

# CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI

Petition No. 44/TT/2020

Coram:

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

**Date of Order:19.02.2021**

**In the matter of:**

Approval under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and truing up of transmission tariff of the 2014-19 period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff of the 2019-24 period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for **Asset-I:** 765 kV D/C Varanasi-Kanpur (new) line and associated bays including 240 MVAR Switchable L/R in both Ckt. at Varanasi GIS Sub-station and 330 MVAR non-switchable L/R in both Ckt. at Kanpur GIS Sub-station; 765 kV S/C Kanpur (new) GIS-Jhatikara line & associated bays including 330 MVAR switchable L/R at Kanpur GIS Sub-station and 330 MVAR non-switchable L/R at Jhatikara Sub-station; 400 kV D/C (Quad) Kanpur (New) GIS-Kanpur (old) line & Associated bays; 2X1500 MVA 765/400 kV ICT-I&II Associated bays at 765/400 kV Kanpur (new) GIS Sub-station; 240 MVAR, 765 kV Bus Reactor-1 & associated bay at Kanpur (new) GIS Sub-station; 240 MVAR, 765 kV Bus Reactor-2 & associated bay at Kanpur (new) GIS Sub-station; **Asset-II:** LILO of one Ckt of 400 kV D/C Sasaram-Allahabad line & associated bays at Varanasi GIS Sub-station; **Asset-III:** 125 MVAR, 400 kV Bus Reactor & associated bay at Kanpur (new) GIS Sub-station; **Asset-IV:** 240 MVAR, 765 kV Bus Reactor & associated bay at Jhatikara Sub-station; **Asset-V:** 125 MVAR, 400 kV Bus Reactor & associated bay at Varanasi GIS Sub-station; **Asset-VI:** 400 kV D/C (Quad) Sarnath-Varanasi Transmission Line along with associated bays at Varanasi GIS Sub-station under Transmission System for Phase-I Generation Projects in Jharkhand and West Bengal-Part-B in the Northern Region.

**And in the matter of:**

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

.....**Petitioner**

**Vs**

1. Rajasthan Rajya Vidyut Prasaran Nigam Ltd.,  
Vidyut Bhawan, Vidyut Marg,  
Jaipur-302005.



2. Ajmer Vidyut Vitran Nigam Ltd.,  
132 kV, GSS RVPNL Sub-station Building,  
Caligiri Road, Malviya Nagar,  
Jaipur-302017.
3. Jaipur Vidyut Vitran Nigam Ltd.,  
132 kV, GSS RVPNL Sub-station Building,  
Caligiri Road, Malviya Nagar,  
Jaipur-302017.
4. Jodhpur Vidyut Vitran Nigam Ltd.,  
132 kV, GSS RVPNL Sub-station Building,  
Caligiri Road, Malviya Nagar,  
Jaipur-302017.
5. Himachal Pradesh State Electricity Board,  
Vidyut Bhawan,  
Kumar House Complex Building II,  
Shimla-171004.
6. Punjab State Electricity Board,  
Thermal Shed Tia,  
Near 22 Phatak, Patiala-147001.
7. Haryana Power Purchase Centre,  
Shakti Bhawan, Sector-6,  
Panchkula (Haryana) 134109.
8. Power Development Department,  
Government of Jammu & Kashmir,  
Mini Secretariat, Jammu.
9. Uttar Pradesh Power Corporation Ltd.,  
(Formerly Uttar Pradesh State Electricity Board)  
Shakti Bhawan, 14, Ashok Marg,  
Lucknow-226001.
10. Delhi Transco Ltd.,  
Shakti Sadan, Kotla Road,  
New Delhi-110002.
11. BSES Yamuna Power Ltd.,  
B-Block, Shakti Kiran Building,  
(Near Karkardooma Courts),  
Karkardooma, 2<sup>nd</sup> Floor,  
New Delhi-110092.
12. BSES Rajdhani Power Ltd.,  
BSES Bhawan, Nehru Place,  
New Delhi-110019.



13. Tata Power Delhi Distribution Ltd.,  
NDPL House, Hudson Lines, Kingsway Camp,  
Delhi-110009.
14. Chandigarh Administration,  
Sector-9, Chandigarh.
15. Uttarakhand Power Corporation Ltd.,  
Urja Bhawan, Kanwali Road,  
Dehradun (Uttarakhand).
16. North Central Railway,  
Allahabad.
17. New Delhi Municipal Council,  
Palika Kendra, Sansad Marg,  
New Delhi-110002.

...Respondent(s)

**For Petitioner:** Shri S. S. Raju, PGCIL  
Shri A. K. Verma, PGCIL  
Shri Vipin Joseph, PGCIL  
Shri V. P. Rastogi, PGCIL  
Shri B. Dash, PGCIL

**For Respondent:** Shri R.B. Sharma, Advocate, BRPL

### **ORDER**

The instant petition has been filed by Power Grid Corporation of India Limited (hereinafter referred to as “the Petitioner”), a deemed transmission licensee, for truing up of the tariff of the period from the date of commercial operation to 31.3.2019 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as “the 2014 Tariff Regulations”) and for determination of 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 under Transmission System for Phase-I Generation Projects in Jharkhand and West Bengal-Part-B in the Northern Region (hereinafter referred to as “the Transmission Project”):



**Asset-I:** 765 kV D/C Varanasi-Kanpur (new) line and associated bays including 240 MVAr Switchable L/R in both Ckts. at Varanasi GIS Sub-station and 330 MVAr non-switchable L/R in both Ckts. at Kanpur GIS Sub-station; 765 kV S/C Kanpur (new) GIS-Jhatikara line & associated bays including 330 MVAr switchable L/R at Kanpur GIS Sub-station and 330 MVAr non-switchable L/R at Jhatikara Sub-station; 400 kV D/C (Quad) Kanpur (New) GIS-Kanpur (old) line & associated bays; 2x1500 MVA 765/400 kV ICT-I&II associated bays at 765/400 kV Kanpur (new) GIS Sub-station; 240 MVAr, 765 kV Bus Reactor- 1 & associated bay at Kanpur(new) GIS Sub-station; 240 MVAr, 765 kV Bus Reactor-2 & associated bay at Kanpur(new) GIS Sub-station;

**Asset-II:** LILO of one Ckt of 400 kV D/C Sasaram-Allahabad line & associated bays at Varanasi GIS Sub-station;

**Asset-III:** 125 MVAr, 400 kV Bus Reactor & associated bay at Kanpur (new) GIS Sub-station;

**Asset-IV:** 240 MVAr, 765 kV Bus Reactor & associated bay at Jhatikara Sub-station;

**Asset-V:** 125 MVAr, 400 kV Bus Reactor & associated bay at Varanasi GIS Sub-station; and

**Asset-VI:** 400 kV D/C (Quad) Sarnath-Varanasi Transmission Line along with associated bays at Varanasi GIS Sub-station.

2. The Petitioner has made the following prayers in the instant Petition:

*“1) Allow the Add Cap for 2014-19 and 2019-24 tariff block as claimed as per para 5.9 and 7.2 above.*

*2) Approve the trued up Transmission Tariff for 2014-19 block and transmission tariff for 2019-24 block for the assets covered under this petition, as per para 6.2 and 7.4 above.*

*3) Allow the Petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission as provided in Tariff Regulation 2014 and Tariff regulations 2019 as per para 6.2 and 7.4 for respective block.*



4) 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.

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

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

7) Allow the Petitioner to file a separate petition before the Hon'ble Commission for claiming the overall security expenses and consequential IOWC on that security expenses as mentioned at para 7.10 above.

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

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

and pass such other relief as the 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 under:

a. The Investment Approval for the Transmission Project was accorded by the Board of Directors of the Petitioner vide Memorandum No. C/CP/ Jharkhand & West Bengal Projects (Ph-1)- Part-B, dated 9.2.2012 with estimated cost of ₹320144 lakh including IDC of ₹20719 lakh based on 4<sup>th</sup> Quarter 2011 price level. The Revised Cost Estimate (RCE) for the Transmission Project was accorded by the Board of Directors of the Petitioner vide C/CP/PA 1617-11-OQ-RCE005, dated 11.11.2016 at ₹429232 lakh including IDC of ₹49570 lakh (based on April 2016 price level).

b. The scope of work covered under the Transmission Project broadly includes:

#### **Transmission Lines**

i. Varanasi-Kanpur 765 kV D/C line



- ii. Kanpur- Jhatikara 765 kV S/C line
- iii. Kanpur (765/400 kV)-Kanpur (Existing) 400 kV D/C (Quad) line
- iv. 400 kV connectivity for new 765/400 kV sub-station at Varanasi
  - Varanasi-Sarnath (UPPCL) 400 kV D/C (Quad) line
  - LILO of Sasaram-Allahabad 400 kV line at Varanasi
  - Opening of LILO at one circuit of Sasaram- Allahabad 400 kV D/C line at Sarnath

### **Sub-station**

- i. Establishment of new 2x1500 MVA, 765/400 kV GIS Sub-station at Kanpur
- ii. Extension of 765 k/400 kV Varanasi, 765/400 kV Jhatikara and 400/220 kV Kanpur (existing sub-stations).

### **Reactive Compensation**

#### Line Reactors

Transmission Line	From bus (MVAr)	To bus (MVAr)
a) Varanasi-Kanpur 765 kV D/C	1x 240 (Switchable) on each ckt.	1 x 330 (Fixed) on each ckt.
b) Kanpur-Jhatikara 765 kV S/C	1x 330 (Switchable)	1x 300 (Fixed)

#### Bus Reactors

a) Kanpur 765 kV	-	2 x 240 MVAr
b) Jhatikara 765 kV	-	1x 240 MVAr
c) Varanasi 400 kV	-	1 x 125 MVAr
d) Kanpur 400 kV	-	1 x 125 MVAr

- c. As per the Investment Approval dated 9.2.2012, the scheduled date of commercial operation of the transmission assets under the scope of the Transmission Project was 8.10.2014 against which the transmission assets were put under commercial operation as under:

Sl. No.	Name of the Asset(s)	Actual COD	Delay
1	<b>Asset-I</b> 765 kV D/C Varanasi-Kanpur (new) line and associated bays including 240 MVAr Switchable L/R in both Ckt. at Varanasi GIS Sub-station and 330 MVAr non-switchable L/R in both Ckt. at Kanpur GIS Sub-station;  765 kV S/C Kanpur (new) GIS-Jhatikara	14.7.2016	21 months and 5 days



	<p>line &amp; associated bays including 330 MVAR switchable L/R at Kanpur GIS Sub-station and 330 MVAR non-switchable L/R at Jhatikara Sub-station;</p> <p>400 kV D/C (Quad) Kanpur (New) GIS–Kanpur (old) line &amp; associated bays, 2x1500 MVA 765/400 kV ICT-I &amp; II &amp; associated bays at 765/400 kV Kanpur (new) GIS Sub-station;</p> <p>240 MVAR, 765 kV Bus Reactor-1 and associated bay at Kanpur (new) GIS Sub-station;</p> <p>240 MVAR, 765 kV Bus Reactor-2 and associated bay at Kanpur (new) GIS Sub-station (Earlier Combined Assets-I, II, III, V, VI and VII in Petition No. 274/TT/2015).</p>		
2	<b>Asset-II:</b> LILO of one Ckt. of 400 kV D/C Sasaram-Allahabad line and associated bays at Varanasi GIS Sub-station (Earlier Asset-IV in Petition No. 274/TT/2015).	1.4.2016	17 months and 20 days
3	<b>Asset-III:</b> 125 MVAR, 400 kV Bus Reactor and associated bay at Kanpur (new) GIS Sub-station (Earlier Asset-VIII in Petition No. 274/TT/2015).	2.9.2016	22 months and 23 days
4	<b>Asset-IV:</b> 240 MVAR, 765 kV Bus Reactor and associated bay at Jhatikara Sub-station (Earlier Asset-IX in Petition No. 274/TT/2015).	28.11.2015	13 months and 19 days
5	<b>Asset-V:</b> 125 MVAR, 400 kV Bus Reactor and associated bay at Varanasi GIS Sub-station (Earlier Asset-X in Petition No. 274/TT/2015).	1.10.2016	23 months and 22 days
6	<b>Asset-VI:</b> 400 kV D/C (Quad) Sarnath-Varanasi T/L along with associated bays at Varanasi GIS Substation (Earlier Asset-I in Petition No. 205/TT/2016).	22.10.2016	24 months and 14 days

d. Tariff in respect of Assets-I, II, III, IV and V from COD to 31.3.2019 was allowed by the Commission *vide* order dated 31.5.2016 in Petition No. 274/TT/2015. The Commission in the said order did not consider the time over-run in respect of Assets-I, III and V as the actual period of time over-run was then not known. However, the entire time over-run of 17 months and 20 days in respect of Asset-II was condoned, while the entire time over-run of 13 months



and 9 days in respect of Asset-IV was disallowed by the Commission *vide* order dated 31.5.2016 in Petition No. 274/TT/2015.

e. Tariff from COD to 31.3.2019 in respect of Asset-VI was allowed and entire time over-run of 24 months and 14 days was condoned by the Commission *vide* order dated 30.8.2017 in Petition No. 205/TT/2016.

f. The transmission tariff based on truing up claimed by the Petitioner is as under:

(₹ in lakh)					
Asset	Particulars	2015-16	2016-17	2017-18	2018-19
Asset-I	Annual Fixed Charges (AFC) approved <i>vide</i> order dated 31.5.2016 in Petition No. 274/TT/2015	--	39898.63	49184.74	48020.56
	AFC claimed by the Petitioner based on truing up in the instant petition	--	43748.05	60974.93	59910.46
Asset-II	AFC approved <i>vide</i> order dated 31.5.2016 in Petition No. 274/TT/2015	--	723.20	710.39	697.78
	AFC claimed by the Petitioner based on truing up in the instant petition	--	838.00	858.74	859.99
Asset-III	AFC approved <i>vide</i> order dated 31.5.2016 in Petition No. 274/TT/2015	Was approved combined with Asset-I			
	AFC claimed by the Petitioner based on truing up in the instant petition	--	334.81	621.15	639.25
Asset-IV	AFC approved <i>vide</i> order dated 31.5.2016 in Petition No. 274/TT/2015	297.36	786.89	811.94	794.76
	AFC claimed by the Petitioner based on truing up in the instant petition	255.78	774.90	784.90	768.50
Asset-V	AFC approved <i>vide</i> order dated 31.5.2016 in Petition No. 274/TT/2015	--	254.52	329.41	328.13
	AFC claimed by the Petitioner based on truing up in the instant petition	--	139.50	288.13	292.22
Asset-VI	AFC approved <i>vide</i> order dated 30.8.2017 in Petition	--	2656.14	6061.44	6054.10





	No. 205/TT/2016				
	AFC claimed by the Petitioner based on truing up in the instant petition	--	2650.65	6002.43	5984.16

4. The Respondents are distribution licensees and Power Departments, which are procuring transmission service from the Petitioner, mainly beneficiaries of the Northern Region.

5. The Petitioner has served the petition on the Respondents and notice of this petition has been published in newspapers in accordance with Section 64 of the Electricity Act, 2003. The general notice dated 12.3.2020 directing the beneficiaries/ Respondents to file reply in the matter was also published on the Commission's website. No comments/ objections have been received from the general public in response to the aforesaid notice published in the newspaper by the Petitioner. BSES Rajdhani Private Limited (BRPL), Respondent No.12, has filed its reply *vide* affidavit dated 12.3.2020. BRPL has raised issues of cost over-run, additional capital expenditure (ACE) and accrued IDC, initial spares, Optical Ground Wire, time over-run, deferred tax liability, effective tax rate, capital spares, security expense, application filing fees and expenses incurred for publication of notices and GST. The Petitioner *vide* affidavit dated 8.6.2020 has filed rejoinder to the reply of BRPL. The issues raised by BRPL and clarifications thereto given by the Petitioner have been dealt in the relevant portions of this order.

6. This order is issued considering the submissions made by the Petitioner in its affidavits dated 20.12.2019, 12.3.2020, 30.6.2020, BRPL's reply affidavit dated 12.3.2020 and Petitioner's rejoinder affidavit dated 8.6.2020

7. The hearing in this matter was held on 9.6.2020 through video conference and the order was reserved.



8. Having heard the representatives of the Petitioner, learned counsel for BRPL and perused the material on record, we proceed to dispose of the petition.

9. BRPL in its affidavit dated 12.3.2020 has submitted that the Commission permits association/ forum or other bodies corporate or group of consumers to participate in accordance with Regulation 18 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and prayed that one of the agencies may be asked to represent the interest of consumer in the instant petition in terms of Section 94(3) of the Electricity Act, 2003. In response, the Petitioner has submitted that it has dispatched the copy of the Petitions to all the Respondents and published the tariff notices in the newspapers to invite attention of all the stakeholders. Further, during the hearing, the Commission also gave opportunity to all the stakeholders to submit their comments and views.

10. We have considered the submissions of the BRPL and Petitioner. Before hearing the instant petition, the Commission posted the notice of hearing of the instant petition in its website on 12.3.2020. Besides this, notice of this petition was also published in the newspapers on 4.3.2020 in English, Hindi and vernacular language, whose details have been furnished by the Petitioner in its affidavit dated 3.6.2020. No representation in response to above notices has been received from any consumer association/ forum by the Secretary of the Commission. Hence, we are of the opinion that there is no need to engage any agency in the instant case to represent consumer interest especially when no such representation to this effect is received.

### **TRUING UP OF ANNUAL FIXED CHARGES OF THE 2014-19 TARIFF PERIOD**

11. The details of the trued-up transmission charges claimed by the Petitioner for the transmission assets are as under:



### Asset-I

Particulars	(₹ in lakh)		
	2016-17 (Pro-rata for 261 days)	2017-18	2018-19
Depreciation	13078.96	18711.64	18839.50
Interest on Loan	13363.12	17515.09	16065.64
Return on Equity	14741.66	21090.38	21292.03
Interest on Working Capital	980.59	1369.15	1348.71
O&M Expenses	1583.72	2288.67	2364.58
<b>Total</b>	<b>43748.05</b>	<b>60974.93</b>	<b>59910.46</b>

### Asset-II

Particulars	(₹ in lakh)		
	2016-17	2017-18	2018-19
Depreciation	217.95	231.27	237.08
Interest on Loan	239.11	227.24	211.36
Return on Equity	240.22	255.00	262.07
Interest on Working Capital	21.44	22.00	22.15
O&M Expenses	119.28	123.23	127.33
<b>Total</b>	<b>838.00</b>	<b>858.74</b>	<b>859.99</b>

### Asset-III

Particulars	(₹ in lakh)		
	2016-17 (Pro-rata for 211 days)	2017-18	2018-19
Depreciation	85.55	163.17	172.26
Interest on Loan	101.37	181.63	177.59
Return on Equity	107.99	204.56	215.28
Interest on Working Capital	8.09	14.95	15.39
O&M Expenses	31.81	56.84	58.73
<b>Total</b>	<b>334.81</b>	<b>621.15</b>	<b>639.25</b>

### Asset-IV

Particulars	(₹ in lakh)			
	2015-16 (Pro-rata for 125 days)	2016-17	2017-18	2018-19
Depreciation	67.16	208.00	217.44	217.44
Interest on Loan	77.70	226.35	213.41	193.54
Return on Equity	74.44	230.16	240.35	241.00
Interest on Working Capital	6.69	20.27	20.59	20.32
O&M Expenses	29.79	90.12	93.11	96.20
<b>Total</b>	<b>255.78</b>	<b>774.90</b>	<b>784.90</b>	<b>768.50</b>



### Asset-V

(₹ in lakh)

Particulars	2016-17 (Pro-rata for 182 days)	2017-18	2018-19
Depreciation	33.69	71.41	74.11
Interest on Loan	37.57	73.54	69.72
Return on Equity	37.02	78.49	81.67
Interest on Working Capital	3.79	7.85	7.99
O&M Expenses	27.43	56.84	58.73
<b>Total</b>	<b>139.50</b>	<b>288.13</b>	<b>292.22</b>

### Asset-VI

(₹ in lakh)

Particulars	2016-17 (Pro-rata for 161 days)	2017-18	2018-19
Depreciation	765.54	1783.01	1827.86
Interest on Loan	868.69	1854.40	1728.02
Return on Equity	855.16	1991.66	2047.15
Interest on Working Capital	59.58	135.17	135.01
O&M Expenses	101.68	238.19	246.12
<b>Total</b>	<b>2650.65</b>	<b>6002.43</b>	<b>5984.16</b>

12. The details of the trued-up Interest on Working Capital (IWC) claimed by the Petitioner for the transmission assets are as under:

### Asset-I

(₹ in lakh)

Particulars	2016-17 (Pro-rata for 261 days)	2017-18	2018-19
O&M Expenses	184.57	190.72	197.05
Maintenance Spares	332.22	343.30	354.69
Receivables	10196.71	10162.49	9985.08
Total Working Capital	10713.50	10696.51	10536.82
Rate of Interest (%)	12.80	12.80	12.80
<b>Interest on Working Capital</b>	<b>980.59</b>	<b>1369.15</b>	<b>1348.71</b>

### Asset-II

(₹ in lakh)

Particulars	2016-17	2017-18	2018-19
O&M Expenses	9.94	10.27	10.61
Maintenance Spares	17.89	18.48	19.10
Receivables	139.67	143.12	143.33
Total Working Capital	167.50	171.87	173.04
Rate of Interest (%)	12.80	12.80	12.80
<b>Interest on Working Capital</b>	<b>21.44</b>	<b>22.00</b>	<b>22.15</b>



### Asset-III

(₹ in lakh)

Particulars	2016-17 (Pro-rata for 211 days)	2017-18	2018-19
O&M Expenses	4.59	4.74	4.89
Maintenance Spares	8.25	8.53	8.81
Receivables	96.53	103.53	106.54
Total Working Capital	109.37	116.80	120.24
Rate of Interest (%)	12.80	12.80	12.80
<b>Interest on Working Capital</b>	<b>8.09</b>	<b>14.95</b>	<b>15.39</b>

### Asset-IV

(₹ in lakh)

Particulars	2015-16 (Pro-rata for 125 days)	2016-17	2017-18	2018-19
O&M Expenses	7.27	7.51	7.76	8.02
Maintenance Spares	13.08	13.52	13.97	14.43
Receivables	124.82	129.15	130.82	128.08
Total Working Capital	145.17	150.18	152.55	150.53
Rate of Interest (%)	13.50	13.50	13.50	13.50
<b>Interest on Working Capital</b>	<b>6.69</b>	<b>20.27</b>	<b>20.59</b>	<b>20.32</b>

### Asset-V

(₹ in lakh)

Particulars	2016-17 (Pro-rata for 182 days)	2017-18	2018-19
O&M Expenses	4.59	4.74	4.89
Maintenance Spares	8.25	8.53	8.81
Receivables	46.63	48.02	48.70
Total Working Capital	59.47	61.29	62.40
Rate of Interest (%)	12.80	12.80	12.80
<b>Interest on Working Capital</b>	<b>3.79</b>	<b>7.85</b>	<b>7.99</b>

### Asset-VI

(₹ in lakh)

Particulars	2016-17 (Pro-rata for 161 days)	2017-18	2018-19
O&M Expenses	19.21	19.85	20.51
Maintenance Spares	34.58	35.73	36.92
Receivables	1001.54	1000.40	997.36
Total Working Capital	1055.33	1055.98	1054.79
Rate of Interest (%)	12.80	12.80	12.80
<b>Interest on Working Capital</b>	<b>59.58</b>	<b>135.17</b>	<b>135.01</b>



### **Date of commercial operation (COD)**

13. The Commission vide order dated 31.5.2016 in Petition No. 274/TT/2015 with regard to date of commercial operation of the transmission assets observed as under:

*“7. In view of the submissions of the petitioner, the tariff for the assets with anticipated COD is allowed in this instant order in accordance with Regulation 6 (1) (ii) of the 2014 Tariff regulations. However, in this instant order entire (time over run) delay period has not been considered for the assets with anticipated COD (i.e. Combined Asset-I, II, III, V, VI, VII, VIII and Asset-X) as the COD of these assets are yet to be achieved and the period of delay is not known and therefore view on actual time overrun cannot be taken. The same shall be considered at the time of truing up of the assets, after actual COD is achieved.”*

*“10. The petitioner has claimed the date of the commercial operation of the Assets-IV and Asset-IX as 1.4.2016 and 25.11.2015 respectively. For rest of the assets the anticipated COD submitted by the petitioner is 15.6.2016.....”*

*“11. The petitioner has submitted RLDC certificate issued by NRLDC, POSOCO for Asset-IV and Asset-IX dated 18.4.2016 and 11.12.2015 respectively in support of the claim of commercial operation in accordance with Regulation 5(2) of the 2014 Tariff Regulations indicating completion of successful trial operation.*

*“12. The petitioner is directed to submit the RLDC certificate for the assets with anticipated COD at the time of truing up. Accordingly, the tariff is worked out from COD to 31.3.2019 for the assets”.*

14. The Commission vide order dated 31.5.2016 in Petition No. 274/TT/2015 directed the Petitioner to submit the RLDC certificate for the transmission assets at the time of truing up. Accordingly, the Petitioner has now submitted RLDC certificates for Asset-I dated 25.7.2016 and 1.8.2016, for Asset-III dated 26.9.2016 and for Asset-V dated 12.10.2016 along with the Petition. As multiple transmission assets were combined into Asset-I, the Petitioner has accordingly submitted separate RLDC certificates for different transmission elements. Along with this, the Petitioner has submitted the COD Certificates for Asset-I dated 3.8.2016, for Asset-III dated 12.10.2016 and for Asset-V dated 19.10.2016. The Petitioner has also submitted certificate of completion of trial operation dated 25.7.2016 and 1.8.2016 for Asset-I, for Asset-III dated 26.9.2016 and for Asset-V dated 12.10.2016 along with CMD



certificates. The Petitioner has submitted that Assets-I, III and V were declared under commercial operation on 14.7.2016, 2.9.2016 and 1.10.2016 respectively.

15. We have considered the submissions of the Petitioner. Taking into consideration the aforesaid COD certificates, CMD certificates and certificates of trial run, COD of the Assets-I, III and V is approved as 14.7.2016, 2.9.2016 and 1.10.2016 respectively. Accordingly, the actual COD of the transmission assets is considered in this order and is as under:

<b>Asset</b>	<b>Actual COD</b>
Asset-I	14.7.2016
Asset-II	1.4.2016
Asset-III	2.9.2016
Asset-IV	28.11.2015
Asset-V	1.10.2016
Asset-VI	22.10.2016

**Time over-run**

16. As per the IA dated 9.2.2012, the Transmission Project was scheduled to be put into commercial operation within 32 months from the date of IA. However, the transmission assets under the scope of the Transmission Project were put into commercial operation as detailed below:

<b>Assets</b>	<b>Scheduled COD</b>	<b>Actual COD</b>	<b>Time over-run</b>	<b>Time Over-run Condoned</b>
Asset-I	8.10.2014	14.7.2016	21 months 5 days (645 days)	To be considered in the instant petition.
Asset-II		1.4.2016	17 months 24 days (541 days)	Condoned
Asset-III		2.9.2016	22 months 23 days (695 days)	To be considered in the instant petition.
Asset-IV		28.11.2015	13 months 20 days (416 days)	Disallowed
Asset-V		1.10.2016	23 months 22 days (724 days)	To be considered in the instant petition.
Asset-VI		22.10.2016	24 months 14 days (745 days)	Condoned



17. The entire time over-run of 17 months and 24 days was condoned in the case of Asset-II while entire time over-run of 13 months and 20 days in respect of Asset-IV was disallowed vide order dated 31.5.2016 in Petition No. 274/TT/2015. The entire time over-run of 24 months and 14 days in the case of Asset-VI was condoned vide order dated 30.8.2016 in Petition No. 205/TT/2016. As stated above, the time over-run in respect of Assets-I, III and V is considered in this order.

18. The reasons submitted by the Petitioner for time over-run in case of Assets-I, III and Asset-V are as under:

**Asset-I**

**Delay in acquisition of land for Varanasi Sub-station**

19. The Petitioner has submitted that delay in execution of Varanasi Sub-station was mainly due to the delay in acquisition of land. The first letter for request of acquisition of land was forwarded to the District Magistrate (DM), Chandauli on 10.9.2010. A huge agitation was staged by the landowners against acquisition of land. The matter was politicalized when a local Member of Parliament (MP) supported the villagers against the land acquisition. Letters to the Chief Minister (Uttar Pradesh) and Ministry of Power were submitted by the Petitioner on 22.9.2010 alongwith paper cutting dated 23.9.2010. The matter was taken up by the then DM, Varanasi. After various efforts by the Petitioner, the idea of land acquisition was dropped and direct purchase through negotiation was opted due to delay in land acquisition. After various correspondences with administration and concerned authorities, the proposal was made to purchase land in lots for which Gazette Notification was published under Sections 4 and 6 of the Land Acquisition Act, 1894 on 26.11.2013 and 22.4.2014 respectively. The whole procedure took more than two years. The Petitioner has submitted the detailed chronology of events and the same is as follows:





Sl. No.	Description	Date
1	Letter from PGCIL to DM, Chandauli	10.9.2010
2	MP letter to CM, UP not to acquire land	22.9.2010
3	MP letter to Power Minister, Government of India	22.9.2010
4	Letter to Section Officer (MOP) to CMD, PGCIL	30.9.2010
5	Letter of Special Secretary to MP, Chandauli	29.10.2010
6	Letter to Dy. Secretary to CMD PPCL	3.2.2011
7	Letter of Chief Engineer UPPCL to DGM, PGCIL	24.2.2011
8	PGCIL letter to DM, Varanasi containing proposal for Varanasi sub-station	25.7.2011
9	Fresh proposal submitted by PGCIL letter towards land acquisition for 765/400 kV GIS sub-station	9.1.2012
10	Idea for land acquisition dropped and direct purchase through negotiation was opted due to delay in land acquiring	15.2.2012
11	Site visit by High power committee for rate negotiation with landowners for purchase of land	26.6.2012
12	Intimation cum assistance sought from DM, Varanasi towards starting of purchase of land	8.12.2012
13	Request for government land submitted to district administration	23.3.2013
14	Gazette Notification published for Section-4	26.11.2013
15	Gazette Notification published for Section-6	22.4.2014
16	Deposit of money to purchase government land	29.1.2014
17	Request letter to register government land in the name of the Petitioner submitted to Commissioner Varanasi	30.1.2014
18	Award of land	20.8.2014
19	Letter to DM Varanasi, for providing physical possession of land	30.9.2014
20	Physical possession of balance land	12.12.2014

### **Delay in acquisition of land for Kanpur Sub-station**

20. The Petitioner has submitted that the first proposal letter for acquisition of land (approximately 140 acres) for construction of 765/400 kV AIS sub-station in village Rania Khanchandpur, Kanpur was submitted to DM, Kanpur on 16.8.2010. Further, based on the Petitioner's proposal, Additional District Magistrate (ADM), Ramabai Nagar, vide letter dated 24.9.2010 instructed ADM-Land Acquisition (Akbarpur) to expedite the survey and provide acquisition report at the earliest. The Tehsildar, Akbarpur submitted the site identification report and the same was forwarded to Additional District Magistrate, Ramabai Nagar on 13.3.2011. While the proposal was in its approval stage, a huge agitation was staged by the landowners demanding



huge compensation against land acquisition. The Petitioner has further submitted that various meetings with Gram Sabha, villagers, Kisan Sangh, Administration were held. These proceedings went on for about 2.5 months, but no settlement was reached.

21. The Petitioner apprised the System Planning & Project Appraisal Division, CEA, Ministry of Power with regard to the agitation and difficulty in procurement of adequate land for AIS sub-station at Kanpur and proposed a GIS sub-station instead of AIS sub-station at Kanpur vide letter dated 7.6.2011. CEA gave in-principle approval for replacing AIS sub-station with GIS sub-station vide letter dated 10.6.2011.

22. The revised proposal was submitted to District Magistrate, Ramabai Nagar requesting for acquisition of about 50 acres instead of earlier proposed 140 acres of land in village: Bilsaraya, Tehsil: Akbarpur, District: Ramabai Nagar for construction of 765/400 kV sub-station at Kanpur vide letter dated 10.8.2011.

23. The Gazette Notification was published on 13.10.2012 as per the Land Acquisition Act, 1894, which notified that the land is needed for public purpose in District Ramabai Nagar and called for objections, if any, by any person against the acquisition within 30 days. The amount for second phase of land acquisition was submitted by the Petitioner on 3.1.2013.

24. A memorandum was signed between District Magistrate (Kanpur), Additional District Magistrate (Kanpur), Sub-Registrar (Kanpur) and the Petitioner on 11.3.2013 for acquisition of land and the compensation rate. The proposal was then forwarded to Commissioner, Kanpur for approval.

25. The approval of land acquisition was then accorded by the competent authority and possession letter was received on 17.10.2013. The Petitioner has further submitted that the whole procedure took more than 38 months on account of delay in



land acquisition from the date of submission of proposal to District Administration. The detailed chronology of events as submitted by the Petitioner is as follows:

Sl. No.	Description	Date
1	Site Selection Report prepared by the Petitioner	23.6.2010
2	Instruction/ Directions given by ADM Administration Ramabai Nagar to SDM Akbarpur for Preparation of proposal Land Acquisition.	24.9.2010
3	Letter issued for project sanction from Secretary UP Government to DM.	3.11.2010
4	Letter Submitted to DM by AGM Kanpur for preparation of proposal	27.11.2010
5	Letter submitted to DM by AGM/DGM Kanpur for preparation of proposal	29.12.2010
6	Proposal referred to ADM-LA Kanpur Nagar by ADM Administration Kanpur Dehat.	13.3.2011
7	Proposal Prepared and send to District Administration by SDM Akbarpur.	17.3.2011
8	Proposal Prepared and send to District Administration by SDM Akbarpur.	18.3.2011
9	Letter of CEA for Construction of GIS Substation in place of AIS	10.6.2011
10	Submission of revised proposal to District Administration, Ramabai Nagar from DGM Kanpur for Preparation of Revised Proposal AIS to GIS.	10.8.2011
11	Revised Proposal Submitted by SDM Akbarpur to ADM Administration Ramabai Nagar	1.10.2011
12	Revised Proposal refer by ADM Administration Kanpur Dehat to ADMLA Kanpur Nagar.	3.10.2011
13	Meeting held with Villagers (Bilsarayan) to fix the Land Cost. (1150000.00/Bigha)	29.11.2012
14	Meeting held with villagers (Khanchadrapur) to fix the Land Cost (2000000.00/Bigha)	1.12.2012
15	Notification under Section 4 issued on 13.10.2012	13.10.2012
16	Notification under Section 6 issued on 19.3.2013	19.3.2013
17	Report of Committee meeting held with Committee Member.	18.3.2013
18	Possession taken from ADMLA on 19.3.2013	19.3.2013
19	Letter for mutation from ADMLA to Tehsildar.	28.11.2013

### **Delay due to various clearances in 765 kV D/C Varanasi-Kanpur (new) Line**

26. The Petitioner has submitted that various approvals from Railways, NHAI (National Highways Authority of India), PTCC, Defence and Civil Aviation departments took considerable time which led to delay in execution of the asset. The proposal for



NHAI, Railway, Forest, Defence and Civil Aviation clearance was identified during the final/ check surveys conducted for the transmission line and the same were applied/ submitted to the appropriate authorities as and when the hindrance(s) encountered along the length of under construction transmission line as per the site/ location requirements. Detailed chronology of events is tabulated as below:

<b>1</b>	<b><u>Railway Clearance</u></b>	<b>Date</b>
	Lucknow Division (NR)	
<b>a.</b>	Proposal submitted to DRM Lucknow for crossing Jaunpur- Allahabad Rail Track	15.12.2012
	Demand note for deposit of way leaves charges and other charges sent by Railways	22.10.2014
	Permission granted by Railways	15.4.2015
<b>b.</b>	Proposal submitted to DRM Lucknow for crossing Allahabad- Faizabad Rail Track	1.12.2012
	Demand note for deposit of way leaves charges and other charges sent by Railways	9.9.2013
	On deposit of way leave charges & other charges permission granted by Railways	3.3.2014
<b>C</b>	Proposal submitted to DRM Howrah for crossing Delhi- Howrah Rail Track	24.9.2012
	Letter issued by Sr. Divisional Engineer NCR-ALD for Joint Inspection	2.11.2012
	Joint Inspection done	19.12.2012
	Demand note issue for way leave charge and Power block charges	21.8.2014
	Permission granted	19.9.2014
<b>d.</b>	Proposal submitted to Sr. DEE (NCR) Jhansi for clearance on Kanpur- Jhansi Railway line (BG) Electrified	20.2.2013
	Revised Proposal submitted due to change of line route for construction proposed HPCL depot.	5.3.2014
	Site Inspection fee Submitted to Sr. DFM Jhansi	1.7.2014
	Sr. Dee (TD) written letter for Track crossing Inspection	17.7.2014
	Site Inspection done jointly	12.8.2014
	Demand note issued to deposit to way leave charges	9.12.2014
	Permission granted by sr. DEE(TD) Jhansi	22.4.2015
<b>E</b>	Banda –Kanpur Railway line (BG) non-Electrified	
	Proposal submitted to Sr. DEE, Jhansi	20.3.2013
	Sr. DEE (General), Jhansi for processing fee	18.3.2013
	Letter issued by Sr. DEE(G), Jhansi for site Inspection	03.9.2013
	Joint Inspection done	13.9.2013
	Joint Inspection report submitted Sr. DEE (G0, Jhansi	17.10.2013
	Demand note issue for Way Leave charge by DEN (line)	12.5.2014
	Permission granted for crossing of Rly. Track.	8.12.2014
	<b>Railway Department took 15 to 26 months in giving the clearance</b>	



<b>2</b>	<b><u>Defence Aviation Clearance</u></b>	
<b>a.</b>	Proposal submitted to Group Captain, CATCO, HQ, CAC, IAF, Bamrauli, Allahabad	8.7.2013
	NOC Issued by Wing Commander, Joint Director, ATC, AF HQ, New Delhi	15.1.2014
<b>b.</b>	Proposal submitted to director, Air Traffic (ATS) Vayu Bhawan, New Delhi	21.11.2013
	Group Captain, command ATC officer New Delhi raised some observations.	11.12.2013
	Compliance report submitted to Group Captain, command ATC officer, New Delhi	1.1.2014
	NOC issued by Under Secretary to the Government of India, New Delhi	19.3.2015
<b>3</b>	<b><u>Civil Aviation Clearance</u></b>	
<b>a.</b>	Proposal submitted to Airport Director, LBS International Airport, AAI, Varanasi	4.5.2013
	NOC Issued by Asstt. GM, ATC-NOC, Airport Authority of India	18.11.2013
<b>b.</b>	Proposal submitted to Regional Director Airport Authority of (I) Ltd.	12.9.2013
	NOC issued by joint General Manager (NOC), (ATM), NR (Airport Authority of India, New Delhi	10.3.2014
	<b>NOC from Concerned Authorities from Defence and Civil Aviation Department took 6 to 16 months.</b>	
<b>4</b>	<b><u>NHAI Clearance</u></b>	
<b>a.</b>	NH-24 B (Lucknow-Allahabad)	
	Proposal submitted to Project Director, Allahabad	25.9.2012
	Project Director NHAI, Rae Bareilly forwarded the case to Chief General Manager, Lucknow for approval	6.2.2013
	Permission granted for road crossing	12.9.2013
<b>b.</b>	(NH-2) Delhi – Kolkata	
	Proposal submitted to Project Director, NHAI, KNP	24.9.2012
	Observation raised by Project Director, Kanpur.	7.11.2012
	Compliance report submitted to Project Director	10.12.2012
	Permission for NH-2 Crossing issued	19.2.2013
<b>c.</b>	(NH-86) Sagar-Kanpur	
	Proposal submitted to Project Director NHAI, KNP	31.7.2013
	Permission for NH-86 Crossing issued	9.9.2013
<b>d.</b>	NH-335 FATEHPUR-LALGANG	
	Proposal submitted to Project Director NHAI (PIU) Rai Bareilly	6.7.2013
	Project Director (PIU) was forwarded to CGM (Tech)/ Regional officer, Lucknow for approval	30.7.2013
	Permission granted for road crossing by DGM (Tech), Lucknow	26.8.2013
<b>e.</b>	NH-96/330 Allahabad- Faizabad	
	Proposal submitted to Executive Engineer NH Div-1, PWD Allahabad for crossing of NH-96/330 near Mauaima	29.5.2014
	Approval issued by Executive Engineer NH Div-1 PWD Allahabad	13.8.2014
	<b>NHAI Clearance took 2 to 12 months.</b>	



**Delay due to various RoW (Right of Way) issues in 765 kV D/C Varanasi-Kanpur (new) line**

27. There were various RoW issues created by the landowners and the villagers. The route was also diverted due to HPPCL pipeline. Detailed chronology of events is as under:

<b>Sl. No.</b>	<b><u>Description</u></b>	<b>Date</b>
<b>1</b>	<b><u>RoW</u></b>	
<b>a.</b>	<b><u>RoW problem due to HPPCL</u></b>	
	Letter to HPPCL	6.12.2013
	HPCL letter to the petitioner	12.12.2013
	HPCL letter to the petitioner	28.1.2014
	HPCL letter to the petitioner	21.2.2014
	The Petitioner finally diverted the route to avoid further delay in the project. This issue delayed the project by around 4 months.	
<b>b.</b>	<b><u>RoW problem at Location no. 78/01</u></b>	
	Letter to DM Allahabad to resolve the RoW at Location no. 78/01 in Village – Karnai, Allahabad for start the foundation and informed that that the Petitioner officials were warned and threatened	10.3.2014
	Letter to SDM, Phoolpur (District -Allahabad) to resolve the ROW at Location no. 78/01	6.6.2014
	SDM, Phoolpur visited the site at Location no. 78/1	5.7.2014 & 13.8.2014
	Letter to SDM Phoolpur Allahabad to resolve the ROW in Village – Karnai, Allahabad to start the foundation	8.8.2014
	Petitioner started to work at Loc. No. 78/1 as per the direction of SDM, Phoolpur which was again stopped by Laxmikant Shukla. Laxmikant Shukla filed a case against the Petitioner in Allahabad High Court	26.8.2014
	Case was disposed of by High Court Allahabad	4.9.2014
	DM, Allahabad heard the case on 18.12.2014 and disposed the case on 10.02.2015.	18.12.2014 & 10.2.2015
	Copy of the order dated 10.02.2015 Received by the Petitioner	11.4.2015
	Letter to SDM Phoolpur Allahabad to resolve the RoW in Village – Karnai, Allahabad. It was also informed that even after the receipt of DM, Allahabad Order, Laxmikant Shukla did not permit the Petitioner to work at his premise.	15.4.2015
	Letter to SDM Phoolpur Allahabad to resolve the RoW in Village –	3.5.2015



	Karnai, Allahabad to start the foundation	
	Laxmi Kant Shukla again filed the case at High Court Allahabad	22.6.2015
	<b>Total time taken to resolve the RoW issue at Location No. 78/01 was around 16 months</b>	
	<b><u>Various RoW problems created at various locations</u></b>	
<b>c.</b>	Letter to SDM Kanpur	28.5.2014
	Letter to SP (RA)	17.6.2014
	Letter to ADM Kanpur	18.11.2014
	Letter to SP (Rural)	20.11.2014
	Letter to SDM, Fatehpur	6.1.2015
	Letter to SDM Unchahar	5.8.2015
	Letter to Chauk in-charge Sadh Kanpur	17.8.2015
	Letter to SDM Ghatampur	24.8.2015
	Letter to SO by SDM Ghatampur	24.8.2015
	These were minor ROW Problem created by landowners during construction at various locations which hampered the work for around 12 months.	

### **Delay due to various RoW issues in 765 kV S/C Kanpur (new)-Jhatikara line**

28. The Petitioner submitted that there were various RoW issues and court cases created by the landowners, villagers during the construction of the asset. The detailed chronology is as under:

<b>Sl. No.</b>	<b>Description</b>	<b>Date</b>
1	Civil Suit for permanent injunction was filed by Deshraj, S/o Parma of village Sohna, Gurgaon	4.7.2012
	The above suit was dismissed in favour of Petitioner	26.7.2012
	Caveat filed against the order of injunction passed by court of CJ, Gurgaon	30.7.2012
2	Civil Suit for permanent injunction was filed by Bhoop Singh etc of village Jaurasi, Tauru, Mewat	9.10.2012
	The above suit was dismissed in favour of the Petitioner	1.11.2012
3	Civil Suit for permanent injunction was filed by Rajpal s/o Bhoop Singh etc of village Jaurasi, Tauru, Mewat	16.10.2012
	The above suit was dismissed in favour of the Petitioner	11.12.2012
4	Letter to District Magistrate, Palwal, Haryana to resolve severe hindrance from villagers of Bhoopgarh.	15.10.2012
	Order of DM Palwal to SP & SDM Palwal to do the needful	17.10.2012
5	Letter to DC, Mewat to resolve hindrance in village Jaurasi	17.10.2012
6	Letter to SDM Hodal, Haryana to resolve to resolve severe hindrance from villagers of Bhoopgarh.	26.10.2012
7	Caveat filed against four farmers of village Bhoopgarh due to strong resistance of farmers as there was perception of suit for permanent injunction.	22.11.2012
8	Civil Suit for permanent injunction was filed by Hemraj etc of village	5.12.2012



	Bhoopgarh	
	The above suit was dismissed in favour of the Petitioner	16.2.2013
9	Letter to SHO Kosikala, Mathura to resolve hindrance in village Ainch to carry out foundation work.	7.12.2012
10	Letter to Gopal Adarsh society to carry out foundation work	14.12.2012
11	Letter to DM Mewat to resolve the hindrance from village Jaurasi (Tauru).	13.2.2013
12	Letter to DC, Mewat to resolve hindrance in village Jaurasi	13.3.2013
13	Letter to DC Mewat to provide local police to start work in Jaurasi (Tauru)	22.3.2013
14	Suit for permanent injunction was filed by Chaturbhuj, S/o Gopal of village Khambi	27.5.2013
15	Written statement was submitted	5.7.2013
16	Letter to SHO Hasanpur, Palwal to complete the backfilling work in village Khambi, Palwal	6.7.2013
17	Letter to SHO Hasanpur, Palwal for compromise in village Khambi, Palwal to carryout backfilling.	11.7.2013
18	Civil suit for permanent injunction was filed by Aash Mohammad, S/o Amar Singh, village Malakha, Tauru, Mewat	12.8.2013
	Civit Misc. writ at High Court Allahabad by Gangaram & Others of village Mudaliya, Khanpur (Mathura)	30.5.2013
19	Dismissed in favour the Petitioner	30.7.2013
	Civil Misc. writ at High Court Allahabad by Kiranpal & Others of village Mudaliya, Khanpur (Mathura)	22.9.2013
20	Dismissed in favour the Petitioner	30.7.2013
	Civil suit for permanent injunction was filed by Mercantile Relator Pvt Ltd. at the Civil court of Pataudi Gurgaon	31.10.2013
21	Dismissed in favour the Petitioner	19.5.2014
22	Letter to DM, Palwal for severe hindrance in village Gehlab, Tehsil Hathin, Palwal	3.1.2014
23	Letter to DSP, Hathin for severe hindrance in village Gehlab, Tehsil Hathin, Palwal	4.1.2014
24	Letter to SHO, Hathin for severe hindrance in village Gehlab, Tehsil Hathin, Palwal	4.1.2014
25	DM Palwal directed to submit the report stating the rule of compensation for laying transmission line because farmers of village Gehlab approached DM office	6.1.2014
26	Reply to above letter was submitted	9.1.2014
27	Letter to DCP, Gurgaon to resolve hindrance from village Fatehpur	20.2.2014
28	Letter to SHO NUH to resolve hindrance in village Chhapera	22.4.2014
29	Letter to ASI Khorikala to resolve hindrance from village Jaurasi	27.5.2014
30	Caveat filed against Girraj Singh, S/o Natthi singh, village Chhapera as there was perception of suit for permanent injunction.	28.4.2014
31	Caveat filed against Reliance Haryana SEZ Limited.	7.4.2015
32	Letter from DC Gurgaon to PGCIL, Palwal to carry out the work and compensate the applicant of Farukhnagar	13.4.2015





33	Letter of Gangaram & others (from village Shall) to DM Mathura for compensation) - Villagers of Shall did not allow to work at site	21.8.2014
34	Letter of Kiranpal & others (from village Mudaliya, Khanpur) to DM Mathura for compensation) - Villagers did not allow to work at site.	21.8.2014
35	Letter of ADM Mathura to the Petitioner for compensation to villagers as per direction of High Court Allahabad	21.9.2014
36	Letter to DM Mathura to resolve the severe hindrance in village Shall, Mudaliya & Khanpur	10.11.2014
37	DM Mathura directed SDM Maat to do the needful.	
38	After mutual understanding b/w villagers of Mudaliya & Khanpur prior compensation form was filled.	22.11.2014
39	Letter to SHO Naujheel to carry out the erection of tower because Kiranpal (slapped supervisor threatened labourers to enter the field) after taking the cheque.	17.12.2014
40	Letter to SDM Maat against Kiranpal for abusing and beating the labourers	18.12.2014
	Letter to SHO Rojkamev, Nuh to resolve hindrance in village Rojkamev	6.1.2015
41	OS filed in CJ, Mathura (Sr. Division) by Gangaram	26.3.2015
42	Next hearing was on:	28.10.2015
43	Letter to DM Mathura to start work in Tehsil-Maat (village- Shall, Mudaliya, Khanpur etc.)	28.4.2015
44	Letter to DM Mathura by Gangaram & others from village Shall, Mudaliya & Khanpur to stop the work	1.5.2015
45	Reminder from PGCIL, Palwal to DM Mathura to clear the hindrance in Maat tehsil.DM instructed telephonically Tehsildar Maat & SHO Naujheel to do the needful.	11.5.2015
46	DM instructed telephonically Tehsildar Maat & SHO Naujheel to do the needful.	
47	Letter to SHO Naujheel to clear the hindrance in village Shall, Maat, Mathura	29.5.2015
48	Petition in the court of District Magistrate, Mewat at Nuh by Aash Mohd. S/o Jain Khan, Ghasera	11.5.2015
49	Dismissed in favour the Petitioner	24.6.2015
50	Petition in the court of District Magistrate, Mewat at Nuh by Girraj Singh. S/o Natthi Singh, Chhapera	11.5.2015
51	Dismissed in favour the Petitioner	24.6.2015
52	Letter to SHO Naujheel to clear the hindrance in village Prahladgarhi, Maat, Mathura	
53	Letter to District Magistrate, Palwal, Haryana to resolve severe hindrance from villagers of Gehlab	4.7.2015
54	DM Palwal issued order and deputed Duty Magistrate to start work	9.7.2015
55	Petition in the District Court, Mewat by Aash Mohd. S/o Jain Khan, Ghasera	3.8.2015
56	Subsequent hearing was held	28.10.2015
57	Letter to SHO Hathin to resolve hindrance in village Alooka, Palwal	12.8.2015



58	Letter to DC Mewat to resolve severe hindrance in village Ghasera & to depute Duty magistrate	13.8.2015
59	DC Mewat showed inability to depute duty Magistrate on regular basis and asked to point out critical areas with date to carry out the work.	29.7.2015
60	On representation from farmers of Kharkhari, Ghasera & Chhapeda to DC, Mewat, DC Mewat ordered SDM Nuh to submit report	30.9.2015
61	Since work did not start so reminder given to DM Palwal	18.8.2015
62	DM passed order to carry out work deputing Duty Magistrate, Hathin	18.8.2015
63	Letter to Tehsildar Hathin to start stringing activity	20.8.2015
64	Tehsildar Hathin requested SP Palwal to provide sufficient police force to carry out the work	20.8.2015
65	Letter to Nayeb Tehsildar Hathin for field inspection	8.9.2015
66	Letter to DC, Mewat to resolve severe hindrance in village Ghasera & Kharkhari	10.9.2015
67	Letter to SHO Hathin for hindrance in work in village Alooka	21.9.2015
68	Letter to SDM Hathin to resolve the hindrance in villagr Alooka & Gharrot	22.9.2015
69	Letter to SP NUH (Mewat) to resolve severe hindrance from village Badka	29.9.2015
70	Letter to DM Palwal to provide sufficient police force to carry out the stringing work	5.10.2015
71	Letter from DM Palwal to SP Palwal to provide sufficient police force to carryout stringing work	7.10.2015
72	Letter to DM Palwal to depute Duty Magistrate again.	16.10.2015
73	Letter to SHO Hathin for hindrance in work in village Gahlab, Rindika etc.	17.10.2015
74	Order of DC, Palwal to appoint Duty Magistrate & starting work in Palwal District from 20.10.2015	21.10.2015
75	Letter to SHO Bahin for hindrance in work in village Gahlab.	2.11.2015
76	Letter of SDM Hathin to DC, Palwal to provide sufficient Police force to start work in Hathin Tehsil.	14.11.2015
77	Letter to SDM, Hathin to start the work in Tehsil – Hathin	12.12.2015
78	Letter of DC, Nuh to CM, Palwal to submit the schedule of program of the stringing work in Nuh District.	14.12.2015
79	Letter to DC, Nuh to submit the scheduling of program	15.12.2015
80	Order of DC, Nuh to appoint Duty Magistrate & starting work in Nuh District from 22.12.2015	18.12.2015
81	Letter of SDM Hathin to DC, Palwal to submit the representation from farmers of Palwal District.	11.12.2015
82	Letter of DC, Palwal to Chief Manager Palwal to do the needful regarding the representation of farmers of Palwal.	5.1.2016
83	Letter to DC, Palwal regarding hindrance in Hathin Tehsil, Palwal	18.1.2016
84	Order of DC, Palwal to appoint Duty Magistrate & starting work in Palwal District from 08.02.2016.	8.2.2016
85	Letter to DC, Nuh regarding hindrance in district-Nuh.	22.3.2016
86	Letter to DC, Nuh to submit the scheduling of program	22.3.2016



87	Court case summon from the court of Addl. Civil Judge (Sr. Div.), Hathin	18.4.2016
88	Letter to SHO, Nuh to lodge F.I.R. against farmer (Girraj) of village-Chappera, Nuh.	28.4.2016
89	Order of DC, Nuh to appoint duty magistrate & start work from 3.5.2016.	28.4.2016
90	Letter to SHO, Nuh to lodge F.I.R. against farmer (Ash Mohd.) of village-Ghasera, Nuh	4.5.2016

29. Further, the Petitioner has also submitted the CPM analysis and PERT chart for the transmission assets. The Petitioner has submitted that the above facts reflect that the time over-run in execution of Asset-I is mainly due to RoW issues created by the landowners from where the transmission line is routed. Various court cases were filed by the landowners of villages in Sohna (Gurgaon); Jaurasi, Tauru (Mewat); Bhoopgarh (Palwal); Khambi (Palwal) and Mathura. The Petitioner took the help from administration during the entire construction period as and when required to resolve RoW issues. The Petitioner has further submitted that from the chronological events, it is evident that the Petitioner was continuously facing RoW problems for about 46 months which were beyond the control of the Petitioner.

30. The Petitioner has also submitted that delay in execution of the transmission lines of Asset-I had a cascading effect on execution of the Kanpur Sub-station as without the COD of the 765 kV D/C Varanasi-Kanpur (new) line and 765 kV S/C Kanpur (new) GIS-Jhatikara line, Kanpur Sub-station could not be charged.

#### **Delay in Assets-III and V**

31. The Petitioner has submitted that the delay in execution of Assets-III and V was due to delay in land acquisition for Varanasi and Kanpur Sub-stations. The Petitioner further submitted that without execution of either “765 kV D/C Varanasi-Kanpur (new) line” and “765 kV S/C Kanpur (new) GIS-Jhatikara line”, the 765/400 kV Kanpur Sub-



station could not be charged. Therefore, the execution of these transmission assets got delayed due to execution of Asset-I.

32. BRPL has submitted that the transmission assets were scheduled to be completed within a time period of 32 months from the date of IA i.e. by 8.10.2014. BRPL has further submitted that Assets-I, II, III, IV, V and VI were executed with huge delay of 21 months, 18 months, 23 months, 25 months, 24 months and 24 months respectively. BRPL has submitted that delay in acquisition of land at Varanasi and Kanpur Sub-stations and delay in seeking approvals from Forest, Railway, NHAI, PTCC, Defence, Civil Aviation and State Power Department and ROW issues do not fall under uncontrollable factors as defined in Regulation 12(2) of the 2014 Tariff Regulations. BRPL has further submitted that the Petitioner is solely responsible for delay in respect of these transmission assets. The Petitioner has not submitted the Detailed Project Report (DPR), CPM analysis and PERT Chart which are important documents to adjudge the time over-run in respect of the transmission assets and the justification submitted. BRPL has submitted that the Petitioner has failed to comply with the provisions of Regulation 12 of the 2014 Tariff Regulations and hence, the request of the Petitioner for condoning the time over-run is liable to be rejected.

33. In response, the Petitioner has submitted that complete justification for delay along with chronology of events has been submitted with the petition along with the supporting documents. The Petitioner has further submitted that CPM and PERT charts have also been submitted vide affidavit dated 12.3.2020.

34. We have considered the above submissions of the Petitioner and BRPL and have also scrutinized the record carefully. Based on the submissions of the parties and documents, analysis on time over-run with regard to Assets-I, III and V is as under:



**Asset I:**

35. The PERT and CPM chart submitted by the Petitioner reflects the reasons for delay in achieving the commercial operation of Asset-I:

Element	Activity	Period of activity				Time over-run	Reason(s) for time over-run
		Planned		Achieved			
Transmission line		From	To	From	To		
765 kV D/C Varanasi-Kanpur, 765 kV S/C Kanpur-Jhatikara and 400 kV D/C (Quad) Kanpur-Kanpur Lines	LOA	12.4.2012	9.4.2012	28.2.2012	5.3.2012	No time over-run	Delay in obtaining RoW and various clearances from Railways, NHAI, PTCC, Defense department and Civil Aviation department and court cases
	Supplies (Structure, equipment etc.)	6.9.2012	23.7.2014	2.4.2012	27.4.2016	21 months 4 days (644 days)	
	Foundation	17.10.2012	13.5.2014	1.4.2012	14.1.2016	20 months 1 day (611 days)	
	Civil works & Erection	19.12.2012	17.6.2014	15.9.2012	31.1.2016	19 months 14 days (593 days)	
	Stringing	13.3.2013	17.9.2014	1.11.2013	1.6.2016	20 months 15 days (623 days)	
	Testing & commissioning	18.9.2014	8.10.2014	5.7.2016	13.7.2016	21 months 4 days (644 days)	

Element	Activity	Period of activity				Time over-run	Reason(s) for time over-run
		Planned		Achieved			
Sub-station		From	To	From	To		
Establishment of New 2x1500 MVA, 765/400 kV GIS substation at Kanpur along with 240 MVAR, 765 kV Bus Reactor-1 & 2 and associated bays, 330	LOA	19.9.2012	19.9.2012	26.6.2013	26.6.2013	9 months 7 days (280 days)	Delay in land acquisition for Kanpur Sub-station and Varanasi Sub-station and delay in COD of "765 kV D/C Varanasi-Kanpur (new) line" & "765 KV S/C
	Supplies (Structure, equipment, etc.)	10.1.2013	18.6.2014	13.3.2014	1.1.2016	18 months 14 days (562 days)	
	Civil works & Erection	4.4.2013	20.8.2014	1.1.2014	10.3.2017	30 months	



MVAR non-switchable L/R and 2 nos. 400 kV bays						28 days (933 days)	Kanpur (new) GIS-Jhatikara line”
	Testing & commissioning	10.7.2014	1.10.2014	1.3.2016	1.7.2016	20 months (639 days)	

### **Delay in acquisition of land for Varanasi Sub-station**

36. The first letter of request for acquisition of land was forwarded to the District Magistrate (DM), Chandauli on 10.9.2010. However, the physical possession of the land was obtained only on 12.12.2014. The Commission has already dealt with this issue in detail in its order dated 31.5.2016 in Petition No. 274/TT/2015. The relevant portion of the said order is extracted hereunder for reference:

*“Asset- IV: It is observed that the main reason for time over run for Asset IV is on account of delay in land acquisition for Varanasi sub-station which was majorly due to agitation created by land owners. It is observed that the petitioner has been pursuing for acquisition of land from 10.9.2010 to 9.1.2012. Later, the decision had to be dropped and thereafter negotiation with land owners was taken up. The land was finally acquired on 12.12.2014. The petitioner has submitted the necessary documentary evidence in support of the delay. On perusal of these documents, it is observed that the delay in the commissioning of the assets is due to the reasons beyond the control of the petitioner. The Hon’ble Appellate Tribunal for Electricity in its judgement dated 27.4.2011 in Appeal No.72/2010 has held that the additional cost due to time over-run due to factors beyond the control of project developer shall be capitalised. Accordingly, we condone the entire delay for Asset-IV.”*

37. It is observed that the land acquisition process was started much before the IA dated 9.2.2012. From the date of IA, the Petitioner took 1037 days to receive physical possession of the aforementioned land. Therefore, time over-run due to land acquisition in Varanasi Sub-station is condoned.

### **Delay in acquisition of land for Kanpur Sub-station**

38. The Petitioner submitted proposal to District Magistrate, Ramabai Nagar requesting for acquisition of about 50 acres of land in village: Bilsaraya, Tehsil: Akbarpur, District: Ramabai Nagar for construction of 765/400 kV Sub-station at Kanpur vide letter dated 10.8.2011. The approval of land acquisition was then given



by the Competent Authority and possession letter was received on 17.10.2013. It is observed that land acquisition process took 616 days to from the date of IA. The delay in land acquisition occurred mainly due to agitation by landowners. It is observed that the delay on account of land acquisition of Kanpur Sub-station is subsumed in the period of delay attributable to the land acquisition for the Varanasi Sub-station.

**Delay due to various clearances in 765 kV D/C Varanasi-Kanpur (new) line**

39. From the submissions of the Petitioner, it is apparent that Railway, NHAI, PTCC, Defence and Civil Aviation departments took considerable time which in turn led to delay in execution of the transmission asset. The Petitioner has submitted detailed chronology supported by documentary evidence for various approvals. The time taken in receiving various clearances is shown in the table below:

<b>Approving authority / department</b>	<b>Date of submission of first proposal for clearance / approval</b>	<b>Approval / NOC (No Objection Certificate) date</b>	<b>No. of days elapsed</b>
Railways	15.12.2012	22.4.2015	858
Defence	8.7.2013	19.3.2015	619
Civil Aviation	4.5.2013	10.3.2014	310
NHAI	25.9.2013	13.8.2014	322

40. It is observed that time taken in obtaining approvals from Defence, Civil Aviation and NHAI is subsumed in the time taken to obtain approval from Railways. The chronology of events shows that there was considerable time gap in the frequency of communication through official letters. However, it is observed that delay on account of receipt of approvals from the Civil Aviation department and NHAI is subsumed in the period of delay attributable to land acquisition at Varanasi Sub-station. The delay on account of delay in receipt of approvals from the Railways and Defence departments is subsumed in the delay due to RoW issues in the 765 kV S/C Kanpur (new)-Jhatikara line.



**Delay due to RoW issues in 765 kV D/C Varanasi-Kanpur(new) line**

41. The submissions of the Petitioner show that RoW issues were created by the landowners, villagers and HPPCL. The Petitioner has submitted detailed chronology supported by documentary evidence of the court cases filed in the matter. It is observed that court cases filed by the landowners took considerable time which in turn delayed the final judgement in the matter. The time elapsed on account of issues related to RoW is shown in the table below:

Activity	Date	No. of days elapsed
Initiation of communication for RoW with District Authorities	15.12.2012	982
Final resolution of the RoW issues	24.8.2015	

42. It is observed that final resolution of RoW issues took considerable time which impacted the timely execution of the asset. The above reasons of delay in execution of the transmission asset were beyond the control of the Petitioner. The delay due to RoW issues in 765 kV S/C Varanasi-Kanpur (new) line is subsumed in the delay due to RoW issues in 765 kV S/C Kanpur (new)-Jhatikara line. The same has been discussed above in this order.

**Delay due to various RoW issues in 765 kV S/C Kanpur (new)-Jhatikara line**

43. From the submissions of the Petitioner, it is evident that there were various RoW issues and court cases filed in the matter. Court cases filed against the Petitioner consumed considerable time in receiving the judgments from the Court and final approval for further processing. Days lost on account of issues relating to RoW is shown in the table below:





Activity	Date	No. of days lost
Filing of first civil suit by one of the landowners	4.7.2012	1394
Final resolution of the RoW issues	28.4.2016	

44. It is noticed that final resolution of the RoW issues in 765 kV Kanpur (new)-Jhatikara line took considerable time. The reasons were beyond the control of the Petitioner. Hence, delay due to RoW issues in the aforementioned line is condoned.

45. The number of days elapsed to complete various activities related to execution of Asset-I as discussed in the previous paragraphs is shown below:

Sl. No.	Activity	Date of completion of activity	No. of days elapsed to complete the activity	Remarks
(1)	Land acquisition for Varanasi Sub-station	12.12.2014	1037 (From IA date)	-
(2)	Land acquisition for Kanpur Sub-station	17.10.2013	616 (From IA date)	Delay subsumed in delay due to activity in Sl. No. (1)
(3)	Clearances for Varanasi-Kanpur (new) line*	22.4.2015	858 <sup>^</sup>	Delay subsumed in delay due to activity in Sl. No. (5)
(4)	RoW for Varanasi-Kanpur (new) line*	24.8.2015	982	Delay subsumed in delay due to activity in Sl. No. (5)
(5)	RoW for Kanpur (new)-Jhatikara line*	28.4.2016	1394	

*\*No. of days elapsed are from date of start of the activity*

*<sup>^</sup>Number of days taken to complete the activity related to obtaining clearance from the Railways. The number of days taken to obtain clearance from the Civil Aviation, Defence departments and NHAI are subsumed in the number of days taken for clearance from Railways.*

46. The date of IA date was 9.2.2012 and the actual COD claimed by the Petitioner is 14.7.2016. It is observed that delay in completion of the activities mentioned in the table above had a cascading effect on downstream activities including civil works, erection, installation of equipment, testing and commissioning.

47. As discussed in the above paragraph, the delay in respect of Asset-I was on account of reasons beyond the control of the Petitioner. Hence, the entire delay of 645 days in completion of Asset-I is condoned.



**Delay in respect of Assets-III and V**

48. The reasons of delay in declaring the commercial operation of Asset-III are based on the information furnished by the Petitioner and the same is as under:

Asset	Activity	Period of activity				Time over-run	Reason(s) for time over-run
		Planned		Achieved			
Asset-III		From	To	From	To		
125 MVar 400 kV Bus Reactor and associated bay at Kanpur (new) GIS	LOA	19.9.2012	19.9.2012	26.6.2013	26.6.2013	9 months 7 days (280 days)	Mainly on account of delay in achieving commercial operation of Asset-I
	Supplies (Structure, equipment, etc.)	10.1.2013	18.6.2014	13.3.2014	20.2.2016	20 months 2 days (612 days)	
	Civil works & Erection	4.4.2013	20.8.2014	3.1.2014	10.3.2017	30 months 18 days (933 days)	
	Testing & commissioning	10.7.2014	1.10.2014	16.8.2016	31.8.2016	22 months 30 days (700 days)	

49. It is observed that civil works and erection activities could be started for 125 MVar 400 kV Bus Reactor at Kanpur only after completion of land acquisition on 17.10.2013 and the same has been mentioned above in this order.

50. On perusal of above table, it is noticed that the activity relating to 'testing and commissioning' was completed on 31.8.2016 for Asset-III. The Petitioner has claimed the date of commercial operation of Asset-III as 2.9.2016. The COD claimed by the Petitioner for Asset-III is considered in this order.

Asset	Activity	Period of activity				Time over-run	Reason(s) for time over-run
		Planned		Achieved			
Asset-V		From	To	From	To		
125 MVar 400 kV Bus Reactor and	LOA	19.9.2012	19.9.2012	26.11.2013	26.11.2013	14 months 7 days	Mainly on account of



associated bay at Varanasi (new) GIS						(433 days)	delay in achieving commercial operation of Asset-I
	Supplies (Structure, equipment, etc.)	10.1.2013	18.6.2014	23.6.2014	8.5.2015	22 months 20 days (690 days)	
	Civil works & Erection	4.4.2013	20.8.2014	1.1.2015	5.9.2015	12 months 16 days (381 days)	
Testing & commissioning	10.7.2014	1.10.2014	1.8.2016	30.9.2016	23 months 29 days (730 days)		

51. It is observed that the civil works and erection activities could be started for the 125 MVAr 400 kV Bus Reactor at Varanasi only after completion of land acquisition process on 12.12.2014.

52. From the above table, it is apparent that the activity relating to 'testing and commissioning' was completed on 30.9.2016 for Asset-V. The Petitioner has claimed the COD of Asset-V as 1.10.2016. The COD claimed by the Petitioner in the instant petition is considered in this order.

53. From the submissions of the Petitioner, it is observed that without execution of 765 kV D/C Varanasi-Kanpur (new) line and 765 kV S/C Kanpur (new) GIS-Jhatikara line, it was not possible to charge 765/400 kV Kanpur Sub-station. Therefore, the execution of Assets-III and V was delayed due to execution of Asset-I. As the time over-run in case of Asset-I has already been condoned, the time over-run of 695 days and 724 days in case of Asset-III and V respectively is also condoned.

### **Cost over-run**

54. The Petitioner has submitted the following reasons for variation in capital cost of the transmission assets:



### **Price Variation (PV) (Net increase of ₹55536 lakh)**

a. Increase in cost from DPR to LOA is because of the fact that contracts for various packages were awarded to the lowest evaluated and responsive bidder, on the basis of Competitive Bidding, after publication of NITs in leading newspapers. Thus, the award prices represent the lowest prices available at the time of bidding of various packages. The Petitioner has further submitted that during project execution, there has been inflationary trend in the prices of various input items as indicated by the indices given below:

Name of Indices	DPR (4Q'11PL) (one month prior to first OBD)	March 2012	March 2013	March 2014	March 2015	Increase from first OBD (%)
Tower Steel	51961	53234	53539	53586	49918	-3.93%
HG Zinc	118700	120600	132900	159200	155600	<b>31.09%</b>
EC Grade Al	136000	142167	146700	143883	151833	<b>11.64%</b>
CRGO	180040	165697	156590	194009	226050	<b>25.56%</b>
WPI	157.3	161	170.1	178.9	176.1	<b>11.95%</b>
WPI for Ferrous metals	151.1	154.8	154.7	156.3	151.4	<b>0.20%</b>
WPI for Fuel & Power	172.7	177.8	191.6	212.6	187.3	<b>8.45%</b>
CPI	197	201	224	238	254	<b>28.93%</b>

### **Variation in quantities of approved items (Net Increase of ₹26691 lakh)**

b. During execution of the transmission assets, the overall line length increased from 878 km in DPR to about 932 km resulting in variation in the following items:

- i. Tower Steel
- ii. Conductor and Earth-wire
- iii. Concreting and Reinforcement
- iv. Stringing



**Land and Compensation (Net increase of ₹6858 lakh)**

c. Based on actual expenditure incurred and balance anticipated expenditure likely to be incurred under the head, there has been an increase in cost. The details of increase in cost due to 'land and compensation' are hereunder:

Description	As per DPR (₹ in lakh)	As per RCE (₹ in lakh)	Remarks															
Land acquisition for sub-station & R&R Compensation	700	1725	Based on actual / anticipated payment.															
			<table border="1"><thead><tr><th></th><th colspan="2">DPR</th><th colspan="2">RCE</th></tr><tr><th></th><th>Area (Acre)</th><th>Amount (in ₹ lakh)</th><th>Area (Acre)</th><th>Amount (in ₹ lakh)</th></tr></thead><tbody><tr><td>Kanpur</td><td>50.00</td><td>700.00</td><td>52.36</td><td>1725.42</td></tr></tbody></table>		DPR		RCE			Area (Acre)	Amount (in ₹ lakh)	Area (Acre)	Amount (in ₹ lakh)	Kanpur	50.00	700.00	52.36	1725.42
				DPR		RCE												
	Area (Acre)	Amount (in ₹ lakh)	Area (Acre)	Amount (in ₹ lakh)														
Kanpur	50.00	700.00	52.36	1725.42														
Compensation towards crop, PTCC	1314	6159	Based on actual / anticipated payment.															
Compensation towards Forest	190	1179	During DPR preparation stage, about 16.80 Ha of forest area was envisaged. However, after detailed survey during implementation, total forest involvement was found to be about 32.95 Ha.															
<b>Total</b>	<b>2205</b>	<b>9063</b>																

**Foreign Exchange Rate Variation (Net Increase of ₹9586 lakh)**

d. The project involves funding from external commercial borrowings. Further, the payment under various contracts awarded in the project is in foreign currency. The details of exchange rates considered are as under:

Foreign currency (in INR)		
	Approved DPR (4Q, 2011 PL)	RCE
1 USD	54.48	Varied from 49.64 to 67.57
1 EURO	71.10	Varied from 65.65 to 86.31

**Variation in IDC and IEDC (net increase of ₹10777 lakh)**

e. As per the Investment Approval, IEDC including contingencies for the project was estimated at ₹21546 lakh on normative basis whereas in the RCE,



on the basis of actual/ anticipated expenditure incurred, it works out to ₹3472 lakh resulting in decrease of ₹18074 lakh.

f. IDC for the project as per approved DPR cost was estimated at ₹20719 lakh whereas based on the actual and anticipated funds flow, IDC for the project in the RCE works out to ₹49570 lakh. Thus, there is an increase of ₹28851 lakh in IDC. The main reasons for increase in IDC are the increase in estimated cost of the Project (excluding IDC) from ₹299425 lakh to ₹379661 lakh and increase in execution period from 32 months to 56 months.

g. The details of FR apportioned approved capital cost, actual expenditure upto COD, actual capital expenditure incurred during the 2015-19 period are as under:

Asset	Apportioned Approved Capital Cost	Cost as per RCE	Capital Cost as on COD	ACE as per Auditor Certificates				Capital Cost as on 31.3.2019
				2015-16	2016-17	2017-18	2018-19	
Asset-I	282165.62	376481.00	349949.63	0.00	6097.96	2178.08	1976.00	360201.7
Asset-II	3398.01	5599.00	3978.60	0.00	259.15	151.63	63.89	4453.27
Asset-III	2195.35	5269.00	3051.38	0.00	311.75	226.46	84.78	3674.37
Asset-IV	4201.25	4750.00	3691.18	67.54	307.16	0.00	0.00	4065.88
Asset-V	1973.61	1748.00	1241.18	0.00	56.29	64.10	32.66	1394.23
Asset-VI	26210.16	35383.00	32980.6	0.00	336.56	1057.14	325.58	34699.88

55. BRPL submitted that the Commission restricted the cost of the transmission assets to the apportioned approved capital cost in Petition No. 274/TT/2015, and that except for Assets-IV and V, all transmission assets have cost over-run. BRPL has further submitted that the Petitioner is required to justify as to how the indices have resulted in cost over-run. BRPL has submitted that RCE is mere indication of revision of cost of various transmission assets and no justification has been given for approving the cost. The Petitioner has not submitted the details of variation in prices, variation in the quantity, increase in land and forest compensation and Foreign Exchange. BRPL has submitted that cost over-run may not be allowed.



56. In response, the Petitioner has submitted that detailed reasons for cost variation have been given in the petition. The Petitioner has further submitted that Form-5 shows the detailed cost variation.

57. We have examined the submissions of BRPL and the Petitioner. On perusal of record, we find that the capital cost as on 31.3.2019 including ACE is within the RCE apportioned approved capital cost. However, there is cost variation in case of Assets-I, II, III and VI and it is allowed as the estimated completion capital cost is within the RCE apportioned approved capital cost.

**Interest During Construction (IDC) and Incidental Expenditure During Construction (IEDC)**

58. As stated above in this order, we have condoned the entire time over-run in respect of Assets-I, III and V. The time over-run in case of Assets-II was condoned in order dated 31.5.2016 in Petition No. 274/TT/2015 whereas the time over-run in case of Asset-IV was disallowed. The entire time over-run in case of Asset-VI was condoned in order dated 30.8.2016 in Petition No. 205/TT/2016.

59. The Petitioner has claimed IDC for the transmission assets covered in the instant petition and has submitted the statement showing IDC claim, discharge of IDC liability as on date of commercial operation and thereafter as under:

(₹ in lakh)

Assets	IDC as per Auditor Certificate	IDC Discharged upto COD	IDC discharged during 2015-16	IDC discharged during 2016-17	IDC discharged during 2017-18	Total IDC
Asset-I	39786.07	32003.37	0.00	7046.93	735.77	39786.07
Asset-II	383.07	293.79	0.00	89.27	0.00	383.06
Asset-III	344.63	282.09	0.00	30.69	31.85	344.63
Asset-IV	318.73	277.28	3.73	37.72	0.00	318.73
Asset-V	140.12	116.87	0.00	19.90	3.35	140.12
Asset-VI	4270.87	3873.60	0.00	88.34	308.94	4270.88



60. The Petitioner has submitted IDC computation statement which contains the name of loan, drawl date, loan amount, interest rate and interest claimed. IDC is worked out based on the details given in the IDC statement. Further, the loan amount as on the date of commercial operation has been mentioned in Forms 6 and 9C. On scrutiny of these documents, certain discrepancies have been noticed such as mismatch in loan amount between IDC statement and Forms 6 and 9C. The allowable IDC has been worked out based on the information available on record and by relying on loan amount as per Form 9C. IDC claimed and considered as on the date of commercial operation and summary of discharge of IDC liability up to date of commercial operation and thereafter for the purpose of tariff determination is as under:

(₹ in lakh)

Assets	IDC as per Auditor certificate	IDC disallowed due to time over-run not condoned	IDC disallowed due to computational error	IDC allowed	IDC discharged upto COD	IDC discharged during 2016-17	IDC discharged during 2017-18
1	2	3	4	5=2-3-4	6	7	8
Asset-I	39786.07	0.00	0.00	39786.07	32003.37	7046.93	735.77
Asset-II	383.07	0.00	2.34	380.73	293.79	86.94	0.00
Asset-III	344.63	0.00	0.16	344.47	282.09	30.69	31.69
Asset-IV	318.73	188.07	0.00	130.66	130.66	0.00	0.00
Asset-V	140.12	0.00	0.07	140.05	116.87	19.90	3.28
Asset-VI	4270.87	0.00	0.00	4270.87	3873.60	88.34	308.93

61. The Petitioner has claimed IEDC for the transmission assets covered in the instant petition as per the tabulation given below and has submitted Auditor Certificate in this regard. The Petitioner has submitted that the entire IEDC mentioned in the Auditor's Certificate is on cash basis and was paid upto the date of commercial operation.





(₹ in lakh)

<b>Assets</b>	<b>IEDC claimed as per Auditor certificate</b>	<b>IEDC discharged up to COD</b>
Asset-I	6107.44	6107.44
Asset-II	74.99	74.99
Asset-III	53.30	53.30
Asset-IV	101.44	101.44
Asset-V	22.27	22.27
Asset-VI	708.56	708.56

62. Time over-run in case of Asset-IV was disallowed. Hence, there is disallowance of IEDC. IEDC disallowed for Asset-IV due to the time over-run is as under:

(₹ in lakh)

<b>Assets</b>	<b>IEDC as per Auditor's Certificate</b>	<b>IEDC disallowed due to time over-run not condoned</b>
Asset-I	6107.44	0.00
Asset-II	74.99	0.00
Asset-III	53.30	0.00
Asset-IV	101.44	30.40
Asset-V	22.27	0.00
Asset-VI	708.56	0.00

63. IEDC claimed and considered as on the date of commercial operation for the purpose of tariff determination is as under:

(₹ in lakh)

<b>Asset</b>	<b>IEDC as per Auditor's Certificate</b>	<b>IEDC disallowed due to time over-run not condoned</b>	<b>IEDC allowed</b>
Asset-I	6107.44	0.00	6107.44
Asset-II	74.99	0.00	74.99
Asset-III	53.30	0.00	53.30
Asset-IV	101.44	30.40	71.04
Asset-V	22.27	0.00	22.27
Asset-VI	708.56	0.00	708.56



## Initial Spares

64. Regulation 13(d) of the 2014 Tariff Regulations provides that Initial Spares shall be capitalised as a percentage of plant and machinery cost up to cut-off date, subject to the following ceiling norms:

*“(d) Transmission System  
Transmission line: 1.00%  
Transmission sub-station (Green Field): 4.00%  
Transmission sub-station (Brown Field): 6.00%  
Gas Insulated sub-station :5.00%  
Communication System: 3.5%”*

65. The Initial Spares claimed by the Petitioner are as under:

(₹ in lakh)

Assets	Plant and Machinery Cost			Initial spares claimed by the Petitioner			Initial spares allowable as claimed by Petitioner		
	Transmission Line	Sub-station	PLCC	Transmission Line	Sub-station	PLCC	Transmission Line	Sub-station	PLCC
Asset-I	225336.23	90395.92	653.96	1978.54	3577.99	7.86	2256.14	4569.36	23.43
Asset-II	1843.52	2066.3	84.04	0.00	0.00	0.00	18.62	108.75	3.05
Asset-III	0.00	3352.51	0.00	0.00	142.81	0.00	0.00	168.93	0.00
Asset-IV	0.00	3950.97	81.59	0.00	198.22	0.00	0.00	239.54	2.96
Asset-V	0.00	1278.29	0.00	0.00	22.25	0.00	0.00	66.11	0.00
Asset-VI	27684.29	2231.65	133.69	0.00	0.00	0.00	279.64	117.46	4.85

66. BRPL has submitted that the Petitioner has claimed the Initial Spares beyond the ceiling prescribed under Regulation 13 of the 2014 Tariff Regulations in case of Assets-I, III, IV and V. BRPL has further submitted that the Petitioner has not claimed the Initial Spares for Assets-II and VI which may not be required in these transmission assets. BRPL has submitted that Initial Spares are provided asset-wise upto the ceiling and as such the Initial Spares beyond the ceiling may be disallowed strictly in



accordance with Regulation 13 of the 2014 Tariff Regulations. In response, the Petitioner has submitted that Initial Spares shall be seen as project in totality and may be allowed as claimed. We have considered the submissions of the Petitioner and BRPL. The Petitioner has claimed the Initial Spares of PLCC separately. The Commission vide order dated 24.1.2021 in Petition No.126/TT/2020 has already considered PLCC to be a part of sub-station. Therefore, the Initial Spares have been computed by combining the cost of both PLCC and sub-station and allowed as per the norms specified for sub-station in the 2014 Tariff Regulations. The Initial Spares allowed for the transmission assets as per percentage specified in the 2014 Tariff Regulations is as under:

Asset	Particulars	Plant and Machinery cost (excluding IDC and IEDC, land cost & cost of civil works) (₹ in lakh)	Initial Spares claimed (₹ in lakh)	Norms as per 2014 Tariff Regulations	Initial Spares allowable (₹ in lakh)	Allowed in order dated 31.5.2016 and order dated 30.8.2017 (₹ in lakh)	Initial Spares dis-allowed (₹ in lakh)	Initial Spares allowed (₹ in lakh)
		A	B	C	$D=(A-B)*C/(100-C)$	E	B-D	
Asset-I	Transmission Line	225336.23	1978.54	1.0%	2256.14	1181.02*	-	1978.54
	Sub-station and PLCC	91049.88	3585.85	5.0%	4603.37	2033.63*		3585.85
Asset-II	Transmission Line	1843.52	0.00	1.0%	18.62	-		0.00
	Sub-station and PLCC	2150.34	0.00	5.0%	113.18	-		0.00
Asset-III	Transmission Line	0.00	0.00	1.0%	0.00	-		0.00
	Sub-station	3352.51	142.81	5.0%	168.93	-		142.81
Asset-IV	Transmission Line	0.00	0.00	1.0%	0.00	-		0.00
	Sub-station (Brown Field) and PLCC	4032.56	198.22	6.0%	244.75	149.47#		198.22
Asset-V	Transmission Line	0.00	0.00	1.0%	0.00	-		0.00
	Sub-station	1278.29	22.25	5.0%	66.11	21.48		22.25
Asset-VI	Transmission Line	27684.29	0.00	1.0%	279.64	-		0.00
	Sub-station and PLCC	2365.34	0.00	5.0%	124.49	-		0.00

\* Claim of Asset-III included

# Initial Spares allowed after adjustment of cost over-run



### Capital Cost as on COD

67. The capital cost of the Transmission Project has been calculated in accordance with the Regulation 9(3) of the 2014 Tariff Regulation.

68. The Commission vide order dated 31.5.2016 in Petition No. 274/TT/2015 and vide order dated 30.8.2017 in Petition No. 205/TT/2016 had allowed the capital cost of ₹325184.13 lakh as on COD and projected ACE of ₹3022.73 lakh for determination of tariff for the 2014-19 period for transmission assets covered in the instant petition. The details of the same are as under:

(₹ in lakh)

Name of the Asset	FR Apportioned Approved Cost	Admitted Capital Cost as on COD	ACE				Admitted Capital Cost as on 31.0.2019
			2015-16	2016-17	2017-18	2018-19	
Assets-I & III	284360.97	284360.97	0.00	0.00	0.00	0.00	284360.97
Asset-II	3398.01	3398.01	0.00	0.00	0.00	0.00	3398.01
Asset-IV	4201.25	3661.16	67.54	472.55	0.00	0.00	4201.25
Asset-V	1973.61	1179.87	0.00	352.27	50.32	0.00	1582.46
Asset-VI	35383.00	32584.12	0.00	416.01	1248.03	416.01	34664.17

69. The total estimated completion cost claimed for Assets-I, II, III, IV and V vide order dated 31.5.2016 in Petition No. 274/TT/2015 was ₹410349.02 lakh against which the capital cost was restricted to FR approved cost of ₹293542.69 lakh.

70. The details of the capital cost now approved as on the date of commercial operation after adjustment of IDC, IEDC and Initial Spares are as under:

(₹ in lakh)

Assets	Capital Cost claimed as on COD (A)	Un-discharged IDC (B)	IDC disallowed due to time over-run (C)	IDC disallowed due to computational error (D)	IEDC disallowed due to time over-run (E)	Capital Cost allowed as on COD (E) = (A-B-C-D-E)
Asset-I	349949.63	7782.70	0.00	0.00	0.00	342166.93
Asset-II	3978.60	86.94	0.00	2.34	0.00	3889.32



Assets	Capital Cost claimed as on COD (A)	Un-discharged IDC (B)	IDC disallowed due to time over-run (C)	IDC disallowed due to computational error (D)	IEDC disallowed due to time over-run (E)	Capital Cost allowed as on COD (E) = (A-B-C-D-E)
Asset-III	3051.38	62.38	0.00	0.16	0.00	2988.84
Asset-IV	3691.18	0.00	188.07	0.00	30.40	3472.70
Asset-V	1241.18	23.18	0.00	0.07	0.00	1217.93
Asset-VI	32980.60	397.27	0.00	0.00	0.00	32583.33

### **Additional Capital Expenditure (ACE)**

71. The Commission allowed ACE of ₹3022.73 lakh for the transmission assets covered in the instant petition in 2014-19 tariff period towards balance and retention payments subject to ceiling of approved apportioned capital cost vide order dated 31.5.2016 in Petition No. 274/TT/2015 and order dated 30.8.2017 in Petition No. 205/TT/2016.

72. The Petitioner has claimed the following ACE based on actual expenditure:

(₹ in lakh)

Asset(s)	Approved Apportioned Cost as per FR	Approved Apportioned Cost as per RCE	Capital Cost as on COD	Actual ACE				Capital Cost as on 31.3.2019
				2015-16	2016-17	2017-18	2018-19	
Asset-I & III	282165.62	376481.00	349949.63	0.00	6097.96	2178.08	1976.00	<b>360201.7</b>
Asset-II	3398.01	5599.00	3978.60	0.00	259.15	151.63	63.89	<b>4453.27</b>
Asset-III	2195.35	5269.00	3051.38	0.00	311.75	226.46	84.78	<b>3674.37</b>
Asset-IV	4201.25	4750.00	3691.18	67.54	307.16	0.00	0.00	<b>4065.88</b>
Asset-V	1973.61	1748.00	1241.18	0.00	56.29	64.10	32.66	<b>1394.23</b>
Asset-VI	26210.16	35383.00	32980.6	0.00	336.56	1057.14	325.58	<b>34699.88</b>

73. The Petitioner has claimed that ACE incurred for all the transmission assets is on account of balance and retention payments due to undischarged liability for works executed within the cut-off date.



74. As per the earlier submission, ACE proposed was on account of balance/retention payment and as per instant petition ACE includes Balance Work. Through the TV (technical validation) letter dated 5.3.2020, the Petitioner was asked to submit the reasons along with the supporting documents. In response the Petitioner *vide* affidavit dated 12.3.2020 submitted that in Petition No. 274/TT/2015 and 205/TT/2016, ACE had been claimed with a justification that it is proposed mainly towards balance works and retention payments in transmission line and civil and other works of the sub-station. The Petitioner further submitted that there are many works in transmission line such as foundation protection work and erection of missing member which are done after COD. There are some compensation payments which are cleared by the district authorities after COD and payment is made thereafter. Similarly, there are many works in sub-station such as roads, drains, township, cable trench cover, service room of control room building other than main control room, landscaping works which are normally completed after COD. At the same time, payment for all the works which are completed till COD are not made by COD. Moreover, the final amendments to the work involve some new items and, therefore, rates of many items are not finalized by COD and hence it is not possible to freeze the liability of all the works by COD. Hence, in Petition No. 274/TT/2015 and Petition No. 205/TT/2016, all such payments (for all works completed by COD and beyond) were broadly clubbed together under one head as Balance works and Retention Payments. This practice has been followed in earlier true up petition also. However, during true-up which happens after 1 to 5 years, most of the final amendments are issued, payments and material reconciliation gets completed, final payments get released and contracts get closed. The Petitioner has submitted that it is only at this stage that the actual status of payments is reconciled and value of works beyond cut-off date (i.e. value of



unexecuted work) and the actual liability as on date of COD are exactly known. Accordingly, payments which were shown earlier as liability have now been bifurcated into unexecuted work (i.e. some works done after COD) and for those works which were completed as on COD but payments after COD as balance and retention payments.

75. The Petitioner in the Auditor’s Certificate dated 31.7.2019 has submitted that ACE in 2018-19 excludes Liquidated Damages (LD) amounting to ₹46.41 lakh recovered in 2018-19. Further, in response to the Commission’s query, The Petitioner has confirmed that the expenditure shown is after deduction of LD amount of ₹46.41 lakh. BRPL has submitted that the Petitioner has projected ACE in all the six assets under Regulation 14 of the 2014 Tariff Regulations. Further, BRPL has stated that almost all the assets have accrued IDC of varying order in the projected ACE and the same may be disallowed by the Commission. In response, the Petitioner has submitted that ACE may be allowed as claimed by the Petitioner.

76. We have considered the submissions of BRPL and the Petitioner. ACE claimed by the Petitioner is allowed under Regulation 14(1)(i) and (ii) of the 2014 Tariff Regulations. The un-discharged IDC liability as on the date of commercial operation has been allowed as ACE during the year of its discharge. The allowed ACE is summarized as under:

(₹ in lakh)

Asset	ACE (as per Auditor Certificate)				IDC Discharged				ACE (Including discharged IDC)			
	2015-16	2016-17	2017-18	2018-19	2015-16	2016-17	2017-18	2018-19	2015-16	2016-17	2017-18	2018-19
Asset-I	0.00	6097.96	2178.08	1976	0.00	7046.93	735.77	0.00	0.00	13144.89	2913.85	1976.00
Asset-II	0.00	259.15	151.63	63.89	0.00	86.94	0.00	0.00	0.00	346.09	151.63	63.89
Asset-III	0.00	311.75	226.46	84.78	0.00	30.69	31.69	0.00	0.00	342.44	258.15	84.78
Asset-IV	67.54	307.16	0	0.00	0.00	0.00	0.00	0.00	67.54	307.16	0.00	0.00



Asset	ACE (as per Auditor Certificate)				IDC Discharged				ACE (Including discharged IDC)			
	2015-16	2016-17	2017-18	2018-19	2015-16	2016-17	2017-18	2018-19	2015-16	2016-17	2017-18	2018-19
Asset-V	0.00	56.29	64.1	32.66	0.00	19.90	3.28	0.00	0.00	76.19	67.38	32.66
Asset-VI	0.00	336.56	1057.14	325.58	0.00	88.34	308.93	0.00	0.00	424.90	1366.07	325.58
<b>Total</b>	<b>67.54</b>	<b>7368.87</b>	<b>3677.41</b>	<b>2482.91</b>	<b>0.00</b>	<b>7272.80</b>	<b>1079.67</b>	<b>0.00</b>	<b>67.54</b>	<b>14641.67</b>	<b>4757.08</b>	<b>2482.91</b>

77. The details of the capital cost and ACE approved upto 31.3.2019 of the transmission assets covered in the instant petition are as under:

(₹ in lakh)

Asset	Capital Cost admitted as on COD	ACE (including accrued IDC discharged)				Capital Cost as on 31.3.2019
		2015-16	2016-17	2017-18	2018-19	
Asset-I	342166.93	0.00	13144.89	2913.85	1976.00	360201.67
Asset-II	3889.32	0.00	346.09	151.63	63.89	4450.93
Asset-III	2988.84	0.00	342.44	258.15	84.78	3674.21
Asset-IV	3472.70	67.54	307.16	0.00	0.00	3847.40
Asset-V	1217.93	0.00	76.19	67.38	32.66	1394.16
Asset-VI	32583.33	0.00	424.90	1366.07	325.58	34699.88

### Debt-Equity ratio

78. The Petitioner has claimed debt-equity ratio of 70:30 as on the date of commercial operation. Debt-equity ratio of 70:30 is considered as provided under Regulation 19 of the 2014 Tariff Regulations. The details of the debt and equity as on the date of commercial operation and as on 31.3.2019 for Assets-I, II, III, IV, V and VI considered for the purpose of tariff of the 2014-19 period is as under:

### Asset-I

Particulars	Capital Cost as on COD (₹ in lakh)	(%)	ACE during 2014-19 (₹ in lakh)	(%)	Capital Cost as on 31.3.2019 (₹ in lakh)	(%)
Debt	239516.85	70.00	12624.32	70.00	252141.17	70.00
Equity	102650.08	30.00	5410.42	30.00	108060.50	30.00
<b>Total</b>	<b>342166.93</b>	<b>100.00</b>	<b>18034.74</b>	<b>100.00</b>	<b>360201.67</b>	<b>100.00</b>





**Asset-II**

Particulars	Capital Cost as on COD (₹ in lakh)	(%)	ACE during 2014-19 (₹ in lakh)	(%)	Capital Cost as on 31.3.2019 (₹ in lakh)	(%)
Debt	2722.52	70.00	393.13	70.00	3115.65	70.00
Equity	1166.80	30.00	168.48	30.00	1335.28	30.00
<b>Total</b>	<b>3889.32</b>	<b>100.00</b>	<b>561.61</b>	<b>100.00</b>	<b>4450.93</b>	<b>100.00</b>

**Asset-III**

Particulars	Capital Cost as on COD (₹ in lakh)	(%)	ACE during 2014-19 (₹ in lakh)	(%)	Capital Cost as on 31.3.2019 (₹ in lakh)	(%)
Debt	2092.19	70.00	479.76	70.00	2571.94	70.00
Equity	896.65	30.00	205.61	30.00	1102.26	30.00
<b>Total</b>	<b>2988.84</b>	<b>100.00</b>	<b>685.37</b>	<b>100.00</b>	<b>3674.21</b>	<b>100.00</b>

**Asset-IV**

Particulars	Capital Cost as on COD (₹ in lakh)	(%)	ACE during 2014-19 (₹ in lakh)	(%)	Capital Cost as on 31.3.2019 (₹ in lakh)	(%)
Debt	2430.89	70.00	262.29	70.00	2693.18	70.00
Equity	1041.81	30.00	112.41	30.00	1154.22	30.00
<b>Total</b>	<b>3472.70</b>	<b>100.00</b>	<b>374.70</b>	<b>100.00</b>	<b>3847.40</b>	<b>100.00</b>

**Asset-V**

Particulars	Capital Cost as on COD (₹ in lakh)	(%)	ACE during 2014-19 (₹ in lakh)	(%)	Capital Cost as on 31.3.2019 (₹ in lakh)	(%)
Debt	852.55	70.00	123.36	70.00	975.91	70.00
Equity	365.38	30.00	52.87	30.00	418.25	30.00
<b>Total</b>	<b>1217.93</b>	<b>100.00</b>	<b>176.23</b>	<b>100.00</b>	<b>1394.16</b>	<b>100.00</b>

**Asset-VI**

Particulars	Capital Cost as on COD (₹ in lakh)	(%)	ACE during 2014-19 (₹ in lakh)	(%)	Capital Cost as on 31.3.2019 (₹ in lakh)	(%)
Debt	22808.33	70.00	1481.59	70.00	24289.92	70.00
Equity	9775.00	30.00	634.97	30.00	10409.96	30.00
<b>Total</b>	<b>32583.33</b>	<b>100.00</b>	<b>2116.55</b>	<b>100.00</b>	<b>34699.88</b>	<b>100.00</b>



## Depreciation

79. The Petitioner's claim towards depreciation in this petition was found higher than the depreciation allowed for the transmission assets in order dated 31.5.2016 in Petition No. 274/TT/2015 and in order dated 30.8.2017 in Petition No. 205/TT/2016. The Petitioner has neither given any justification for claiming higher depreciation than what was allowed earlier in orders dated 31.5.2016 and 30.8.2017 nor made any specific prayer for allowing higher depreciation in this petition. In a similar case, the Commission vide order dated 9.5.2020 in Petition No. 19/TT/2020 held as under:

*"31. We have considered the submissions of the Petitioner. The instant assets were put into commercial operation during the 2009-14 period and the tariff from the respective CODs to 31.3.2014 was allowed vide orders dated 30.8.2012 and 9.5.2013 in Petition No.343/2010 and Petition No. 147/TT/2011 respectively. Further, the tariff of the 2009- 14 period was trued up and tariff for the 2014-19 period was allowed vide order dated 25.2.2016 in Petition No.10/TT/2015. The Petitioner did not claim any capital expenditure towards "IT Equipment" in the above said three petitions where tariff for the instant assets for the 2009-14 period was allowed, tariff of the 2009-14 period was trued up and tariff for 2014-19 period was allowed even though there was a clear provision in the 2009 Tariff Regulations and 2014 Tariff Regulations providing depreciation @15% for IT Equipment. Having failed to make a claim as per the 2009 Tariff Regulations (the period during which COD of assets was achieved), the Petitioner has now, at the time of truing up of the tariff allowed for the 2014-19 period has apportioned a part of the capital expenditure to "IT Equipment". The Petitioner has adopted similar methodology not only in this but in some of the other petitions listed along with the instant petition on 26.2.2020. It is observed that the Petitioner has for the first time apportioned a part of the capital expenditure towards IT Equipment and has claimed depreciation under the head "IT Equipment" @15% at the time of truing up of the tariff of 2014-19 period. Regulation 8(1) of the 2014 Tariff Regulations provides for truing up of the capital expenditure including the additional capital expenditure, incurred up to 31.3.2019, admitted by the Commission after prudence check. We are of the view that scope of truing up exercise is restricted to truing up of the capital expenditure already admitted and apportionment or reapportionment of the capital expenditure cannot be allowed at the time of truing up. Therefore, we are not inclined to consider the Petitioner's prayer for apportionment of capital expenditure towards IT Equipment and allowing depreciation @ 15% from 1.4.2014 onwards. Accordingly, the depreciation @ 5.28% has been considered for IT Equipment as part of the sub-station up to 31.3.2019 while truing up the capital expenditure for the 2014-19 period. During the 2019-24 tariff period, the IT Equipment has been considered separately and depreciation has been allowed @ 15% for the balance depreciable value of IT Equipment in accordance with Regulation 33 read with Sr. No. (p) of the Appendix-I (Depreciation Schedule) of the 2019 Tariff Regulations."*



80. In line with the above order dated 9.5.2020 in Petition No. 19/TT/2020, the depreciation has been considered @5.28% for IT Equipment as part of the sub-station upto 31.3.2019 while truing up the capital expenditure for the 2014-19 period. During the 2019-24 tariff period, the IT Equipment has been considered separately and depreciation has been allowed @15% for the balance depreciable value of IT Equipment in accordance with Regulation 33 read with Sr. No. (p) of the Appendix-I (Depreciation Schedule) of the 2019 Tariff Regulations. The calculation of weighted average rate of depreciation (WAROD) is placed in Annexure-1. The Gross Block during the tariff period 2014-19 has been depreciated at WAROD (Annexure-1). WAROD has been worked out after taking into account the depreciation rates of assets as prescribed in the 2014 Tariff Regulations. Asset-wise depreciation approved in the instant petition followed by depreciation approved earlier, claimed by the Petitioner in the instant petition and trued up in this order are as follows:

**Asset-I**

(₹ in lakh)

Particulars	2016-17 (Pro-rata for 261 days)	2017-18	2018-19
Opening Gross Block	342166.93	355311.82	358225.67
ACE	13144.89	2913.85	1976.00
Closing Gross Block	355311.82	358225.67	360201.67
Average Gross Block	348739.38	356768.75	359213.67
Freehold Land	1443.97	1443.97	1443.97
Weighted Average Rate of Depreciation (WAROD) (%)	5.24	5.24	5.24
Balance useful life of the asset	32.00	32.00	31.00
Elapsed Life of the asset	0.00	0.00	1.00
Aggregated Depreciable Value	312565.86	319792.30	321992.73
<b>Combined Depreciation during the year</b>	<b>13063.69</b>	<b>18689.62</b>	<b>18817.11</b>
Aggregate Cumulative Depreciation	13063.69	31753.30	50570.41
Remaining Aggregate Depreciable Value	299502.18	288038.99	271422.32



(₹ in lakh)

Particulars	2016-17 (Pro-rata for 261 days)	2017-18	2018-19
Approved <i>vide</i> order dated 31.5.2016 in Petition No. 274/TT/2015	11823.18	14880.90	14880.90
Claimed by Petitioner	13078.96	18711.64	18839.50
Allowed after true-up in this order	13063.69	18689.62	18817.11

**Asset-II**

(₹ in lakh)

Particulars	2016-17	2017-18	2018-19
Opening Gross Block	3889.32	4235.41	4387.04
ACE	346.09	151.63	63.89
Closing Gross Block	4235.41	4387.04	4450.93
Average Gross Block	4062.37	4311.23	4418.99
Weighted Average Rate of Depreciation (WAROD) (%)	5.30%	5.29%	5.29%
Balance useful life of the asset	30.00	29.00	28.00
Elapsed Life of the asset	0.00	1.00	2.00
Aggregated Depreciable Value	3656.13	3880.10	3977.09
<b>Combined Depreciation during the year</b>	<b>215.26</b>	<b>228.28</b>	<b>233.97</b>
Aggregate Cumulative Depreciation	215.26	443.54	677.51
Remaining Aggregate Depreciable Value	3440.86	3436.56	3299.58

(₹ in lakh)

Particulars	2016-17	2017-18	2018-19
Approved <i>vide</i> order dated 31.5.2016 in Petition No. 274/TT/2015	180.20	180.20	180.20
Claimed by Petitioner	217.95	231.27	237.08
Allowed after true-up in this order	215.26	228.28	233.97

**Asset-III**

(₹ in lakh)

Particulars	2016-17 (Pro-rata for 211 days)	2017-18	2018-19
Opening Gross Block	2988.84	3331.28	3589.43
ACE	342.44	258.15	84.78
Closing Gross Block	3331.28	3589.43	3674.21
Average Gross Block	3160.06	3460.35	3631.82
Freehold Land	180.50	180.50	180.50
Weighted Average Rate of Depreciation (WAROD) (%)	4.65	4.68	4.71
Balance useful life of the asset	25.00	25.00	24.00



Particulars	2016-17 (Pro-rata for 211 days)	2017-18	2018-19
Elapsed Life of the asset	0.00	0.00	1.00
Aggregated Depreciable Value	2681.60	2951.87	3106.18
<b>Combined Depreciation during the year</b>	<b>84.88</b>	<b>161.89</b>	<b>170.88</b>
Aggregate Cumulative Depreciation	84.88	246.76	417.65
Remaining Aggregate Depreciable Value	2596.73	2705.10	2688.54

(₹ in lakh)

Particulars	2016-17 (Pro-rata for 211 days)	2017-18	2018-19
Approved <i>vide</i> order dated 31.5.2016 in Petition No. 274/TT/2015	Was included in Combined Asset- I, II, III, V, VI, VII, VIII <i>vide</i> order dated 31.5.2016 in Petition No. 274/TT/2015.		
Claimed by Petitioner	85.55	163.17	172.26
Allowed after true-up in this order	84.88	161.89	170.88

#### Asset-IV

(₹ in lakh)

Particulars	2015-16 (Pro-rata for 125 days)	2016-17	2017-18	2018-19
Opening Gross Block	3472.70	3540.24	3847.40	3847.40
ACE	67.54	307.16	0.00	0.00
Closing Gross Block	3540.24	3847.40	3847.40	3847.40
Average Gross Block	3506.47	3693.82	3847.40	3847.40
Weighted Average Rate of Depreciation (WAROD) (%)	5.28	5.29	5.29	5.29
Balance useful life of the asset	25.00	25.00	24.00	23.00
Elapsed Life of the asset	0.00	0.00	1.00	2.00
Aggregated Depreciable Value	3155.83	3324.44	3462.66	3462.66
<b>Combined Depreciation during the year</b>	<b>63.23</b>	<b>195.27</b>	<b>203.62</b>	<b>203.62</b>
Aggregate Cumulative Depreciation	63.23	258.50	462.12	665.74
Remaining Aggregate Depreciable Value	3092.60	3065.94	3000.54	2796.93

(₹ in lakh)

Particulars	2015-16 (Pro-rata for 125 days)	2016-17	2017-18	2018-19
Approved <i>vide</i> order dated 31.5.2016 in Petition No. 274/TT/2015	66.63	208.96	221.05	221.05
Claimed by Petitioner	67.16	208.00	217.44	217.44
Allowed after true-up in this order	63.23	195.27	203.62	203.62



**Asset-V**

(₹ in lakh)

Particulars	2016-17 (Pro-rata for 182 days)	2017-18	2018-19
Opening Gross Block	1217.93	1294.12	1361.50
ACE	76.19	67.38	32.66
Closing Gross Block	1294.12	1361.50	1394.16
Average Gross Block	1256.03	1327.81	1377.83
Weighted Average Rate of Depreciation (WAROD)	5.27	5.26	5.27
Balance useful life of the asset	25.00	25.00	24.00
Elapsed Life of the asset	0.00	0.00	1.00
Aggregated Depreciable Value	1130.42	1195.03	1240.05
<b>Combined Depreciation during the year</b>	<b>32.97</b>	<b>69.90</b>	<b>72.54</b>
Aggregate Cumulative Depreciation	32.97	102.88	175.42
Remaining Aggregate Depreciable Value	1097.45	1092.15	1064.63

(₹ in lakh)

Particulars	2016-17 (Pro-rata for 182 days)	2017-18	2018-19
Approved <i>vide</i> order dated 31.5.2016 in Petition No. 274/TT/2015	56.59	81.65	82.96
Claimed by Petitioner	33.69	71.41	74.11
Allowed after true-up in this order	32.97	69.90	72.54

**Asset-VI**

(₹ in lakh)

Particulars	2016-17 (Pro-rata for 161 days)	2017-18	2018-19
Opening Gross Block	32583.33	33008.23	34374.30
ACE	424.90	1366.07	325.58
Closing Gross Block	33008.23	34374.30	34699.88
Average Gross Block	32795.78	33691.27	34537.09
Weighted Average Rate of Depreciation (WAROD) (%)	5.28	5.28	5.28
Balance useful life of the asset	34.00	34.00	33.00
Elapsed Life of the asset	0.00	0.00	1.00
Aggregated Depreciable Value	29516.20	30322.14	31083.38
<b>Combined Depreciation during the year</b>	<b>764.29</b>	<b>1780.04</b>	<b>1824.75</b>
Aggregate Cumulative Depreciation	764.29	2544.32	4369.07
Remaining Aggregate Depreciable Value	28751.92	27777.82	26714.31



(₹ in lakh)

Particulars	2016-17 (Pro-rata for 161 days)	2017-18	2018-19
Approved <i>vide</i> order dated 30.8.2017 in Petition No. 205/TT/2016	764.20	1776.58	1820.68
Claimed by Petitioner	765.54	1783.01	1827.86
Allowed after true-up in this order	764.29	1780.04	1824.75

**Interest on Loan (IoL)**

81. The Petitioner has claimed the weighted average rate of IoL, based on its actual loan portfolio and rate of interest. Accordingly, IoL has been calculated based on actual interest rate submitted by the Petitioner, in accordance with Regulation 26 of the 2014 Tariff Regulations. Asset-wise IoL approved in the instant petition followed by IoL approved earlier, claimed by the Petitioner in the instant petition and trued up in this order are as follows:

**Asset-I**

(₹ in lakh)

Particulars	2016-17 (Pro-rata for 261 days)	2017-18	2018-19
Gross Normative Loan	239516.85	248718.27	250757.97
Cumulative Repayments up to Previous Year	0.00	13063.69	31753.30
Net Loan-Opening	239516.85	235654.59	219004.67
Additions due to ACE	9201.42	2039.70	1383.20
Repayment during the year	13063.69	18689.62	18817.11
Net Loan-Closing	235654.59	219004.67	201570.75
Average Loan	237585.72	227329.63	210287.71
Weighted Average Rate of Interest on Loan (%)	7.8660	7.7056	7.6416
<b>Interest on Loan</b>	<b>13363.53</b>	<b>17517.15</b>	<b>16069.25</b>

(₹ in lakh)

Particulars	2016-17 (Pro-rata for 261 days)	2017-18	2018-19
Approved <i>vide</i> order dated 31.5.2016 in Petition No. 274/TT/2015	12173.18	14237.08	13021.82
Claimed by Petitioner	13363.12	17515.09	16065.64
Allowed after true-up in this order	13363.53	17517.15	16069.25



**Asset-II**

(₹ in lakh)

Particulars	2016-17	2017-18	2018-19
Gross Normative Loan	2722.52	2964.79	3070.93
Cumulative Repayments up to Previous Year	0.00	215.26	443.54
Net Loan-Opening	2722.52	2749.52	2627.39
Additions due to ACE	242.26	106.14	44.72
Repayment during the year	215.26	228.28	233.97
Net Loan-Closing	2749.52	2627.39	2438.14
Average Loan	2736.02	2688.46	2532.77
Weighted Average Rate of Interest on Loan (%)	8.7411	8.4605	8.3636
<b>Interest on Loan</b>	<b>239.16</b>	<b>227.46</b>	<b>211.83</b>

(₹ in lakh)

Particulars	2016-17	2017-18	2018-19
Approved <i>vide</i> order dated 31.5.2016 in Petition No. 274/TT/2015	204.83	188.22	171.66
Claimed by Petitioner	239.11	227.24	211.36
Allowed after true-up in this order	239.16	227.46	211.83

**Asset-III**

(₹ in lakh)

Particulars	2016-17 (Pro-rata for 211 days)	2017-18	2018-19
Gross Normative Loan	2092.19	2331.90	2512.60
Cumulative Repayments up to Previous Year	0.00	84.88	246.76
Net Loan-Opening	2092.19	2247.02	2265.84
Additions due to ACE	239.71	180.70	59.35
Repayment during the year	84.88	161.89	170.88
Net Loan-Closing	2247.02	2265.84	2154.30
Average Loan	2169.60	2256.43	2210.07
Weighted Average Rate of Interest on Loan (%)	8.0832	8.0539	8.0447
<b>Interest on Loan</b>	<b>101.38</b>	<b>181.73</b>	<b>177.79</b>

(₹ in lakh)

Particulars	2016-17 (Pro-rata for 211 days)	2017-18	2018-19
Approved <i>vide</i> order dated 31.5.2016 in Petition No. 274/TT/2015	Was included in Combined Asset- I, II, III, V, VI, VII, VIII <i>vide</i> order dated 31.5.2016 in Petition No. 274/TT/2015.		
Claimed by Petitioner	101.37	181.63	177.59
Allowed after true-up in this order	101.38	181.73	177.79





**Asset-IV**

(₹ in lakh)

Particulars	2015-16 (Pro-rata for 125 days)	2016-17	2017-18	2018-19
Gross Normative Loan	2430.89	2478.17	2693.18	2693.18
Cumulative Repayments up to Previous Year	0.00	63.23	258.50	462.12
Net Loan-Opening	2430.89	2414.94	2434.68	2231.06
Additions due to ACE	47.28	215.01	0.00	0.00
Repayment during the year	63.23	195.27	203.62	203.62
Net Loan-Closing	2414.94	2434.68	2231.06	2027.45
Average Loan	2422.92	2424.81	2332.87	2129.26
Weighted Average Rate of Interest on Loan (%)	8.9351	8.8616	8.6672	8.6217
<b>Interest on Loan</b>	<b>73.94</b>	<b>214.88</b>	<b>202.20</b>	<b>183.58</b>

(₹ in lakh)

Particulars	2015-16 (Pro-rata for 125 days)	2016-17	2017-18	2018-19
Approved <i>vide</i> order dated 31.5.2016 in Petition No. 274/TT/2015	78.32	234.00	229.42	209.44
Claimed by Petitioner	77.70	226.35	213.41	193.54
Allowed after true-up in this order	73.94	214.88	202.20	183.58

**Asset-V**

(₹ in lakh)

Particulars	2016-17 (Pro- rata for 182 days)	2017-18	2018-19
Gross Normative Loan	852.55	905.88	953.05
Cumulative Repayments up to Previous Year	0.00	32.97	102.88
Net Loan-Opening	852.55	872.91	850.17
Additions due to ACE	53.33	47.17	22.86
Repayment during the year	32.97	69.90	72.54
Net Loan-Closing	872.91	850.17	800.49
Average Loan	862.73	861.54	825.33
Weighted Average Rate of Interest on Loan (%)	8.7379	8.5498	8.4774
<b>Interest on Loan</b>	<b>37.59</b>	<b>73.66</b>	<b>69.97</b>

(₹ in lakh)

Particulars	2016-17 (Pro-rata for 182 days)	2017-18	2018-19
Approved <i>vide</i> order dated 31.5.2016 in Petition No. 274/TT/2015	84.10	90.57	84.59



Particulars	2016-17 (Pro-rata for 182 days)	2017-18	2018-19
Claimed by Petitioner	37.57	73.54	69.72
Allowed after true-up in this order	37.59	73.66	69.97

### **Asset-VI**

(₹ in lakh)

Particulars	2016-17 (Pro-rata for 161 days)	2017-18	2018-19
Gross Normative Loan	22808.33	23105.76	24062.01
Cumulative Repayments up to Previous Year	0.00	764.29	2544.32
Net Loan-Opening	22808.33	22341.48	21517.69
Additions due to ACE	297.43	956.25	227.91
Repayment during the year	764.29	1780.04	1824.75
Net Loan-Closing	22341.48	21517.69	19920.84
Average Loan	22574.90	21929.58	20719.27
Weighted Average Rate of Interest on Loan (%)	8.7241	8.4572	8.3425
<b>Interest on Loan</b>	<b>868.72</b>	<b>1854.62</b>	<b>1728.50</b>

(₹ in lakh)

Particulars	2016-17 (Pro-rata for 161 days)	2017-18	2018-19
Approved <i>vide</i> order dated 30.8.2017 in Petition No. 205/TT/2016	879.62	1932.14	1823.74
Claimed by Petitioner	868.69	1854.40	1728.02
Allowed after true-up in this order	868.72	1854.62	1728.50

### **Return on Equity (RoE)**

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

Year	Claimed effective tax rate (in %)	Grossed up RoE (Base Rate/1-t) (in %)
2014-15	21.018	19.624
2015-16	21.382	19.715
2016-17	21.338	19.704



<b>Year</b>	<b>Claimed effective tax rate (in %)</b>	<b>Grossed up RoE (Base Rate/1-t) (in %)</b>
2017-18	21.337	19.704
2018-19	21.549	19.757

83. BRPL has submitted that the Petitioner in the instant petition has mentioned the effective tax rate only for FY 2014-15 and 2015-16. BRPL has further submitted that actual tax paid on income from other business activities of the Petitioner like Consulting, Communication, Planning and Designing of the national/ international projects etc. are required to be excluded for computation of effective tax rate and the same has not been done by the Petitioner. BRPL has submitted that on submission of the said information, the Petitioner can be allowed differential tariff as claimed on account of true up of RoE based on effective tax rate for FY 2014-15 and FY 2015-16 only. BRPL has also submitted that true up for balance period of 2014-19 can be done after the information is supplied by the Petitioner. BRPL has submitted that in terms of Regulation 25(1) of the 2014 Tariff Regulations, deferred tax liability during the 2014-19 tariff period shall not be considered in calculation of effective tax rate. BRPL has further submitted that on the basis of the financial statements of the Petitioner in public domain, BRPL has worked out the effective tax rate of the Petitioner which stands at 8.07% for 2014-15 and 'NIL' in 2015-16, 2016-17, 2017-18 and 2018-19. BRPL has submitted that for computation of effective tax rate for FY 2014-15, the Petitioner should provide the details of actual tax on income from other business streams including deferred tax liability i.e. income on business other than business of generation or transmission, as the case may be.

84. In response, the Petitioner has submitted that for computing effective tax rate, the Respondent has considered the profit before tax as reported in the Statement of Profit and Loss of consolidated financial statements. The Petitioner has further



submitted that Petitioner has been paying tax under section 115JB of the Income Tax Act, 1961 (MAT provisions). The Petitioner's taxable income as Company is derived as per MAT from Profit Before Tax as indicated in the financial statements. The Petitioner has submitted that tax as reported in the financial statements cannot be used as base to calculate the effective tax rate. The Petitioner has clarified that it has submitted effective tax rates for all the financial years starting from 2014-15 to 2018-19 in para 5.4 of the instant petition. The Petitioner has further clarified that all the income from all the streams of businesses was taxable at MAT rate only. The Petitioner has submitted that effective tax rate computed by the Respondent is based on consolidated financial statements of the Petitioner as Company whereas income tax return is filed for the Company on the basis of standalone financial statements. The Petitioner has clarified that tax returns of the subsidiaries and joint ventures are filed separately as individual entities.

85. We have considered the submission of BRPL and the Petitioner. The Commission in order dated 27.4.2020 in Petition No. 247/TT/2019 has 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 relevant portion of the order dated 27.4.2020 is as under:

*"26. We are conscious that the entities covered under MAT regime are paying Income Tax as per MAT rate notified for respective financial year under IT Act, 1961, which is levied on the book profit of the entity computed as per the Section 115JB of the IT Act, 1961. The Section 115JB(2) defines book profit as net profit in the statement of Profit & Loss prepared in accordance with Schedule-III of the Companies Act, 2013, subject to some additions and deductions as mentioned in the IT Act, 1961. Since the Petitioner has been paying income tax on income computed under Section 115JB of the IT Act, 1961 as per the MAT rates of the respective financial year, the notified MAT rate for respective financial year shall be considered as effective tax rate for the purpose of grossing up of RoE for truing up of the tariff of the 2014-19 tariff period in terms of the provisions of the 2014 Tariff Regulations. Interest imposed on any additional income tax demand as per the Assessment Order of the Income Tax authorities shall be considered on actual payment. However, penalty (for default on the part of the Assessee) if any imposed shall not be taken into account for the purpose of grossing up of rate of return on equity. Any under-recovery or over-recovery of grossed up rate on return on equity after truing up, shall be recovered or refunded to beneficiaries or the long-term transmission customers / DICs as the case may be on year to year basis.*



27. Accordingly, following effective tax rates based on notified MAT rates are considered for the purpose of grossing up of rate of return on equity:

<b>Year</b>	<b>Notified MAT rates (inclusive of surcharge &amp; cess)</b>	<b>Effective tax (in %)</b>
2014-15	20.961	20.961
2015-16	21.342	21.342
2016-17	21.342	21.342
2017-18	21.342	21.342
2018-19	21.549	21.549

”

86. The MAT rates considered in order dated 27.4.2020 in Petition No. 274/TT/2019 are considered for the purpose of grossing up of rate of RoE for truing up of the tariff of the 2014-19 tariff period in terms of the provisions of the 2014 Tariff Regulations, as under:

<b>Year</b>	<b>Notified MAT rates (inclusive of surcharge &amp; cess) (in %)</b>	<b>Base rate of RoE (in %)</b>	<b>Grossed up RoE (Base Rate/1-t) (in %)</b>
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

87. The Petitioner has claimed RoE for the 2014-19 period after grossing up RoE of 15.50% with Effective Tax rates (based on MAT rates) each year. RoE is trued up on the basis of the MAT rate applicable in the respective years. Asset-wise RoE approved in the instant petition followed by RoE approved earlier, claimed by the Petitioner in the instant petition and trued up in this order are as follows:



**Asset-I**

(₹ in lakh)

Particulars	2016-17 (Pro-rata for 261 days)	2017-18	2018-19
Opening Equity	102650.08	106593.55	107467.70
Additions due to ACE	3943.47	874.16	592.80
Closing Equity	106593.55	107467.70	108060.50
Average Equity	104621.81	107030.62	107764.10
Return on Equity (Base Rate) (%)	15.500	15.500	15.500
MAT Rate for respective year (%)	21.342	21.342	21.549
Rate of Return on Equity (%)	19.705	19.705	19.758
<b>Return on Equity</b>	<b>14742.00</b>	<b>21090.88</b>	<b>21291.50</b>

(₹ in lakh)

Particulars	2016-17 (Pro-rata for 261 days)	2017-18	2018-19
Approved <i>vide</i> order dated 31.5.2016 in Petition No. 274/TT/2015	13291.50	16728.96	16728.96
Claimed by Petitioner	14741.66	21090.38	21292.03
Allowed after true-up in this order	14742.00	21090.88	21291.50

**Asset-II**

(₹ in lakh)

Particulars	2016-17	2017-18	2018-19
Opening Equity	1166.80	1270.62	1316.11
Additions	103.83	45.49	19.17
Closing Equity	1270.62	1316.11	1335.28
Average Equity	1218.71	1293.37	1325.70
Return on Equity (Base Rate) (%)	15.500	15.500	15.500
MAT Rate for respective year (%)	21.342	21.342	21.549
Rate of Return on Equity (%)	19.705	19.705	19.758
<b>Return on Equity</b>	<b>240.15</b>	<b>254.86</b>	<b>261.92</b>

(₹ in lakh)

Particulars	2016-17	2017-18	2018-19
Approved <i>vide</i> order dated 31.5.2016 in Petition No. 274/TT/2015	199.90	199.90	199.90
Claimed by Petitioner	240.22	255.00	262.07
Allowed after true-up in this order	240.15	254.86	261.92



### Asset-III

(₹ in lakh)

Particulars	2016-17 (Pro-rata for 211 days)	2017-18	2018-19
Opening Equity	896.65	999.38	1076.83
Additions	102.73	77.44	25.43
Closing Equity	999.38	1076.83	1102.26
Average Equity	948.02	1038.11	1089.54
Return on Equity (Base Rate) (%)	15.500	15.500	15.500
MAT Rate for respective year (%)	21.342	21.342	21.549
Rate of Return on Equity (%)	19.705	19.705	19.758
<b>Return on Equity</b>	<b>107.99</b>	<b>204.56</b>	<b>215.27</b>

(₹ in lakh)

Particulars	2016-17 (Pro-rata for 211 days)	2017-18	2018-19
Approved <i>vide</i> order dated 31.5.2016 in Petition No. 274/TT/2015	Was included in Combined Asset- I, II, III, V, VI, VII, VIII <i>vide</i> order dated 31.5.2016 in Petition No. 274/TT/2015.		
Claimed by Petitioner	107.99	204.56	215.28
Allowed after true-up in this order	107.99	204.56	215.27

### Asset-IV

(₹ in lakh)

Particulars	2015-16 (Pro-rata for 125 days)	2016-17	2017-18	2018-19
Opening Equity	1041.81	1062.07	1154.22	1154.22
Additions	20.26	92.15	0.00	0.00
Closing Equity	1062.07	1154.22	1154.22	1154.22
Average Equity	1051.94	1108.15	1154.22	1154.22
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500
MAT Rate for respective year (%)	21.342	21.342	21.342	21.549
Rate of Return on Equity (%)	19.705	19.705	19.705	19.758
<b>Return on Equity</b>	<b>70.80</b>	<b>218.37</b>	<b>227.44</b>	<b>228.05</b>

(₹ in lakh)

Particulars	2015-16 (Pro-rata for 125 days)	2016-17	2017-18	2018-19
Approved <i>vide</i> order dated 31.5.2016 in Petition No. 274/TT/2015	74.24	233.26	247.16	247.16
Claimed by Petitioner	74.44	230.16	240.35	241.00
Allowed after true-up in this order	70.80	218.37	227.44	228.05



**Asset-V**

(₹ in lakh)

Particulars	2016-17 (Pro-rata for 182 days)	2017-18	2018-19
Opening Equity	365.38	388.24	408.45
Additions	22.86	20.21	9.80
Closing Equity	388.24	408.45	418.25
Average Equity	376.81	398.34	413.35
Return on Equity (Base Rate) (%)	15.500	15.500	15.500
MAT Rate for respective year (%)	21.342	21.342	21.549
Rate of Return on Equity (%)	19.705	19.705	19.758
<b>Return on Equity</b>	<b>37.02</b>	<b>78.50</b>	<b>81.67</b>

(₹ in lakh)

Particulars	2016-17 (Pro-rata for 182 days)	2017-18	2018-19
Approved <i>vide</i> order dated 31.5.2016 in Petition No. 274/TT/2015	63.38	91.62	93.10
Claimed by Petitioner	37.02	78.49	81.67
Allowed after true-up in this order	37.02	78.50	81.67

**Asset-VI**

(₹ in lakh)

Particulars	2016-17 (Pro-rata for 161 days)	2017-18	2018-19
Opening Equity	9775.00	9902.47	10312.29
Additions	127.47	409.82	97.67
Closing Equity	9902.47	10312.29	10409.96
Average Equity	9838.73	10107.38	10361.13
Return on Equity (Base Rate) (%)	15.500	15.500	15.500
MAT Rate for respective year (%)	21.342	21.342	21.549
Rate of Return on Equity (%)	19.705	19.705	19.758
<b>Return on Equity</b>	<b>855.18</b>	<b>1991.71</b>	<b>2047.10</b>

(₹ in lakh)

Particulars	2016-17 (Pro-rata for 161 days)	2017-18	2018-19
Approved <i>vide</i> order dated 30.8.2017 in Petition No. 205/TT/2016	850.94	1978.11	2027.06
Claimed by Petitioner	855.16	1991.66	2047.15
Allowed after true-up in this order	855.18	1991.71	2047.10





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

88. The O&M Expenses claimed by the Petitioner for the various elements included in the transmission assets for the 2014-19 period are as under:

### **Asset-I**

(₹ in lakh)			
Particulars	2016-17 (Pro-rata for 261 days)	2017-18	2018-19
13 Nos. 765 kV Sub-station Bays (at Kanpur, Varanasi and Jhatikara)			
2 Nos. 400 kV Sub-station Bays (at Kanpur)			
4 Nos. 400 kV GIS Sub-station Bays (at Kanpur)			
465.09 km S/C (Bundle Conductor- 4 sub-c) (Jhtaikara-Kanpur)			
347.32 km D/C Bundled( 4 or more sun c) (Kanpur-Varanasi, Kanpur-Kanpur)			
<b>Total O&amp;M Expenses Claimed</b>	<b>1583.72</b>	<b>2288.67</b>	<b>2364.58</b>

### **Asset-II**

(₹ in lakh)			
Particulars	2016-17	2017-18	2018-19
2 Nos. 400 kV GIS Sub-station Bays (at Varanasi)			
12.245 km D/C Bundled (4 or more sun c) (Sasaram-Allahabad)			
<b>Total O&amp;M Expenses Claimed</b>	<b>119.28</b>	<b>123.23</b>	<b>127.33</b>

### **Asset-III**

(₹ in lakh)			
Particulars	2016-17 (Pro-rata for 211 days)	2017-18	2018-19
1 Nos. 400 kV GIS Sub-station Bays (at Kanpur)			
<b>Total O&amp;M Expenses Claimed</b>	<b>31.81</b>	<b>56.84</b>	<b>58.73</b>

### **Asset-IV**

(₹ in lakh)				
Particulars	2015-16 (Pro-rata for 125 days)	2016-17	2017-18	2018-19
1 Nos. 765 kV Sub-station Bays (at Jhatikara)				
<b>Total O&amp;M Expenses Claimed</b>	<b>29.79</b>	<b>90.12</b>	<b>93.11</b>	<b>96.20</b>

### **Asset-V**

(₹ in lakh)			
Particulars	2016-17 (Pro-rata for 182 days)	2017-18	2018-19
1 Nos. 400 kV GIS Sub-station Bays (at Varanasi)			
<b>Total O&amp;M Expenses Claimed</b>	<b>27.43</b>	<b>56.84</b>	<b>58.73</b>



**Asset-VI**

(₹ in lakh)

Particulars	2016-17 (Pro-rata for 161 days)	2017-18	2018-19
2 Nos. 400 kV GIS Sub-station Bays (at Varanasi)			
106.33 km D/C Bundled (4 or more sun c) (Varanasi-Sarnath)			
<b>Total O&amp;M Expenses Claimed</b>	<b>101.68</b>	<b>238.19</b>	<b>246.12</b>

89. We have considered the submission of the Petitioner. Regulation 29(4) of the 2014 Tariff Regulations specifies the norms for O&M Expenses for the transmission system. Norms specified in respect of the elements covered in the transmission assets are as under:

Element	Norms for 2015-16	Norms for 2016-17	Norms for 2017-18	Norms for 2018-19
Single Circuit (Bundled conductor with 4 sub-conductors)	₹0.627 lakh/km	₹0.647 lakh/km	₹0.669 lakh/km	₹0.691 lakh/km
Double Circuit Twin Conductor	₹0.707 lakh/km	₹0.731 lakh/km	₹0.755 lakh/km	₹0.780 lakh/km
Double Circuit (Bundled conductor with 4 sub-conductors)	₹1.097 lakh/km	₹1.133 lakh/km	₹1.171 lakh/km	₹1.210 lakh/km
400 kV sub-station	₹62.30 lakh/bay	₹64.37 lakh/bay	₹66.51 lakh/bay	₹68.71 lakh/bay
400 kV GIS sub-station	₹53.25 lakh/bay	₹55.02 lakh/bay	₹56.84 lakh/bay	₹58.73 lakh/bay
765 kV sub-station	₹87.22 lakh/bay	₹90.12 lakh/bay	₹93.11 lakh/bay	₹96.20 lakh/bay

90. Asset-wise O&M Expenses approved in the instant petition followed by O&M Expenses approved earlier, claimed by the Petitioner in the instant petition and true up in this order are as follows:

**Asset-I**

(₹ in lakh)

Particulars	2016-17 (Pro-rata for 261 days)	2017-18	2018-19
<b>O&amp;M Expenses</b>	1583.74	2288.67	2364.57

(₹ in lakh)

Particulars	2016-17 (Pro-rata for 261 days)	2017-18	2018-19
Approved vide order dated 31.5.2016 in Petition No. 274/TT/2015	1708.57	2222.16	2295.87
Claimed by Petitioner	1583.72	2288.67	2364.58
Allowed after true-up in this order	1583.74	2288.67	2364.57



**Asset-II**

(₹ in lakh)

Particulars	2016-17	2017-18	2018-19
O&M Expenses	119.28	123.23	127.33

(₹ in lakh)

Particulars	2016-17	2017-18	2018-19
Approved <i>vide</i> order dated 31.5.2016 in Petition No. 274/TT/2015	119.28	123.23	127.33
Claimed by Petitioner	119.28	123.23	127.33
Allowed after true-up in this order	119.28	123.23	127.33

**Asset-III**

(₹ in lakh)

Particulars	2016-17 (Pro-rata for 211 days)	2017-18	2018-19
O&M Expenses	31.81	56.84	58.73

(₹ in lakh)

Particulars	2016-17 (Pro-rata for 211 days)	2017-18	2018-19
Approved <i>vide</i> order dated 31.5.2016 in Petition No. 274/TT/2015	Was included in Combined Asset I, II, III, V, VI, VII, VIII in order dated 31.5.2016 in Petition No. 274/TT/2015		
Claimed by Petitioner	31.81	56.84	58.73
Allowed after true-up in this order	31.81	56.84	58.73

**Asset-IV**

(₹ in lakh)

Particulars	2015-16 (Pro-rata for 125 days)	2016-17	2017-18	2018-19
O&M Expenses	29.79	90.12	93.11	96.20

(₹ in lakh)

Particulars	2015-16 (Pro-rata for 125 days)	2016-17	2017-18	2018-19
Approved <i>vide</i> order dated 31.5.2016 in Petition No. 274/TT/2015	69.30	90.12	93.11	96.20
Claimed by Petitioner	29.79	90.12	93.11	96.20
Allowed after true-up in this order	29.79	90.12	93.11	96.20



## Asset-V

(₹ in lakh)

Particulars	2016-17 (Pro-rata for 182 days)	2017-18	2018-19
O&M Expenses	27.43	56.84	58.73

(₹ in lakh)

Particulars	2016-17 (Pro-rata for 182 days)	2017-18	2018-19
Approved <i>vide</i> order dated 31.5.2016 in Petition No. 274/TT/2015	43.71	56.84	58.73
Claimed by Petitioner	27.43	56.84	58.73
Allowed after true-up in this order	27.43	56.84	58.73

## Asset-VI

(₹ in lakh)

Particulars	2016-17 (Pro-rata for 161 days)	2017-18	2018-19
O&M Expenses	101.68	238.19	246.12

(₹ in lakh)

Particulars	2016-17 (Pro-rata for 161 days)	2017-18	2018-19
Approved <i>vide</i> order dated 30.8.2017 in Petition No. 205/TT/2016	101.68	238.19	246.12
Claimed by Petitioner	101.68	238.19	246.12
Allowed after true-up in this order	101.68	238.19	246.12

## Interest on Working Capital (IWC)

91. The Petitioner has claimed IWC as per Regulation 28(1)(c) of the 2014 Tariff Regulations as under:

### **i. Maintenance Spares:**

Maintenance spares have been worked out based on 15% of O&M Expenses.

### **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 Regulation 28(3) of the 2014 Tariff Regulations.

92. Asset-wise IWC allowed in the instant petition followed by IWC approved earlier, claimed by the Petitioner in the instant petition and trued up in this order respectively are as follows:

**Asset-I**

(₹ in lakh)

Particulars	2016-17 (Pro-rata for 261 days)	2017-18	2018-19
O&M Expenses	184.57	190.72	197.05
Maintenance Spares	332.22	343.30	354.69
Receivables	10193.25	10159.17	9981.79
Total Working Capital	10710.04	10693.20	10533.52
Rate of Interest (%)	12.80	12.80	12.80
<b>Interest on Working Capital</b>	<b>980.28</b>	<b>1368.73</b>	<b>1348.29</b>

(₹ in lakh)

Particulars	2016-17 (Pro-rata for 261 days)	2017-18	2018-19
Approved <i>vide</i> order dated 31.5.2016 in Petition No. 274/TT/2015	902.20	1115.64	1093.01
Claimed by Petitioner	980.59	1369.15	1348.71
Allowed after true-up in this order	980.28	1368.73	1348.29

**Asset-II**

(₹ in lakh)

Particulars	2016-17	2017-18	2018-19
O&M Expenses	9.94	10.27	10.61
Maintenance Spares	17.89	18.48	19.10
Receivables	139.21	142.63	142.86
Total Working Capital	167.04	171.38	172.57
Rate of Interest (%)	12.80	12.80	12.80
<b>Interest on Working Capital</b>	<b>21.38</b>	<b>21.94</b>	<b>22.09</b>

(₹ in lakh)

Particulars	2016-17	2017-18	2018-19
Approved <i>vide</i> order dated 31.5.2016 in Petition No. 274/TT/2015	18.99	18.84	18.69
Claimed by Petitioner	21.44	22.00	22.15
Allowed after true-up in this order	21.38	21.94	22.09



### Asset-III

(₹ in lakh)

Particulars	2016-17 (Pro-rata for 211 days)	2017-18	2018-19
O&M Expenses	4.59	4.74	4.89
Maintenance Spares	8.25	8.53	8.81
Receivables	96.33	103.32	106.34
Total Working Capital	109.17	116.59	120.04
Rate of Interest (%)	12.80	12.80	12.80
<b>Interest on Working Capital</b>	<b>8.08</b>	<b>14.92</b>	<b>15.37</b>

(₹ in lakh)

Particulars	2016-17 (Pro-rata for 211 days)	2017-18	2018-19
Approved <i>vide</i> order dated 31.5.2016 in Petition No. 274/TT/2015	Was included in Combined Asset- I, II, III, V, VI, VII, VIII <i>vide</i> order dated 31.5.2016 in Petition No. 274/TT/2015.		
Claimed by Petitioner	8.09	14.95	15.39
Allowed after true-up in this order	8.08	14.92	15.37

### Asset-IV

(₹ in lakh)

Particulars	2015-16 (Pro-rata for 125 days)	2016-17	2017-18	2018-19
O&M Expenses	7.27	7.51	7.76	8.02
Maintenance Spares	13.08	13.52	13.97	14.43
Receivables	119.16	123.01	124.35	121.82
Total Working Capital	139.51	144.04	146.07	144.27
Rate of Interest (%)	13.50	13.50	13.50	13.50
<b>Interest on Working Capital</b>	<b>6.43</b>	<b>19.45</b>	<b>19.72</b>	<b>19.48</b>

(₹ in lakh)

Particulars	2015-16 (Pro-rata for 125 days)	2016-17	2017-18	2018-19
Approved <i>vide</i> order dated 31.5.2016 in Petition No. 274/TT/2015	8.87	20.54	21.20	20.91
Claimed by Petitioner	6.69	20.27	20.59	20.32
Allowed after true-up in this order	6.43	19.45	19.72	19.48



## Asset-V

(₹ in lakh)

Particulars	2016-17 (Pro-rata for 182 days)	2017-18	2018-19
O&M Expenses	4.59	4.74	4.89
Maintenance Spares	8.25	8.53	8.81
Receivables	46.39	47.79	48.48
Total Working Capital	59.23	61.05	62.18
Rate of Interest (%)	12.80	12.80	12.80
<b>Interest on Working Capital</b>	<b>3.78</b>	<b>7.81</b>	<b>7.96</b>

(₹ in lakh)

Particulars	2016-17 (Pro-rata for 182 days)	2017-18	2018-19
Approved <i>vide</i> order dated 31.5.2016 in Petition No. 274/TT/2015	6.74	8.72	8.75
Claimed by Petitioner	3.79	7.85	7.99
Allowed after true-up in this order	3.78	7.81	7.96

## Asset-VI

(₹ in lakh)

Particulars	2016-17 (Pro-rata for 161 days)	2017-18	2018-19
O&M Expenses	19.21	19.85	20.51
Maintenance Spares	34.58	35.73	36.92
Receivables	1001.07	999.94	996.90
Total Working Capital	1054.86	1055.52	1054.33
Rate of Interest (%)	12.80	12.80	12.80
<b>Interest on Working Capital</b>	<b>59.56</b>	<b>135.11</b>	<b>134.95</b>

(₹ in lakh)

Particulars	2016-17 (Pro-rata for 161 days)	2017-18	2018-19
Approved <i>vide</i> order dated 30.8.2017 in Petition No. 205/TT/2016	59.70	136.42	136.51
Claimed by Petitioner	59.58	135.17	135.01
Allowed after true-up in this order	59.56	135.11	134.95

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

93. The trued up annual fixed charges allowed for the transmission assets for the 2014-19 period are as under:



**Asset-I**

(₹ in lakh)

Particulars	2016-17 (Pro-rata for 261 days)	2017-18	2018-19
Depreciation	13063.69	18689.62	18817.11
Interest on Loan	13363.53	17517.15	16069.25
Return on Equity	14742.00	21090.88	21291.50
Interest on Working Capital	980.28	1368.73	1348.29
O&M Expenses	1583.74	2288.67	2364.57
<b>Total</b>	<b>43733.24</b>	<b>60955.04</b>	<b>59890.73</b>

**Asset-II**

(₹ in lakh)

Particulars	2016-17	2017-18	2018-19
Depreciation	215.26	228.28	233.97
Interest on Loan	239.16	227.46	211.83
Return on Equity	240.15	254.86	261.92
Interest on Working Capital	21.38	21.94	22.09
O&M Expenses	119.28	123.23	127.33
<b>Total</b>	<b>835.24</b>	<b>855.76</b>	<b>857.14</b>

**Asset-III**

(₹ in lakh)

Particulars	2016-17 (Pro-rata for 211 days)	2017-18	2018-19
Depreciation	84.88	161.89	170.88
Interest on Loan	101.38	181.73	177.79
Return on Equity	107.99	204.56	215.27
Interest on Working Capital	8.08	14.92	15.37
O&M Expenses	31.81	56.84	58.73
<b>Total</b>	<b>334.13</b>	<b>619.94</b>	<b>638.04</b>

**Asset-IV**

(₹ in lakh)

Particulars	2015-16 (Pro-rata for 125 days)	2016-17	2017-18	2018-19
Depreciation	63.23	195.27	203.62	203.62
Interest on Loan	73.94	214.88	202.20	183.58
Return on Equity	70.80	218.37	227.44	228.05
Interest on Working Capital	6.43	19.45	19.72	19.48
O&M Expenses	29.79	90.12	93.11	96.20
<b>Total</b>	<b>244.19</b>	<b>738.08</b>	<b>746.09</b>	<b>730.92</b>





### Asset-V

(₹ in lakh)

Particulars	2016-17 (Pro-rata for 182 days)	2017-18	2018-19
Depreciation	32.97	69.90	72.54
Interest on Loan	37.59	73.66	69.97
Return on Equity	37.02	78.50	81.67
Interest on Working Capital	3.78	7.81	7.96
O&M Expenses	27.43	56.84	58.73
<b>Total</b>	<b>138.80</b>	<b>286.71</b>	<b>290.87</b>

### Asset-VI

(₹ in lakh)

Particulars	2016-17 (Pro-rata for 161 days)	2017-18	2018-19
Depreciation	764.29	1780.04	1824.75
Interest on Loan	868.72	1854.62	1728.50
Return on Equity	855.18	1991.71	2047.10
Interest on Working Capital	59.56	135.11	134.95
O&M Expenses	101.68	238.19	246.12
<b>Total</b>	<b>2649.42</b>	<b>5999.67</b>	<b>5981.43</b>

94. Accordingly, the Annual Transmission Charges approved for Asset-I vide order dated 31.5.2016 in Petition No. 274/TT/2015, claimed by the Petitioner in this Petition and approved after truing up in the instant order is shown in the table below:

(₹ in lakh)

Particulars	2016-17 (Pro-rata for 261 days)	2017-18	2018-19
Approved vide order dated 31.5.2016 in Petition No. 274/TT/2015	39898.63	49184.74	48020.56
Claimed by Petitioner	43748.05	60974.93	59910.46
Allowed after true-up in this order	43733.24	60955.04	59890.73

95. Accordingly, the Annual Transmission Charges approved for Asset-II vide order dated 31.5.2016 in Petition No. 274/TT/2015, claimed by the Petitioner in this petition and approved after truing up in the instant order is shown in the table below:



(₹ in lakh)

Particulars	2016-17	2017-18	2018-19
Approved <i>vide</i> order dated 31.5.2016 in Petition No. 274/TT/2015	723.20	710.39	697.78
Claimed by Petitioner	838.00	858.74	859.99
Allowed after true-up in this order	835.24	855.76	857.14

96. Accordingly, the Annual Transmission Charges approved for Asset-III *vide* order dated 31.5.2016 in Petition No. 274/TT/2015, claimed by the Petitioner in this petition and approved after truing up in the instant order is shown in the table below:

(₹ in lakh)

Particulars	2016-17 (Pro-rata for 211 days)	2017-18	2018-19
Approved <i>vide</i> order dated 31.5.2016 in Petition No. 274/TT/2015	Was included in Combined Asset- I, II, III, V, VI, VII, VIII <i>vide</i> order dated 31.5.2016 in Petition No. 274/TT/2015.		
Claimed by Petitioner	334.81	621.15	639.25
Allowed after true-up in this order	334.13	619.94	638.04

97. Accordingly, the Annual Transmission Charges approved for Asset-IV *vide* order dated 31.5.2016 in Petition No. 274/TT/2015, claimed by the Petitioner in this petition and approved after truing up in the instant order is shown in the table below:

(₹ in lakh)

Particulars	2015-16 (Pro-rata for 125 days)	2016-17	2017-18	2018-19
Approved <i>vide</i> order dated 31.5.2016 in Petition No. 274/TT/2015	297.36	786.89	811.94	794.76
Claimed by Petitioner	255.78	774.90	784.90	768.50
Allowed after true-up in this order	244.19	738.08	746.09	730.92

98. Accordingly, the Annual Transmission Charges approved for Asset-V *vide* order dated 31.5.2016 in Petition No. 274/TT/2015, as claimed by the Petitioner in this petition and as approved after truing up in the instant order is shown in the table below:



(₹ in lakh)

Particulars	2016-17 (Pro-rata for 182 days)	2017-18	2018-19
Approved vide order dated 31.5.2016 in Petition No. 274/TT/2015	254.52	329.42	328.13
Claimed by Petitioner	139.50	288.13	292.22
Allowed after true-up in this order	138.80	286.71	290.87

99. Accordingly, the Annual Transmission Charges approved for Asset-VI vide order dated 30.8.2017 in Petition No. 205/TT/2016, claimed by the Petitioner in this petition and approved after truing up in the instant order is shown in the table below:

(₹ in lakh)

Particulars	2016-17 (Pro-rata for 161 days)	2017-18	2018-19
Approved vide order dated 30.8.2017 in Petition No. 205/TT/2016	2656.14	6061.44	6054.10
Claimed by Petitioner	2650.65	6002.43	5984.16
Allowed after true-up in this order	2649.42	5999.67	5981.43

### **DETERMINATION OF ANNUAL FIXED CHARGES FOR THE 2019-24 TARIFF PERIOD**

100. The Petitioner has submitted the tariff forms combining the transmission assets into a single asset. Accordingly, as per Regulation 8(1) of the 2019 Tariff Regulations, single tariff for the Combined Asset has been worked out for the 2019-24 tariff period. The Petitioner has claimed the following transmission charges for the Combined Asset for the 2019-24 tariff period:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	21680.42	21932.09	21936.93	21936.93	21894.31
Interest on Loan	17071.33	15487.91	13684.85	12556.08	11562.76
Return on Equity	23280.41	23549.14	23554.21	23554.21	23554.21
Interest on Working Capital	1072.89	1064.44	1042.49	1030.77	1018.01
O&M Expenses	3213.30	3324.35	3441.01	3562.66	3686.64
<b>Total</b>	<b>66318.35</b>	<b>65357.93</b>	<b>63659.49</b>	<b>62640.65</b>	<b>61715.93</b>

101. The Petitioner has claimed the following IWC for the Combined Asset for the 2019-24 tariff period:

(₹ in lakh)



Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	267.78	277.03	286.75	296.89	307.22
Maintenance Spares	482.00	498.65	516.15	534.40	553.00
Receivables	8153.90	8057.83	7848.43	7722.82	7588.03
Total Working Capital	8903.68	8833.51	8651.33	8554.11	8448.25
Rate of Interest (%)	12.05	12.05	12.05	12.05	12.05
<b>Interest on Working Capital</b>	<b>1072.89</b>	<b>1064.44</b>	<b>1042.49</b>	<b>1030.77</b>	<b>1018.01</b>

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

102. The Petitioner has stated that E-COD of the Combined Asset works out to be 20.7.2016. However, based on the trued-up capital cost and actual dates of commercial operation of the 6 individual assets, E-COD has been worked out as 19.7.2016 and it is as under:

Asset	Capital Cost as on COD (₹ in lakh)	Actual COD	No. of days from COD of Asset from COD of Project	Weight of cost (%)	Weighted days	Effective COD (latest COD – total weighted Days)
Asset-I	360201.67	14.7.2016	100	88.23	88.23	19.7.2016
Asset-II	4450.93	1.4.2016	204	1.09	2.22	
Asset-III	3674.21	2.9.2016	50	0.90	0.45	
Asset-IV	3847.40	28.11.2015	329	0.94	3.10	
Asset-V	1394.16	1.10.2016	21	0.34	0.07	
Asset-VI	34699.88	22.10.2016	0	8.50	0.00	
<b>Total</b>	<b>408268.25</b>			<b>100.00</b>	<b>94.07</b>	

### **Weighted Average Life (WAL) of the Project**

103. The life as defined in Regulation 33 of the 2019 Tariff Regulations has been considered for determination of Weighted Average Life (WAL).

104. 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.

105. WAL has been determined based on the admitted capital cost of individual elements as on COD and their respective life as specified in the 2019 Tariff



Regulations. The element-wise life as defined in the 2014 Tariff Regulations prevailing at the time of actual COD of individual assets has been ignored for this purpose. The life as defined in the 2019 Tariff Regulations has been considered for determination of WAL. Accordingly, WAL of all the transmission assets executed during the 2014-19 tariff period has been worked out as 32 years as shown under:

Particulars	Life (in years) (1)	Capital Cost as on 31.3.2019 (₹ in lakh) (2)	Weighted Cost (₹ in lakh) (3) = (1) * (2)	Weighted Avg. Life of Asset (in years) (4) = (3) / (2)
Building Civil Works & Colony	25	4784.85	119621.20	<b>32.31 years (rounded off to 32 years)</b>
Transmission Line	35	298745.95	10456108.20	
Sub Station	25	101819.90	2545497.52	
PLCC	15	944.19	14162.91	
IT Equipment (Incl. Software)	6.67	348.89	2325.95	
<b>Total</b>		<b>406643.78</b>	<b>13137715.78</b>	

\* Total capital cost as on 31.3.2019 is ₹408268.25 lakh which includes land of ₹1624.47 lakh which is not considered for weighted average life of the assets.

106. WAL as on 1.4.2019 as determined above is applicable prospectively (i.e. for 2019-24 tariff period onwards) and no retrospective adjustment of depreciation in previous tariff period is required to be done. As discussed above, the Effective COD of the assets is 19.7.2016 and the lapsed life of the project as a whole works out as 2 years as on 1.4.2019 (i.e. the number of completed years as on 1.4.2019 from Effective COD). Accordingly, WAL has been used to determine the remaining useful life as on 31.3.2019 to be 30 years.

### **Capital Cost**

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

*“19. Capital Cost: (1) The Capital cost of the generating station or the transmission system, as the case may be, as determined by the Commission after prudence check in accordance with these regulations shall form the basis for determination of tariff for existing and new projects.*

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

*(a) The expenditure incurred or projected to be incurred up to the date of*



- commercial operation of the project;*
- (b) Interest during construction and financing charges, on the loans (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed;*
  - (c) Any gain or loss on account of foreign exchange risk variation pertaining to the loan amount availed during the construction period;*
  - (d) Interest during construction and incidental expenditure during construction as computed in accordance with these regulations;*
  - (e) Capitalised initial spares subject to the ceiling rates in accordance with these regulations;*
  - (f) Expenditure on account of additional capitalization and de-capitalisation determined in accordance with these regulations;*
  - (g) Adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the date of commercial operation as specified under Regulation 7 of these regulations;*
  - (h) Adjustment of revenue earned by the transmission licensee by using the assets before the date of commercial operation;*
  - (i) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;*
  - (j) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal upto the receiving end of the generating station but does not include the transportation cost and any other appurtenant cost paid to the railway;*
  - (k) Capital expenditure on account of biomass handling equipment and facilities, for co-firing;*
  - (l) Capital expenditure on account of emission control system necessary to meet the revised emission standards and sewage treatment plant;*
  - (m) Expenditure on account of fulfilment of any conditions for obtaining environment clearance for the project;*
  - (n) Expenditure on account of change in law and force majeure events; and*
  - (o) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.*
- (3) The Capital cost of an existing project shall include the following:*
- (a) Capital cost admitted by the Commission prior to 1.4.2019 duly trued up by excluding liability, if any, as on 1.4.2019;*
  - (b) Additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with these regulations;*
  - (c) Capital expenditure on account of 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.*

- (4) *The capital cost in case of existing or new hydro generating station shall also include:*
- (a) cost of approved rehabilitation and resettlement (R&R) plan of the project in conformity with National R&R Policy and R&R package as approved; and*
  - (b) cost of the developer's 10% contribution towards Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) and Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) project in the affected area.*
- (5) *The following shall be excluded from the capital cost of the existing and new projects:*
- (a) The assets forming part of the project, but not in use, as declared in the tariff petition;*
  - (b) De-capitalised Assets after the date of commercial operation on account of replacement or removal on account of obsolescence or shifting from one project to another project:*

*Provided that in case replacement of transmission asset is recommended by Regional Power Committee, such asset shall be de-capitalised 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.”*

108. The Petitioner has claimed capital cost of ₹408489.29 lakh as on 31.3.2019 for the Combined Asset. However, the capital cost as on 31.3.2019 has been worked out as ₹408268.25 lakh and the same has been considered as the opening capital cost as on 1.4.2019 for determination of tariff in accordance with Regulation 19 of the 2019 Tariff Regulations.

### **Additional Capital Expenditure (ACE)**

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

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



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

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

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

(2) *The generating company or the transmission licensee, as the case may be shall submit the details of works asset wise/work wise included in the original scope of work along with estimates of expenditure, liabilities recognized to be payable at a future date and the works deferred for execution.*

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

(1) *The ACE 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.”*





110. The Petitioner has claimed ACE of ₹9538.85 lakh during 2019-24 for the Combined Asset under Regulation 25(1)(d) of the 2019 Tariff Regulations. The details of the capital cost claimed by the Petitioner as on 31.3.2024 as under:

(₹ in lakh)

Assets	FR apportioned approved Capital Cost	Capital Cost as per RCE	Expenditure as on 31.3.2019	Projected ACE 2019-24 (as per Auditor's Certificate)		Capital Cost as on 31.3.2024
				2019-20	2020-21	
Asset-I	282165.62	376481.00	360201.67	7889.34	0.00	368091.01
Asset-II	3398.01	5599.00	4453.27	28.30	0.00	4481.57
Asset-III	2195.35	5269.00	3674.37	841.43	0.00	4515.8
Asset-IV	4201.25	4750.00	4065.88	206.85	180.00	4452.73
Asset-V	1973.61	1748.00	1394.23	57.06	0.00	1451.29
Asset-VI	26210.16	35383.00	34699.89	335.87	0.00	35035.76
<b>Combined Asset</b>	<b>320144.00</b>	<b>429230.00</b>	<b>408489.30</b>	<b>9358.85</b>	<b>180.00</b>	<b>418028.16</b>

111. The Petitioner was directed to furnish the reasons for claiming ACE in 2019-20 which is beyond the cut-off date of 31.3.2019 amounting to ₹9538.85 lakh. In response, the Petitioner, vide affidavit dated 30.6.2020, has submitted that the Commission in order dated 31.5.2016 in Petition No. 274/TT/2015 observed that the time over-run in respect of Assets-I, III and V would be considered at the time of truing up. Therefore, allowance of IDC and IEDC was not finalized. The Petitioner has further submitted that offshore supply contract for 765/400 kV Kanpur GIS Sub-station was awarded to Pinggao Group Co. Ltd., China vide CA dated 26.6.2013 to supply mandatory spares. Accordingly, the agency supplied the mandatory spares as per CA except for some items. The Petitioner has submitted that during construction of GIS sub-station, it was felt necessary to have spares for 800 kV GIS line feeder bay module due to technical requirements. Accordingly, revised contract was awarded to



the agency for supply of 800 kV GIS line feeder bay module vide amendment in 2015 to the aforesaid CA and the agency had supplied the spare material in 2019-20. Further, the Petitioner has submitted that during 2015-17, many big transmission schemes like North East-Northern/Western-I Interconnector, WR-NR HVDC Interconnector, JH WB Part A2, JH WB Part-B, NRSS-21, NRSS-30, NRSS-32 etc. were being implemented in NR-III. Therefore, there was storage for transmission line spares. The storage of transmission line spares require larger space than the sub-station Spares. Due to space constraint in the existing store, there was delay in procurement of transmission line spares. After construction of the new stores/ availability of storage location, additional transmission line spares were procured as per the norms in ongoing transmission line packages in NR-III. The Petitioner has further submitted that substantial payment was balance against offshore supply which involved US Dollar (\$) payment and a number of contracts have not yet been closed, therefore, ₹500.00 lakh has been kept as a contingency.

112. The estimated balance expenditure claimed by the Petitioner is as follows:

Sl. No.	Description	Estimated balance expenditure as on 31.3.2019 (₹ in lakh)
1	Retention & Liability	6174.36
2	Estimated Balance Expenditure GIS Spares for Sub-station (Off-shore)	2000.00
3	Estimated Balance Expenditure Spare for Transmission Line	797.64
4	Estimated Balance Expenditure of 765 kV BR at Jhatikara (NR-I Asset)	386.85
5	Contingency	500.00
	<b>Total</b>	<b>9358.85</b>

113. We have considered the submissions made by the Petitioner. The Petitioner has claimed ACE during 2019-20 and 2020-21 under Regulation 25(1)(d) of the 2019 Tariff Regulations. The Petitioner has submitted that ACE of ₹6174.36 lakh is towards liability for works executed prior to the cut-off date and the same is allowed under



Regulation 25(1)(d) of the 2019 Tariff Regulations. As regards estimated balance expenditure of ₹2000 lakh, the Petitioner has submitted that during the construction of the GIS Sub-station, it was felt necessary to have a Spare bay module for 800 kV GIS line feeder for technical requirement and accordingly order was placed in 2015 and it was supplied in 2019-20. The Petitioner has not submitted any approval for the additional 800 kV GIS line feeder bay module and has not stated the technical requirement clearly. As such, we are not inclined to allow ACE of ₹2000 lakh towards 800 kV GIS line feeder bay module. The Petitioner has submitted that ACE of ₹797.64 lakh is estimated towards spares for transmission line which were not procured earlier due to space constraint. The Petitioner has not explained the claim of ACE of ₹386.85 lakh towards 765 kV Bus-Reactor at Jhatikara. The Petitioner has not submitted the details of works pending and as such we are not inclined to allow ACE towards the same. As regards ACE of ₹500 lakh contingency towards unclosed contracts, it is observed that majority of ACE was projected in 2019-20. The financial year 2019-20 has ended and the actual expenditure must have been finalized. However, the Petitioner has claimed ACE on projected basis. We are not inclined to allow the contingency. The Petitioner is directed to submit the details of the details of work asset wise/ work wise at the time of truing up and ACE disallowed will be reviewed at the time of truing up.

114. ACE claimed by the Petitioner towards retention and liability has been allowed under Regulation 25(1)(d) of the 2019 Tariff Regulations on account of un-discharged liability towards final payment/ withheld payment for works executed after the cut-off date. Accordingly, the capital cost considered for the Combined Asset for the 2019-24 tariff period is as under:



(₹ in lakh)

Apportioned approved Capital Cost as per FR	Apportioned approved Capital Cost as per RCE	Capital Cost as on 31.3.2019	ACE		Capital Cost as on 31.3.2024
			2019-20	2020-21	
320144.00	429230.00	408268.25	6174.36	0.00	414442.61

### Debt-Equity ratio

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

*“18. Debt-Equity Ratio: (1) For new projects, the debt-equity ratio of 70:30 as on date of commercial operation shall be considered. If the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan:*

*Provided that:*

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

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

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

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

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

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

*(4) In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2019, but*



where debt: equity ratio has not been determined by the Commission for determination of tariff for the period ending 31.3.2019, the Commission shall approve the debt: equity ratio in accordance with clause (1) of this Regulation.

(5) Any expenditure incurred or projected to be incurred on or after 1.4.2019 as may be admitted by the Commission as additional capital expenditure for determination of tariff, and renovation and modernisation expenditure for life extension shall be serviced in the manner specified in clause (1) of this Regulation.”

116. The debt-equity considered for the purpose of computation of tariff for 2019-24 tariff period is as under:

Particulars	Capital Cost as on 1.4.2019 (₹ in lakh)	%	ACE during 2019-24 (₹ in lakh)	%	Capital Cost as on 31.3.2024 (₹ in lakh)	%
Debt	285787.78	70.00	4322.05	70.00	290109.83	70.00
Equity	122480.48	30.00	1852.31	30.00	124332.78	30.00
<b>Total</b>	<b>408268.25</b>	<b>100.00</b>	<b>6174.36</b>	<b>100.00</b>	<b>414442.61</b>	<b>100.00</b>

### **Depreciation**

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

**“33. Depreciation:** (1) Depreciation shall be computed from the date of commercial operation of a generating station or unit thereof or a transmission system or element thereof including communication system. In case of the tariff of all the units of a generating station or all elements of a transmission system including 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 31<sup>st</sup> 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 de-capitalized asset during its useful services.”*

118. 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 (as placed in Annexure-II) after taking into account the depreciation rates of IT and non-IT assets as prescribed 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 Combined Asset is as under:

	(₹ in lakh)				
Particular	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Gross Block	408268.25	414442.61	414442.61	414442.61	414442.61
Addition during the year 2019-24 due to projected ACE	6174.36	0.00	0.00	0.00	0.00
Closing Gross Block	414442.61	414442.61	414442.61	414442.61	414442.61
Average Gross Block	411355.43	414442.61	414442.61	414442.61	414442.61
Freehold Land	1624.47	1624.47	1624.47	1624.47	1624.47
Weighted Average Rate of Depreciation (WAROD) (%)	5.25	5.25	5.25	5.25	5.25
Balance useful life at the beginning of the year	30.00	29.00	28.00	27.00	26.00
Elapsed Life of the asset	2.00	3.00	4.00	5.00	6.00
Aggregated Depreciable Value	368794.12	371573.94	371573.94	371573.94	371573.94
<b>Combined Depreciation during the year</b>	<b>21586.53</b>	<b>21751.27</b>	<b>21751.27</b>	<b>21751.27</b>	<b>21751.27</b>
Aggregate Cumulative Depreciation	78462.33	100213.61	121964.88	143716.15	165467.43
Remaining Aggregated Depreciable Value	290331.79	271360.34	249609.06	227857.79	206106.52

### **Interest on Loan (IoL)**

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

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

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

*(3) The repayment for each of the year of the tariff period 2019-24 shall be deemed to be equal to the depreciation allowed for the corresponding year/period. In case of de-capitalization of assets, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered upto the date of de-capitalisation of such asset.*

*(4) Notwithstanding any moratorium period availed by the generating company or the transmission licensee, as the case may be, the repayment of loan shall be considered*



from the first year of commercial operation of the project and shall be equal to the depreciation allowed for the year or part of the year.

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

Provided that if there is no actual loan for a particular year but normative loan is still outstanding, the last available weighted average rate of interest shall be considered;

Provided further that if the generating station or the transmission system, as the case may be, does not have actual loan, then the weighted average rate of interest of the generating company or the transmission licensee as a whole shall be considered.

(6) The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.

(7) The changes to the terms and conditions of the loans shall be reflected from the date of such re-financing.”

120. The Weighted Average Rate of IoL (WAROI) has been considered on the basis of rate prevailing as on 1.4.2019. The Petitioner has prayed that the change in interest rate due to floating rate of interest applicable, if any, during the 2019-24 tariff period will be adjusted. Accordingly, the floating rate of interest, if any, shall be considered at the time of true up. Therefore, IoL has been allowed in accordance with Regulation 32 of the 2019 Tariff Regulations and IoL allowed for the Combined Asset is as under:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	285787.78	290109.83	290109.83	290109.83	290109.83
Cumulative Repayments upto Previous Year	56875.80	78462.33	100213.61	121964.88	143716.15
Net Loan-Opening	228911.98	211647.50	189896.22	168144.95	146393.68
Additions due to ACE	4322.05	0.00	0.00	0.00	0.00
Repayment during the year	21586.53	21751.27	21751.27	21751.27	21751.27
Net Loan-Closing	211647.50	189896.22	168144.95	146393.68	124642.40
Average Loan	220279.74	200771.86	179020.59	157269.31	135518.04
Weighted Average Rate of Interest on Loan (%)	7.7115	7.6330	7.5592	7.8920	8.4287
<b>Interest on Loan</b>	<b>16986.97</b>	<b>15324.85</b>	<b>13532.45</b>	<b>12411.72</b>	<b>11422.39</b>

### **Return on Equity (RoE)**

121. Regulations 30 and 31 of the 2019 Tariff Regulations provide as under:





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

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

*Provided that return on equity in respect of additional capitalization after cut-off date beyond the original scope 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:*

$$\text{Rate of pre-tax return on equity} = \text{Base rate} / (1-t)$$

*Where “t” is the effective tax rate in accordance with clause (1) of this Regulation and shall be calculated at the beginning of every financial year based on the estimated profit*



and tax to be paid estimated in line with the provisions of the relevant Finance Act applicable for that financial year to the company on pro-rata basis by excluding the income of non-generation or non-transmission business, as the case may be, and the corresponding tax thereon. In case of generating company or transmission licensee paying Minimum Alternate Tax (MAT), "t" shall be considered as MAT rate including surcharge and cess.

**Illustration-**

(i) In case of a generating company or a transmission licensee paying Minimum Alternate Tax (MAT) @ 21.55% including surcharge and cess:

$$\text{Rate of return on equity} = 15.50 / (1 - 0.2155) = 19.758\%$$

(ii) In case of a generating company or a transmission licensee paying normal corporate tax including surcharge and cess:

- (a) Estimated Gross Income from generation or transmission business for FY 2019-20 is Rs 1,000 crore;
- (b) Estimated Advance Tax for the year on above is Rs 240 crore;
- (c) Effective Tax Rate for the year 2019-20 = Rs 240 Crore / Rs 1000 Crore = 24%;
- (d) Rate of return on equity =  $15.50 / (1 - 0.24) = 20.395\%$ .

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

122. The Petitioner has submitted that MAT rate is applicable to the Petitioner's Company. Accordingly, the MAT rate applicable in 2019-20 has been considered for the purpose of RoE, which shall be trued up with actual tax rate in accordance with Regulation 31(3) of the 2019 Tariff Regulations. RoE allowed for the Combined Asset has been worked out and allowed as under:



(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity	122480.48	124332.78	124332.78	124332.78	124332.78
Additions due to ACE	1852.31	0.00	0.00	0.00	0.00
Closing Equity	124332.78	124332.78	124332.78	124332.78	124332.78
Average Equity	123406.63	124332.78	124332.78	124332.78	124332.78
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (%)	17.472	17.472	17.472	17.472	17.472
Rate of Return on Equity (%)	18.782	18.782	18.782	18.782	18.782
<b>Return on Equity</b>	<b>23177.62</b>	<b>23351.57</b>	<b>23351.57</b>	<b>23351.57</b>	<b>23351.57</b>

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

123. The O&M Expenses claimed by the Petitioner for the various elements included in the Combined Asset for the 2019-24 period are as under:

(₹ in lakh)

Name of the Asset	2019-20	2020-21	2021-22	2022-23	2023-24
2 No. of 765 kV bays	90.02	93.20	96.46	99.86	103.36
2 No. of 400 kV bays	64.30	66.56	68.90	71.32	73.82
12 No. of 765 kV GIS bays	378.07	391.44	405.12	419.40	434.11
10 No. of 400 kV GIS bays	225.06	232.96	241.16	249.60	258.36
465.09 km Single Circuit (Bundled conductor with 4 sub-conductors)	351.14	363.24	376.26	389.28	403.23
453.65 km Double Circuit (Bundled conductor with 4 sub-conductors)	599.73	620.59	642.36	665.05	688.19
12.245 km Double Circuit Twin Conductor	10.79	11.17	11.56	11.96	12.38
2 No. 765 kV Sub-station ICT	1473.00	1524.00	1578.00	1635.00	1692.00
PLCC (2% of ₹1059.48 lakh)	21.19	21.19	21.19	21.19	21.19
<b>Total O&amp;M expenses</b>	<b>3213.30</b>	<b>3324.35</b>	<b>3441.01</b>	<b>3562.66</b>	<b>3686.64</b>

124. The norms specified under Regulation 35(3)(a) of the 2019 Tariff Regulations provide that:



“35. Operation and Maintenance Expenses:

...

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

<b>Particulars</b>	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>
<b>Norms for sub-station Bays (₹ Lakh per bay)</b>					
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
<b>Norms for Transformers (₹ Lakh per MVA)</b>					
765 kV	0.491	0.508	0.526	0.545	0.564
400 kV	0.358	0.371	0.384	0.398	0.411
220 kV	0.245	0.254	0.263	0.272	0.282
132 kV and below	0.245	0.254	0.263	0.272	0.282
<b>Norms for AC and HVDC lines (₹ Lakh per km)</b>					
Single Circuit (Bundled Conductor with six or more sub-conductors)	0.881	0.912	0.944	0.977	1.011
Single Circuit (Bundled conductor with four sub-conductors)	0.755	0.781	0.809	0.837	0.867
Single Circuit (Twin & Triple Conductor)	0.503	0.521	0.539	0.558	0.578
Single Circuit (Single Conductor)	0.252	0.260	0.270	0.279	0.289
Double Circuit (Bundled conductor with four or more sub-	1.322	1.368	1.416	1.466	1.517
Double Circuit (Twin & Triple Conductor)	0.881	0.912	0.944	0.977	1.011
Double Circuit (Single Conductor)	0.377	0.391	0.404	0.419	0.433
Multi Circuit (Bundled Conductor with four or more sub-conductor)	2.319	2.401	2.485	2.572	2.662
Multi Circuit (Twin & Triple Conductor)	1.544	1.598	1.654	1.713	1.773
<b>Norms for HVDC stations</b>					
HVDC Back-to-Back stations (Rs Lakh 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
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



<i>±500 kV Bhiwadi-Balia HVDC bipole scheme (Rs Lakh) (2500 MW)</i>	1,696	1,756	1,817	1,881	1,947
<i>±800 kV, Bishwanath-Agra HVDC bipole scheme (Rs Lakh) (3000 MW)</i>	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.”*

125. We have considered the submission of the Petitioner. The Petitioner has claimed O&M Expenses separately for the 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. The relevant portions of the order dated 24.1.2021 in Petition No. 126/TT/2020 are extracted hereunder:

*“103. Thus, although PLCC equipment is a communication system, it has been considered as a part of sub-station, as it is used both for protection and communication. Therefore, we are of the considered view that rightly, it was not considered for separate O&M Expenses while framing norms of O&M for 2019-24 tariff period. While specifying norms for bays and transformers, O&M Expenses for PLCC have been included within norms for O&M Expenses for sub-station. Norms of O&M Expenses @2% of the capital cost in terms of Regulation 35(4) of the 2019 Tariff Regulations have been specified for communication system such as PMU, RMU, OPGW etc. and not for PLCC equipment.”*

*“105. In our view, granting of O&M Expenses for PLCC equipment @2% of its capital cost under Regulation 35(4) of the 2014 Tariff Regulations under the communication system head would tantamount to granting O&M Expenses twice for PLCC equipment as PLCC equipment has already been considered as part of the sub-station. Therefore, the Petitioner’s prayer for grant of O&M Expenses for the PLCC equipment @2% of its capital cost under Regulation 35(4) of the 2014 Tariff Regulations is rejected.*

*106. The principle adopted in this petition that PLCC is part of sub-station and accordingly no separate O&M Expenses is admissible for PLCC equipment in the 2019-24 tariff period under Regulation 35(4) of the 2019 Tariff Regulations shall be applicable in case of all petitions where similar claim is made by the Petitioner. As already mentioned, the Commission, however, on the basis of the claim made by the Petitioner*



has inadvertently allowed O&M Expenses for PLCC equipment @2% of its original project cost, which is applicable for other “communication system”, for 2019-24 period in 31 petitions given in Annexure-3 of this order. Therefore, the decision in this order shall also be applicable to all the petitions given in Annexure-3. Therefore, PGCIL is directed to bring this decision to the notice of all the stakeholders in the 31 petitions given in Annexure-3 and also make revised claim of O&M Expenses for PLCC as part of the sub-station at the time of truing up of the tariff allowed for 2019-24 period in respective petitions.”

Therefore, the Petitioner’s claim for separate O&M Expenses for PLCC @2% is not allowed.

126. The O&M Expenses have been worked out as per the norms specified in the 2019 Tariff Regulations and are as under:

	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
<b>O&amp;M Expenses</b>					
2 No. of 765 kV bays					
Norms (₹ lakh/Bay)	45.01	46.60	48.23	49.93	51.68
Total	90.02	93.20	96.46	99.86	103.36
2 No. of 400 kV bays					
Norms (₹ lakh/Bay)	32.15	33.28	34.45	35.66	36.91
Total	64.30	66.56	68.90	71.32	73.82
12 No. of 765 kV GIS bays					
Norms (₹ lakh/Bay)	31.507	32.62	33.761	34.951	36.176
Total	378.08	391.44	405.13	419.41	434.11
10 No. of 400 kV GIS bays					
Norms (₹ lakh/Bay)	22.505	23.296	24.115	24.962	25.837
Total	225.05	232.96	241.15	249.62	258.37
465.09 km Single Circuit (Bundled conductor with 4 sub-conductors)					
Norms (₹ lakh/km)	0.755	0.781	0.809	0.837	0.867
Total	351.14	363.24	376.26	389.28	403.23
12.245 km Double Circuit Twin Conductor					
Norms (₹ lakh/km)	0.881	0.912	0.944	0.977	1.011
Total	10.79	11.17	11.56	11.96	12.38
453.65 km Double Circuit (Bundled conductor with 4 sub-conductors)					
Norms (₹ lakh/km)	1.322	1.368	1.416	1.466	1.517
Total	599.73	620.59	642.37	665.05	688.19
2 No. 765 kV Sub-station ICT					
Norms (₹ lakh/MVA)	0.491	0.508	0.526	0.545	0.564
Total	1473.00	1524.00	1578.00	1635.00	1692.00
<b>Total O&amp;M Expenses allowed (₹ in lakh)</b>	<b>3192.11</b>	<b>3303.16</b>	<b>3419.83</b>	<b>3541.51</b>	<b>3665.46</b>



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

127. Regulation 34(1)(c), Regulation 34(3), Regulation 34(4) and Regulation 3(7) of the 2019 Tariff Regulations specify as under:

*“34. Interest on Working Capital: (1) The working capital shall cover:*

- (a) For Coal-based/lignite-fired thermal generating stations:
  - (i) Cost of coal or lignite and limestone towards stock, if applicable, for 10 days for pit-head generating stations and 20 days for non-pit-head generating stations for generation corresponding to the normative annual plant availability factor or the maximum coal/lignite stock storage capacity whichever is lower;*
  - (ii) Advance payment for 30 days towards cost of coal or lignite and limestone for generation corresponding to the normative annual plant availability factor;*
  - (iii) Cost of secondary fuel oil for two months for generation corresponding to the normative annual plant availability factor, and in case of use of more than one secondary fuel oil, cost of fuel oil stock for the main secondary fuel oil;*
  - (iv) Maintenance spares @ 20% of operation and maintenance expenses including water charges and security expenses;*
  - (v) Receivables equivalent to 45 days of capacity charge and energy charge for sale of electricity calculated on the normative annual plant availability factor; and*
  - (vi) Operation and maintenance expenses, including water charges and security expenses, for one month.**
- (b) For Open-cycle Gas Turbine/Combined Cycle thermal generating stations:
  - (i) Fuel cost for 30 days corresponding to the normative annual plant availability factor, duly taking into account mode of operation of the generating station on gas fuel and liquid fuel;*
  - (ii) Liquid fuel stock for 15 days corresponding to the normative annual plant availability factor, and in case of use of more than one liquid fuel, cost of main liquid fuel duly taking into account mode of operation of the generating stations of gas fuel and liquid fuel;*
  - (iii) Maintenance spares @ 30% of operation and maintenance expenses including water charges and security expenses;*
  - (iv) Receivables equivalent to 45 days of capacity charge and energy charge for sale of electricity calculated on normative plant availability factor, duly taking into account mode of operation of the generating station on gas fuel and liquid fuel; and*
  - (v) Operation and maintenance expenses, including water charges and security expenses, for one month.**
- (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.**

*(2) The cost of fuel in cases covered under sub-clauses (a) and (b) of clause (1) of this Regulation shall be based on the landed fuel cost (taking into account normative*





*transit and handling losses in terms of Regulation 39 of these regulations) by the generating station and gross calorific value of the fuel as per actual weighted average for the third quarter of preceding financial year in case of each financial year for which tariff is to be determined:*

*Provided that in case of new generating station, the cost of fuel for the first financial year shall be considered based on landed fuel cost (taking into account normative transit and handling losses in terms of Regulation 39 of these regulations) and gross calorific value of the fuel as per actual weighted average for three months, as used for infirm power, preceding date of commercial operation for which tariff is to be determined.*

*(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 1<sup>st</sup> April of the year during the tariff period 2019-24 in which the generating station or a unit thereof or the transmission system including communication system or element thereof, as the case may be, is declared under commercial operation, whichever is later:*

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

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

*“3. Definitions. - 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;”*

128. The Petitioner has submitted that it has computed IWC for the 2019-24 period considering the SBI Base Rate plus 350 basis points as on 1.4.2019. The Petitioner has considered the rate of IWC as 12.05%.

129. IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The rate of interest considered is 12.05% (SBI 1-year MCLR applicable as on 1.4.2019 of 8.55% plus 350 basis points) for 2019-20, whereas rate of interest 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). The components of the working capital and interest thereon allowed for the Combined Asset are as under:



(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	266.01	275.26	284.99	295.13	305.46
Maintenance Spares	478.82	495.47	512.97	531.23	549.82
Receivables	8116.10	7978.58	7769.46	7644.96	7516.29
Total Working Capital	8860.93	8749.32	8567.42	8471.31	8371.56
Rate of Interest (%)	12.05	11.25	11.25	11.25	11.25
<b>Interest on Working Capital</b>	<b>1067.74</b>	<b>984.30</b>	<b>963.83</b>	<b>953.02</b>	<b>941.80</b>

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

130. The transmission charges allowed for the Combined Asset for the 2019-24 tariff period is as under:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	21586.53	21751.27	21751.27	21751.27	21751.27
Interest on Loan	16986.97	15324.85	13532.45	12411.72	11422.39
Return on Equity	23177.62	23351.57	23351.57	23351.57	23351.57
Interest on Working Capital	1067.74	984.30	963.83	953.02	941.80
O & M Expenses	3192.11	3303.16	3419.83	3541.51	3665.46
<b>Total</b>	<b>66010.98</b>	<b>64715.15</b>	<b>63018.95</b>	<b>62009.09</b>	<b>61132.49</b>

### Filing Fee and the Publication Expenses

131. BRPL has submitted that though the Commission can allow filing fee and publication expenses at its discretion under Regulation 70(1) of the 2019 Tariff Regulations, but the exercise of such discretion is a judicial discretion in the adjudication of tariff for which no justification has been filed by the Petitioner. BRPL also referred to the Commission's order dated 11.9.2008 in Petition No. 129 of 2005 where it declined the claim of Central Power Sector undertakings for allowing the reimbursement of the application filing fee. The Petitioner, in response has requested for reimbursement of expenditure by the beneficiaries towards the petition filing fee and publication expense in terms of Regulation 70(1) of the 2019 Tariff Regulations. Further, the Petitioner also referred to the Commission's order dated 28.3.2016 in



Petition No. 137/TT/2015 where it allowed the recovery of petition filing fee and expenditure for publication of notices from beneficiaries on pro-rata basis.

132. We have considered the submissions of the BRPL and the Petitioner. The Petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses. The Petitioner is entitled for reimbursement of the filing fees and publication expenses in connection with the present petition, directly from the beneficiaries on pro-rata basis in accordance with Regulation 70(1) of the 2019 Tariff Regulations.

### **Licence Fee & RLDC Fees and Charges**

133. The Petitioner has claimed reimbursement of licence fee and RLDC fee and charges in accordance with Regulation 70(4) and 70(3) respectively of the 2019 Tariff Regulations for 2019-24 tariff period.

134. The Petitioner is 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 is also 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.

### **Security Expenses**

135. The Petitioner has submitted that security expenses for the transmission assets are not claimed in the instant petition and it would file a separate petition for claiming the overall security expenses and the consequential IWC. The Petitioner has requested to consider the actual security expenses incurred during 2018-19 for claiming estimated security expenses for 2019-20 which shall be subject to true up at the end of the year based on the actuals. The Petitioner has submitted that similar petition for security expenses for 2020-21, 2021-22, 2022-23 and 2023-24 shall be



filed on a yearly basis on the basis of the actual expenses of previous year subject to true up at the end of the year on actual expenses. The Petitioner has submitted that the difference, if any, between the estimated security expenses and actual security expenses as per the audited accounts may be allowed to be recovered from the beneficiaries on a yearly basis.

136. BRPL has submitted that the approach adopted by the Petitioner towards claim of security expenses does not warrant the need for interest on working capital as the same is claimed in advance. The Petitioner, in response has submitted that the expenses are not claimed in the instant petition and shall be claimed separately in a separate petition along with other assets.

137. We have considered the submissions of the Petitioner and BRPL. We are of the view that the Petitioner should claim security expenses for all the transmission assets in one petition. It is observed that the Petitioner has already filed the Petition No.260/MP/2020 claiming consolidated security expenses on projected basis for the 2019-24 tariff period on the basis of actual security expenses incurred in 2018-19. Therefore, security expenses will be dealt with in Petition No. 260/MP/2020 in accordance with the applicable provisions of the 2019 Tariff Regulations.

### **Goods and Services Tax**

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



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

140. We have considered the submissions of the Petitioner and BRPL. Since GST is not levied on transmission service at present, we are of the view that the Petitioner's prayer is premature.

#### **Capital Spares**

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

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

142. The billing, collection and disbursement of the transmission charges approved shall be governed by the provisions of the Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010 or the Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020, as applicable, as provided in Regulation 43 of the 2014 Tariff Regulations for the 2014-19 tariff period and Regulation 57 of the 2019 Tariff Regulations for the 2019-24 tariff period.

143. To summarise, the trued-up Annual Fixed Charges allowed for the transmission assets for 2014-19 period are as under:



(₹ in lakh)

<b>Annual Fixed Charges</b>				
<b>Assets</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
<b>Asset-I</b>		<b>43733.24</b>	<b>60955.04</b>	<b>59890.73</b>
<b>Asset-II</b>		<b>835.24</b>	<b>855.76</b>	<b>857.14</b>
<b>Asset-III</b>		<b>334.13</b>	<b>619.94</b>	<b>638.04</b>
<b>Asset-IV</b>	<b>244.19</b>	<b>738.08</b>	<b>746.09</b>	<b>730.92</b>
<b>Asset-V</b>		<b>138.80</b>	<b>286.71</b>	<b>290.87</b>
<b>Asset-VI</b>		<b>2649.42</b>	<b>5999.67</b>	<b>5981.43</b>

The Annual Fixed Charges allowed for the Combined Asset for the 2019-24 tariff period in this order are as under:

(₹ in lakh)

<b>Particulars</b>	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>
<b>Annual Fixed Charges</b>	<b>66010.98</b>	<b>64715.15</b>	<b>63018.95</b>	<b>62009.09</b>	<b>61132.49</b>

144. This order disposes of Petition No. 44/TT/2020.

Sd/  
**(Arun Goyal)**  
Member

Sd/  
**(I. S. Jha)**  
Member

Sd/  
**(P. K. Pujari)**  
Chairperson



**Asset-I**

2014-19 Capital Expenditure	Admitted Capital Cost as on COD (₹ in lakh)	ACE (₹ in lakh)			Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations (₹ in lakh)			
		2016-17	2017-18	2018-19			2016-17	2017-18	2018-19	
Land - Freehold	1443.97	0.00	0.00	0.00	1443.97	0.00%	0.00	0.00	0.00	
Building Civil Works & Colony	3678.22	289.30	124.76	68.47	4160.76	3.34%	127.68	134.60	137.83	
Transmission Line	253897.94	8717.08	1686.72	118.56	264420.30	5.28%	13635.94	13910.60	13958.26	
Sub Station	82385.49	4058.29	1065.82	1765.26	89274.86	5.28%	4457.09	4592.37	4667.11	
PLCC	546.67	69.65	33.78	19.11	669.21	6.33%	36.81	40.08	41.76	
IT Equipment (Incl. Software)	214.63	10.57	2.77	4.60	232.57	5.28%	11.61	11.96	12.16	
<b>Total</b>	<b>342166.93</b>	<b>13144.89</b>	<b>2913.85</b>	<b>1976.00</b>	<b>360201.67</b>	<b>Total</b>	<b>18269.14</b>	<b>18689.62</b>	<b>18817.11</b>	
							<b>Average Gross Block (₹ in lakh)</b>	<b>348739.38</b>	<b>356768.75</b>	<b>359213.67</b>
							<b>Weighted Average Rate of Depreciation</b>	<b>5.24%</b>	<b>5.24%</b>	<b>5.24%</b>

**Asset-II**

2014-19 Capital Expenditure	Admitted Capital Cost as on COD (₹ in lakh)	ACE (₹ in lakh)			Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations (₹ in lakh)			
		2016-17	2017-18	2018-19			2016-17	2017-18	2018-19	
Building Civil Works & Colony	3.95	18.01	0.00	0.00	21.96	3.34%	0.43	0.73	0.73	
Transmission Line	1947.00	43.52	48.14	15.13	2053.79	5.28%	103.95	106.37	108.04	
Sub Station	1820.38	271.76	102.08	47.85	2242.07	5.28%	103.29	113.16	117.12	
PLCC	92.85	9.05	0.00	0.00	101.89	6.33%	6.16	6.45	6.45	
IT Equipment (Incl. Software)	25.14	3.75	1.41	0.91	31.21	5.28%	1.43	1.56	1.62	
<b>Total</b>	<b>3889.32</b>	<b>346.09</b>	<b>151.63</b>	<b>63.89</b>	<b>4450.93</b>	<b>Total</b>	<b>215.26</b>	<b>228.28</b>	<b>233.97</b>	
							<b>Average Gross Block (₹ in lakh)</b>	<b>4062.37</b>	<b>4311.23</b>	<b>4418.99</b>
							<b>Weighted Average Rate of Depreciation</b>	<b>5.30%</b>	<b>5.29%</b>	<b>5.29%</b>

**Asset-III**

2014-19 Capital Expenditure	Admitted Capital Cost as on COD (₹ in lakh)	ACE (₹ in lakh)			Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations (₹ in lakh)			
		2016-17	2017-18	2018-19			2016-17	2017-18	2018-19	
Land - Freehold	180.50	0.00	0.00	0.00	180.50	0.00%	0.00	0.00	0.00	
Building Civil Works & Colony	502.78	76.36	5.67	0.00	584.82	3.34%	18.07	19.44	19.53	
Sub Station	2294.27	264.77	251.24	84.37	2894.65	5.28%	128.13	141.75	150.61	
IT Equipment (Incl. Software)	11.29	1.30	1.24	0.41	14.24	5.28%	0.63	0.70	0.74	
<b>Total</b>	<b>2988.84</b>	<b>342.44</b>	<b>258.15</b>	<b>84.78</b>	<b>3674.21</b>	<b>Total</b>	<b>146.83</b>	<b>161.89</b>	<b>170.88</b>	
							<b>Average Gross Block (₹ in lakh)</b>	<b>3160.06</b>	<b>3460.35</b>	<b>3631.82</b>
							<b>Weighted Average Rate of Depreciation</b>	<b>4.65%</b>	<b>4.68%</b>	<b>4.71%</b>



## Asset-IV

2014-19 Capital Expenditure	Admitted Capital Cost as on COD (₹ in lakh)	ACE (₹ in lakh)		Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations (₹ in lakh)			
		2015-16	2016-17			2015-16	2016-17	2017-18	2018-19
Sub Station	3452.67	67.15	260.24	3780.06	5.28%	184.07	192.72	199.59	199.59
PLCC	0.00	0.00	45.15	45.15	6.33%	0.00	1.43	2.86	2.86
IT Equipment (Incl. Software)	20.04	0.39	1.77	22.20	5.28%	1.07	1.13	1.17	1.17
<b>Total</b>	<b>3472.70</b>	<b>67.54</b>	<b>307.16</b>	<b>3847.40</b>	<b>Total</b>	<b>185.14</b>	<b>195.27</b>	<b>203.62</b>	<b>203.62</b>
<b>Average Gross Block (₹ in lakh)</b>						<b>3506.47</b>	<b>3693.82</b>	<b>3847.40</b>	<b>3847.40</b>
<b>Weighted Average Rate of Depreciation</b>						<b>5.28%</b>	<b>5.29%</b>	<b>5.29%</b>	<b>5.29%</b>

## Asset-V

2014-19 Capital Expenditure	Admitted Capital Cost as on COD (₹ in lakh)	ACE (₹ in lakh)			Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations (₹ in lakh)		
		2016-17	2017-18	2018-19			2016-17	2017-18	2018-19
Building Civil Works & Colony	8.75	1.84	0.02	0.00	10.62	3.34%	0.32	0.35	0.35
Sub Station	1194.92	73.47	66.56	32.27	1367.22	5.28%	65.03	68.73	71.34
IT Equipment (Incl. Software)	14.26	0.87	0.80	0.39	16.32	5.28%	0.78	0.82	0.85
<b>Total</b>	<b>1217.93</b>	<b>76.19</b>	<b>67.38</b>	<b>32.66</b>	<b>1394.16</b>	<b>Total</b>	<b>66.13</b>	<b>69.90</b>	<b>72.54</b>
<b>Average Gross Block (₹ in lakh)</b>						<b>1256.03</b>	<b>1327.81</b>	<b>1377.83</b>	
<b>Weighted Average Rate of Depreciation</b>						<b>5.27%</b>	<b>5.26%</b>	<b>5.27%</b>	

## Asset-VI

2014-19 Capital Expenditure	Admitted Capital Cost as on COD (₹ in lakh)	ACE (₹ in lakh)			Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations (₹ in lakh)		
		2016-17	2017-18	2018-19			2016-17	2017-18	2018-19
Building Civil Works & Colony	6.61	0.02	0.06	0.00	6.69	3.34%	0.22	0.22	0.22
Transmission Line	30394.66	394.92	1206.67	275.62	32271.86	5.28%	1615.26	1657.55	1696.68
Sub Station	2040.00	25.30	150.43	45.31	2261.04	5.28%	108.38	113.02	118.19
PLCC	112.88	4.31	6.75	4.00	127.94	6.33%	7.28	7.63	7.97
IT Equipment (Incl. Software)	29.18	0.36	2.16	0.65	32.35	5.28%	1.55	1.62	1.69
<b>Total</b>	<b>32583.33</b>	<b>424.90</b>	<b>1366.07</b>	<b>325.58</b>	<b>34699.88</b>	<b>Total</b>	<b>1732.70</b>	<b>1780.04</b>	<b>1824.75</b>
<b>Average Gross Block (₹ in lakh)</b>						<b>32795.78</b>	<b>33691.27</b>	<b>34537.09</b>	
<b>Weighted Average Rate of Depreciation</b>						<b>5.28%</b>	<b>5.28%</b>	<b>5.28%</b>	





**ANNEXURE-2**

2019-24 Capital Expenditure	Combined Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	Projected ACE (₹ in lakh) 2019-20	Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations (₹ in lakh)					
					2019-20	2020-21	2021-22	2022-23	2023-24	
Land - Freehold	1624.47	0.00	1624.47	0.00%	0.00	0.00	0.00	0.00	0.00	
Building Civil Works & Colony	4784.85	0.00	4784.85	3.34%	159.81	159.81	159.81	159.81	159.81	
Transmission Line	298745.95	0.00	298745.95	5.28%	15773.79	15773.79	15773.79	15773.79	15773.79	
Sub Station	101819.90	6068.32	107888.22	5.28%	5536.29	5696.50	5696.50	5696.50	5696.50	
PLCC	944.19	78.79	1022.98	6.33%	62.26	64.75	64.75	64.75	64.75	
IT Equipment (Incl. Software)	348.89	27.25	376.14	15.00%	54.38	56.42	56.42	56.42	56.42	
<b>Total</b>	<b>408268.25</b>	<b>6174.36</b>	<b>414442.61</b>	<b>Total</b>	<b>21586.53</b>	<b>21751.27</b>	<b>21751.27</b>	<b>21751.27</b>	<b>21751.27</b>	
					<b>Average Gross Block (₹ in lakh)</b>	<b>411355.43</b>	<b>414442.61</b>	<b>414442.61</b>	<b>414442.61</b>	<b>414442.61</b>
					<b>Weighted Average Rate of Depreciation</b>	<b>5.25%</b>	<b>5.25%</b>	<b>5.25%</b>	<b>5.25%</b>	<b>5.25%</b>

