CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

Petition No. 104/TT/2019

Coram:

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

Date of order: 17.08.2021

In the matter of:

Approval under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations 1999 and determination of transmission tariff for the 2014-19 period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 for Asset-I: Extension of Kota 400/220 kV Sub-station (POWERGRID)-Shifting of 400 kV, 50 MVAR line reactor from Merta to Kota Sub-station for its use as Bus Reactor and 400 kV Bus reactor bay; Asset-II: Extension of Koteshwar 400/220 kV Sub-station (THDC)-installation of 400 kV, 125 MVAR bus reactor along with associated bay at Koteshwar; Asset-III: Extension of Dehar 400/220 kV Sub-station (BBMB)-installation of 400 kV, 1x63 MVAR bus Reactor-II through a single 400 kV hybrid GIS bay and Asset-IV: Replacement of 250 MVA ICT with 4x105MVA, 1-Phase ICT & retrofitting of associated 400/220 kV bay equipment and protection relays at Dehar under "Strengthening Scheme in Northern Region".

And in the matter of:

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

Versus

1. Rajasthan Rajya Vidyut Prasaran Nigam Limited,
   Vidyut Bhawan, Vidyut Marg, Jaipur - 302 005.

2. Ajmer Vidyut Vitran Nigam Limited,
   132 kV, GSS RVPNL Sub-station Building,
   Caligiri Road, Malviya Nagar, Jaipur - 302 017.

3. Jaipur Vidyut Vitran Nigam Limited,
   132 kV, GSS RVPNL Sub-station Building,
   Caligiri Road, Malviya Nagar, Jaipur - 302 017.

4. Jodhpur Vidyut Vitran Nigam Limited,
   132 kV, GSS RVPNL Sub-station Building,
   Caligiri Road, Malviya Nagar, Jaipur - 302 017

5. Himachal Pradesh State Electricity Board,
   Vidyut Bhawan, Kumar House Complex Building II,
   Shimla - 171 004

6. Punjab State Electricity Board,
   The Mall, Patiala - 147 001.

7. Haryana Power Purchase Centre,
   Shakti Bhawan, Sector – 6,
   Panchkula - 134 109

8. Power Development Department,
   Government of Jammu & Kashmir,
   Mini Secretariat, Jammu

9. Uttar Pradesh Power Corporation Limited,
   (Formerly Uttar Pradesh State Electricity Board),
   Shakti Bhawan, 14, Ashok Marg,
   Lucknow - 226 001

10. Delhi Transco Limited,
    Shakti Sadan, Kotla Road,
    New Delhi - 110 002

11. BSES Yamuna Power Limited,
    BSES Bhawan, Nehru Place,
    New Delhi

12. BSES Rajdhani Power Limited,
    BSES Bhawan, Nehru Place,
    New Delhi

13. TATA Power Delhi Distribution Limited,
    33 kV Sub-station, Building,
    Hudson Lane, Kingsway Camp,
    North Delhi – 110009

14. Chandigarh Administration,
    Sector - 9, Chandigarh

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

16. North Central Railway,
Allahabad

17. New Delhi Municipal Council,
Palika Kendra, Sansad Marg,
New Delhi - 110 002 **...Respondents**

For Petitioner : Shri S. S. Raju, PGCIL
Shri A. K. Verma, PGCIL
Shri B. Dash, PGCIL
Shri Ved Prakash Rastogi, PGCIL

For Respondents : Shri R.B. Sharma, Advocate, BRPL
Shri Sanjay Srivastav, Advocate, BRPL

ORDER

The instant petition has been filed by Power Grid Corporation of India Limited, a deemed transmission licensee, for approval of transmission tariff for the 2014-19 tariff period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as "the 2014 Tariff Regulations") in respect of the following transmission assets under "Strengthening Scheme in Northern Region" in Northern Region (hereinafter referred to as "the Transmission Project"):

Asset-I: Extension of Kota 400/220 kV Sub-station (POWERGRID) – Shifting of 400 kV, 50 MVAR line reactor from Merta to Kota Sub-station for its use as Bus Reactor and 400 kV Bus reactor bay;

Asset-II: Extension of Koteshwar 400/220 kV Sub-station (THDC) – installation of 400 kV, 125 MVAR bus reactor along with associated bay at Koteshwar;

Asset-III: Extension of Dehar 400/220 kV Sub-station (BBMB)- installation of 400 kV, 1x63 MVAR bus Reactor-II through a single 400 kV hybrid GIS bay and

Asset-IV: Replacement of 250 MVA ICT with 4x105 MVA, 1-phase ICT & retrofitting of associated 400/220 kV bay equipment and protection relays at Dehar.

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

1) "Approve the Transmission Tariff for the tariff block 2014-19 block for the assets covered under this petition, as per para –8.2 above.

2) *Admit the capital cost as claimed in the Petition and approve the Additional Capitalisation incurred / projected to be incurred.*

3) *Tariff may be allowed on the estimated completion cost, since few elements of the project are yet to be completed, the completion cost for the assets covered under instant Petition are within the overall project cost.*

4) *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 under clause 25 of the Tariff regulations 2014.*

5) *Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in terms of Regulation 52 Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014, and other expenditure (if any) in relation to the filing of petition.*

6) *Allow the petitioner to bill and recover Licensee fee and RLDC fees and charges, separately from the respondents in terms of Regulation 52 Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014.*

7) *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 2014-19 period, if any, from the respondents.*

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

9) *Allow the initial spares as claimed in the petition*

10) *Allow provisional tariff in accordance with clause 7 (i) of Regulation 7 Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014.*

11) *Allow reimbursement of tax if any on account of the proposed implementation of GST.*

12) *Condone the delay in completion of subject assets on merit of the same being out of the control of Petitioner in line with CERC Regulations'2014 12(2)(i) uncontrollable factors.*

and pass such other relief as Hon'ble Commission deems fit and appropriate under the circumstances of the case and in the interest of justice"

Background

3. The investment approval and expenditure sanction to the transmission project was accorded by the Board of Directors of the Petitioner vide memorandum dated 26.10.2012 at an estimated cost of ₹10055 lakh including IDC of ₹489 lakh based on August 2012 price level. The Petitioner vide affidavit dated 16.2.2017 has submitted the Revised Cost Estimate (RCE) of the project at ₹11272 lakh including IDC of ₹527 lakh as discussed in the 336th meeting of Board of Directors of the Petitioner held on 6.12.2016.

4. The Petitioner has been entrusted with the implementation of the transmission project. The scope of the scheme was discussed and agreed in the 30th Standing Committee meeting held on 19.12.2011 and 25th NRPC meeting held on 23.2.2012.

5. The broad scope of project is as under:

Transmission Lines

(i) LILO of Jalandhar-Hamirpur 220 kV D/C line at Hamirpur (POWERGRID)

Sub-stations

(i) Extension of Kota 400/220 kV Sub-station (POWERGRID)-Shifting of 400 kV, 50 MVAR line reactor from Merta to Kota Sub-station for its use as Bus Reactor and 400 kV Bus reactor bay;

(ii) Extension of Dehar 400/220 kV Sub-station (BBMB)-Installation of 400 kV, 2x63 MVAR bus reactor through a single 400 kV hybrid GIS bay and replacement of 250 MVA ICT with 4x105 MVA, 1-Phase ICT & retrofitting of associated 400/220 kV bay equipment and protection relays;

(iii) Extension of Koteshwar 400/220 kV Sub-station (THDC)-Installation of 400 kV, 125 MVAR bus reactors along with associated bay.

6. Details of petitions filed and transmission assets covered in those petitions under the transmission project are as follows:

Sl. No.	Scope as approved in Investment approval	Remarks
1	Loop-out of 220 kV Jalandhar-Hamirpur line at Hamirpur (to be used as LILO of 1st Ckt. of 220 kV Hamirpur-Jalandhar T/L)	Petition No. 28/TT/2014
2	Loop in of 2nd ckt of Jallandhar-Hamirpur T/L	Petition No. 99/TT/2014
3	**Asset-I:** Extension of Kota 400/220 kV Sub-station (POWERGRID) – Shifting of 400 kV, 50 MVAR line reactor from Merta to Kota Sub-station for its use as Bus Reactor and 400 kV Bus reactor bay	Earlier covered under Petition No. 234/TT/2016. Tariff in respect of Asset-I, Asset-II, Asset-III(b) and Asset-IV was not approved and the Petitioner was directed to file fresh petition
4	**Asset-II:** Extension of Koteshwar 400/220 kV Sub-station (THDC) – installation of 400 kV, 125 MVAR bus reactor along with associated bay at Koteshwar.	
5	**Asset-III(a):** Extension of Dehar 400/220 kV Sub-station (BBMB)- installation of 400 kV, 1x63 MVAR bus Reactor-I through a single 400 kV hybrid GIS bay	
6	**Asset-III(b):** Extension of Dehar 400/220kV Substation (BBMB)- installation of 400 kV, 1x63 MVAR bus Reactor-II through a single 400 kV hybrid GIS bay	
7	**Asset-IV:** Replacement of 250 MVA ICT with 4x105 MVA, 1-Phase ICT & retrofitting of associated 400/220 kV bay equipment and protection relays at Dehar	

7. The tariff from COD to 31.3.2019 of Asset-I, Asset-II, Asset-III and Asset-IV (nomenclature as per the instant petition) was claimed by the Petitioner earlier in Petition No. 234/TT/2016. These transmission assets were named Asset-I, Asset-II, Asset-III(b) and Asset-IV in that petition. However, the tariff for the said assets was not allowed in order dated 17.10.2017 in Petition No. 234/TT/2016 and the Commission directed the Petitioner to file a separate petition along with all the relevant information as per the provisions of the 2014 Tariff Regulations. The relevant portion of the order dated 17.10.2017 in Petition No. 234/TT/2016 is as follows:

> *"7. The petitioner has claimed the cost of shifting of 400 kV 50 MVAR line reactor from Merta to Kota Sub-station in Asset-I. The tariff for the 400 kV 50 MVAR line reactor at Merta was granted tariff vide order dated 8.12.2015 in Petition No.203/TT/2014 under System Strengthening in South West part of Northern Grid (Part-A) Transmission System in Northern Region. This is an inter-unit transfer and it is of permanent nature. In a similar case of shifting of 40% FSC from Lucknow Sub-station to Sohawal Sub-station,*

the Commission observed that the assets that are shifted from one transmission system to another should be decapitalised in the books of accounts of the transmission system where the asset was originally commissioned and capitalised in the books of accounts of the transmission system where it is transferred and seek fresh determination of tariff from the date of capitalisation under the transmission system where the asset is transferred. The relevant portion of order dated 28.9.2017 in Petition No. 195/TT/2016 is as under:-

> *"6. The tariff of "40% FSC at Lucknow Sub-station" was allowed since 1.6.2007 and it has completed 10 years of its useful life. It is a case of inter-unit transfer. Since the proposed shifting of FSC from Lucknow to Sohawal is of permanent nature and as it involves two different schemes covered under different Investment Approvals, there will be a mismatch of recovery of the cost of the "40% FSC" over the 25 years. In order to address this issue, the Commission in the past has decided that in case of inter-unit transfer, the assets shall be de-capitalised in the books of accounts of the transmission system where the asset was originally commissioned and capitalised in the books of accounts of the transmission system where it is transferred. In the instant case, the 40% FSC has been transferred from Lucknow to Sohawal end. Therefore, the said assets need to be de-capitalised from the books of accounts of the assets at Lucknow and capitalised in the books of account of assets at Sohawal. The petitioner is directed to carry out the decapitalisation and corresponding capitalisation of the assets within a period of six months and claim the revised tariff of the "40% FSC" at Sohawal Sub-station at the time of truing-up. In so far as the expenditure involved in inter-unit transfer is concerned, this is in the nature of revenue expenditure and is allowed as a onetime pass through. Since the "40% FSC" was dismantled and shifted to Sohawal and thereafter, commissioned on 12.2.2016, the tariff of the assets shall be determined afresh with reference to the COD as 12.2.2016. Accordingly, the petitioner after carrying out necessary de-capitalisation of the assets at Lucknow and capitalisation at Sohawal Sub-station shall seek fresh determination of the tariff with effect from 12.2.2016. Therefore, the tariff for "40% FSC at Sohawal Sub-station" is not allowed in this order.*
>
> *7. However, the petitioner is directed to provide complete details of expenses incurred on shifting the instant asset supported by documentary evidence for a prudence checkby the Commission. Further, there can be more cases of multiple shifting of such FSC/Reactors etc. from one project to another or even within the same project at some other locations. Therefore, in order to avoid multiplicity of tariff revisions, the tariff revision in such cases will be allowed once at the end of tariff block under truing-up provisions".*

8. Accordingly, we are not inclined to grant tariff for Asset-I in the instant petition. The petitioner is directed to carry out the decapitalisation and corresponding capitalisation of the Asset-I within a period of six months and claim the revised tariff of the "reactor" at Kota at the time of truing-up. In so far as the expenditure involved in inter-unit transfer is concerned, this is in the nature of revenue expenditure and is allowed as a onetime pass through. Since the "reactor" was dismantled and shifted to Kota and thereafter, commissioned on 1.4.2016, the tariff of the Asset-I shall be determined afresh with reference to the COD as 1.4.2016. As such, the tariff of the Asset-I is not considered in the present order.

9. The petitioner is further directed to provide complete details of expenses incurred on shifting the instant asset supported by documentary evidence for a prudence check by

the Commission. Therefore, in order to avoid multiplicity of tariff revisions, the tariff for Asset I will be allowed at the end of tariff block under the truing-up provisions.

10. Initially, the petitioner claimed tariff for Asset-III, "Extension of Dehar 400/220 kV Sub-station (BBMB)-installation of 400 kV, 2X63 MVAR bus reactor through a single 400 kV hybrid GIS bay" on the basis of anticipated COD as 1.12.2016. However, Asset-III was commissioned was put into commercial operation in two parts, viz- Asset-III(a): 1x63 MVAR Bus Reactor I at Dehar, put into commercial operation on 14.12.2016 and Asset-III(b): 1x63 MVAR Bus reactor 2 at Dehar with revised anticipated COD of 1.9.2017 (as per vide affidavit dated 2.6.2017). The tariff for the purpose of PoC was granted on 6.2.2017. Thus, more than 6 months have elapsed and Asset-III(b) has not yet been commissioned and no further information has been submitted by the petitioner in this regard. Therefore, it appears that the COD of the Asset-III(b) is not certain. Similarly, in the case of Asset-II, the petitioner vide affidavit dated 2.6.2017 has submitted the revised date of anticipated COD as 31.8.2017 and it was put into commercial operation on the said date. Therefore, the transmission tariff for Asset-II and Asset-III (b) is not considered in the instant order.

11. As regards Asset-IV, it is observed that the petitioner has claimed that it has been charged on 31.1.2017, but has not submitted COD letter/RLDC certificate as claimed in the instant petition. The petitioner has also not submitted the trial run certificate for the COD and the Auditors" certificate for capital cost in the case of Asset-IV. Therefore, we are not able to work out the tariff of Asset-IV as per the 2014 Tariff Regulations."

8. Accordingly, the Petitioner has filed the instant Petition. The Petitioner has submitted the Auditor's Certificate on the basis of actual COD of the transmission assets along with the RLDC Certificate in support of the COD of the transmission assets.

9. The details of the transmission charges claimed by the Petitioner for the transmission assets are as follows:-

(₹ in lakh)

Asset I			
Particulars	**2016-17**	**2017-18**	**2018-19**
Depreciation	14.14	18.88	23.11
Interest on Loan	15.11	18.83	21.71
Return on Equity	15.76	21.03	25.75
Interest on Working Capital	4.35	4.76	5.13
O&M Expenses	64.37	66.51	68.71
Total	**113.73**	**130.01**	**144.41**

(₹ in lakh)

Asset II		
Particulars	**2017-18**	**2018-19**
Depreciation	29.61	49.14
Interest on Loan	28.28	44.20
Return on Equity	32.99	54.75
Interest on Working Capital	4.32	6.71
O&M Expenses	46.13	68.71
Total	**141.33**	**223.51**

(₹ in lakh)

Asset III		
Particulars	**2017-18**	**2018-19**
Depreciation	10.65	24.05
Interest on Loan	10.70	22.85
Return on Equity	11.87	26.80
Interest on Working Capital	2.08	4.60
O&M Expenses	26.59	58.73
Total	**61.89**	**137.03**

(₹ in lakh)

Asset IV			
Particulars	**2016-17**	**2017-18**	**2018-19**
Depreciation	18.42	116.59	126.69
Interest on Loan	19.37	117.06	117.86
Return on Equity	20.53	129.91	141.16
Interest on Working Capital	2.11	13.33	14.00
O&M Expenses	16.08	103.39	106.83
Total	**76.51**	**480.28**	**506.54**

10. The details of Interest on Working Capital claimed by the Petitioner are as follows:-

(₹ in lakh)

Asset I			
Particulars	**2016-17**	**2017-18**	**2018-19**
O & M expenses	5.36	5.54	5.73
Maintenance Spares	9.66	9.98	10.31
Receivables	18.96	21.67	24.07
Total	**33.98**	**37.19**	**40.10**
Rate of Interest	12.80%	12.80%	12.80%
Interest on Working Capital	**4.35**	**4.76**	**5.13**

(₹ in lakh)

Asset II		
Particulars	**2017-18**	**2018-19**
O & M expenses	5.54	5.73
Maintenance Spares	9.98	10.31
Receivables	33.96	37.25
Total	**49.48**	**53.28**
Rate of Interest	12.60%	12.60%
Interest on Working Capital	**4.32**	**6.71**

(₹ in lakh)

Asset III		
Particulars	**2017-18**	**2018-19**
O & M expenses	4.74	4.89
Maintenance Spares	8.53	8.81
Receivables	22.05	22.84
Total	**35.32**	**36.54**
Rate of Interest	12.60%	12.60%
Interest on Working Capital	2.08	4.60

(₹ in lakh)

Asset IV			
Particulars	**2016-17**	**2017-18**	**2018-19**
O & M expenses	8.34	8.62	8.90
Maintenance Spares	15.01	15.51	16.02
Receivables	79.35	80.05	84.42
Total	**102.69**	**104.17**	**109.35**
Rate of Interest	12.80%	12.80%	12.80%
Interest on Working Capital	**2.11**	**13.33**	**14.00**

11. The Respondents are distribution licensees, transmission utilities and power departments, who are procuring transmission services from the Petitioner, mainly beneficiaries of the Northern Region.

12. The Petitioner has served the petition on the Respondents and notice regarding filing of this petition has been published in the newspapers in accordance with Section 64 of the Electricity Act, 2003. No comments or suggestions have been received from the general public in response to the aforesaid notices published in the newspapers. BSES Rajdhani Power Limited (BRPL) i.e. Respondent No. 12 has filed its reply vide affidavit dated 13.6.2019 and has raised the issues in respect of Transmission Service

Agreement (TSA), time and cost over-run, Initial Spares, accrual IDC, RoE, licence fee and RLDC fees and petition filing fees, etc. In response to the issues raised by BRPL, the Petitioner has filed a rejoinder vide affidavit dated 10.2.2020.

13. BRPL has submitted that the Petitioner has not filed the TSA between the transmission licensee and the designated inter-State customers as per provisions of Regulation 3(63) of the 2014 Tarff Regulations. In response, the Petitioner has submitted that as per Regulation 13(5) of the Central Electricity Regulatory Commission (Sharing of Inter State Transmission Charges and Losses) Regulations, 2010, the notified Model Transmission Service Agreement shall be the default transmission agreement and shall mandatorily apply to all designated ISTS customers. The Petitioner has submitted that, therefore, as per these regulations signing of TSA is not mandatory. The Petitioner has further submitted that, however, BRPL has already signed TSA on 19.8.2011 and has submitted a copy of the same.

14. The hearing in this matter was held on 11.2.2020 and 19.8.2020 through video conference and the order was reserved.

15. The order is issued considering the submissions made by the Petitioner vide affidavits dated 4.5.2020, 16.11.2021, 28.12.2020, the reply of BRPL and the rejoinder filed by the Petitioner.

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

Date of commercial operation (COD)

17. The Petitioner has claimed the date of commercial operation of Asset-I, Asset-II, Asset-III and Asset-IV as 1.4.2016, 22.7.2017, 13.10.2017 and 3.2.2017 respectively. The Petitioner has submitted CEA energisation certificates dated 29.3.2016, 24.3.2017, 25.9.2017 and 30.1.2017; RLDC charging certificates dated 19.4.2016, 27.7.2017, 22.5.2018 and 22.5.2018; and self-declared COD letters dated 1.4.2016, 7.9.2017, 1.6.2018 and 1.6.2018 for Asset-I, Asset-II, Asset-III and Asset-IV respectively. The Petitioner has also submitted CMD certificates w.r.t. to all the assets along with the original petition. Taking into consideration CEA certificates, RLDC certificates and CMD certificate, COD of assets are approved as follows:

Approved COD	
Asset -I	1.4.2016
Asset-II	22.7.2017
Asset-III	13.10.2017
Asset-IV	3.2.2017

18. The Petitioner has submitted that 50 MVAR line reactor has been shifted from Merta sub-station to Kota sub-station and is used as bus reactor and the same is part of Asset-I. However, the cost of the shifted reactor is not included in the capital cost of Asset-I of the instant petition and only the cost of shifting the bus reactor of ₹18.06 lakh is included in the capital cost. Thus, the capital cost of Asset-I comprises of cost of shifting and other costs such as switchgear, structure for switchyard, bus bar/ conductors/ insulator etc. The re-capitalized shifted reactor has been considered as Asset-I(a) and the same is dealt with in later part of this order.

Capital Cost

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

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

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

a. *the expenditure incurred or projected to be incurred up to the date of commercial operation of the project;*
b. *Interest during construction and financing charges, on the loans (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed;*
c. *Increase in cost in contract packages as approved by the Commission;*
d. *Interest during construction and incidental expenditure during construction as computed in accordance with Regulation 11 of these regulations;*
e. *capitalised Initial spares subject to the ceiling rates specified in Regulation 13 of these regulations;*
f. *expenditure on account of additional capitalization and de-capitalisation determined in accordance with Regulation 14 of these regulations;"*
g. *adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the COD as specified under Regulation 18 of these regulations; and*
h. *adjustment of any revenue earned by the transmission licensee by using the assets before COD."*

20. The Petitioner has claimed the following apportioned approved capital cost, capital cost as on the date of commercial operation and actual or projected additional capital expenditure (ACE) for the transmission assets:

(₹ in lakh)

Assets	FR apportioned approved cost	RCE apportioned approved cost	Capital cost as on COD	ACE			Total capital cost as on 31.3.2019
				2016-17	2017-18	2018-19	
Asset-I	517.27	546.10	198.20	148.47	21.82	138.50	506.99
Asset-II	999.92	1096.51	803.29	0.00	33.10	188.91	1025.30
Asset-III	505.39	643.59	422.06	0.00	18.68	29.77	470.91
Asset-IV	2794.22	2844.03	2237.59	2.91	3.30	311.17	2554.97

Cost over-run / Variation

21. BRPL has submitted that the cost over-run in case of Asset-II may not be allowed. The submissions made by BRPL in this regard are as follows:

a) The reasons cited by the Petitioner for cost over-run are very casual. The Petitioner has filed RCE approved by the Board of Directors of the Petitioner Company at an estimated cost of ₹11272 lakh including IDC of ₹527 lakh in its 336th meeting held on 6.12.2016.

b) The cost estimates were revised as late as December 2016 and yet it cannot be said to be a proper estimation of cost. RCE is merely an indication of revision of cost of various assets without furnishing any justification for increase in cost approved.

c) The power delegated to the Board of Directors of the Petitioner by the Department of Public Enterprise (DPE), Ministry of Heavy Industries and Public Enterprises, Government of India through its OM No. 26(3)/2005-GM-GL-92 dated 1st May, 2008 and OM No. DPE/11(2)/97-Fin dated 22nd July, 1997 or anybody subordinate to it, cannot exercise the power of revision without mentioning the reasons and the justification of time and cost over-run. Any exercise, if made without reasons and the justification of time and cost over-run would be arbitrary in nature and the Petitioner cannot claim tariff on the basis of such arbitrary exercise of power.

22. The Petitioner, in response, submitted that there is a cost over-run of ₹25.38 lakh (2.5%) in respect of Asset-II. In case of all other assets, completion cost is within the FR apportioned approved cost and, hence, no cost over-run. The Petitioner also submitted that there is no cost over-run in Asset-II with respect to the RCE approved cost. The Petitioner has further submitted that there is cost over-run in case of LILO of 220 kV S/C Jalandhar-Hamirpur Transmission Line at Hamirpur Sub-station and it necessitated RCE for the project. Further, whenever cost over-run is anticipated in any project/ element, RCE is prepared after due analysis of the reasons for cost over-run with proper justifications and put up before the competent authority of the Petitioner for requisite approvals. Therefore, the contentions of BRPL that preparation and approval of RCE is done by an authority without proper justification is not correct. In the instant case, the increase in cost is attributed mainly to variation in price and variation in awarded cost.

23. As regards the variation in awarded cost, the Petitioner has submitted that the contracts for various packages were awarded to the lowest evaluated and responsive bidder, on the basis of competitive bidding, after publication of NIT in leading newspapers. Further, it is submitted that during execution of Asset-II, there has been inflationary trend in the prices of various input items as indicated by the indices given below:-

Name of Indices	Cost as per DPR (August, 2012 Price Level)	November,2012 (one month prior to first OBD)	March, 2013	March, 2014	March, 2015	% Increase from first OBD
HG Zinc	120100	117100	132900	159200	155600	32.88%
EC Grade Al	141283	141283	146700	143883	151833	7.47%
CRGO	176344	165686	156590	194009	226050	36.43%
WPI	167.3	168.8	170.1	178.9	176.1	4.32%
CPI	214	218	224	238	254	16.51%

24. We have considered the submissions of the Petitioner and BRPL. It is observed that the price variation is due to cost variation in rates awarded for procurement of various equipment like switchgear, compensating equipment, outdoor lighting, structure for switchyard, control, relay & protection panels, power and control cables, etc. The estimated completion cost of instant asset is within the RCE apportioned approved cost.

Time over-run

25. The transmission assets were scheduled to be put into commercial operation on 14.10.2014 as per Investment Approval dated 26.10.2012. However, the transmission assets were put into commercial operation as shown under:

Asset	Scheduled COD	COD	Delay (in days)
Asset-I	14.10.2014	1.4.2016	535
Asset-II		22.7.2017	1012
Asset-III		13.10.2017	1095

Asset-IV		3.2.2017	843

26. The reasons submitted by the Petitioner for the time over-run in case of the transmission assets are as follows:

Asset-I

a) The 50 MVAR line reactor was installed at Merta sub-station (RRVPNL) in 400 kV Merta-Kota Transmission Line of RRVPNL and the same was diverted to Kota sub-station (PG) after LILO of the transmission line. After LILO work of 400 kV Kota-Merta Ckt-II at Shree Cement Generation Switchyard at Beawer, the line length of 400 kV Merta-Beawer line has been reduced to 90 km (approx.). With the reduction of line length, the line reactor at Merta sub-station was no more required and the same was installed as bus reactor at Kota sub-station.

b) The major reason for time over-run in case of Asset-I is due to the delay in grant of NOC by RRVPNL to dismantle the line reactor at Merta sub-station. RRVPNL took around 15 months to issue NOC. Details of the correspondence made by the Petitioner with RRVPNL in this regard are as follows:

Sr. No.	Date	Description
1	6.9.2014	Follow up started with RVPNL for issuance of NOC to start the shifting work
2	11.10.2014	Reminder letter
3	6.8.2015	Reminder letter
4	5.11.2015	Reminder letter
5	20.11.2015	RRVPNL gave NOC to start the work

c) After getting NOC from RRVPNL, the Petitioner dismantled and shifted line reactor to Kota sub-station from Merta sub-station and was put into commercial operation on 1.4.2016. The Petitioner took only 133 days to commission Asset-I after receipt of NOC from RRVPNL. If RRVPNL had given NOC on time, then the Petitioner would have put Asset-I into commercial operation much earlier. Therefore, the time over-run may be condoned.

Asset-II

a) A meeting was held on 26.5.2012 between THDC and the Petitioner regarding installation of 125 MVAR, 420 kV bus reactor wherein the issue of the existing

cable trench along the peripheral road was discussed. THDC confirmed that the necessary arrangements for crossing the cable trench will be constructed by THDC and, thereafter, rail-cum-road arrangement will be provided by the Petitioner for installation of bus reactor.

b) While carrying out the bus reactor work on 5.11.2014 at THDC premises, the Petitioner observed that the following civil structures were intervening with the unloading platform and rail-cum-road outside the main block of reactor foundation:

(i) Firefighting pipeline
(ii) Drain-rain water
(iii) Cable trench - Largest section. All cable – Power/ Protection/ Control are passing through the existing trench

c) THDC stated that during construction of rail cum road/ unloading platform for the bus reactor, the fire fighting (in running condition) and cables (power and control) may get severely affected and may lead to long outage of the plant which may not be permitted by NRLDC as re-termination of cables may take a considerable time. Therefore, THDC requested to explore alternative solution for the unloading of reactor and loading it to main block. The Petitioner then formed an internal committee to explore other possibilities. Detailed engineering was done by the Petitioner and ultimately the drawing was proposed for placing the reactor on its foundation by crossing the existing cable trench and fire fighting hydrant pipelines with necessary modifications. The Petitioner again made some more modifications and amendments in the proposed drawings and requested THDC on 18.3.2015 to give permission to start the work. THDC gave the approval on 6.4.2015 as per the modified drawings proposed by the Petitioner for unloading the reactor on platform.

d) The installation work of 125 MVAR bus reactor was completed in May 2016. The work related to installation of emulsifier system to protect the reactor from fire hazards was not completed. The emulsifier system is to be connected with the existing fire-fighting pumps of THDC. The capacity of existing pumps installed at THDC sub-station was insufficient to maintain required flow of hydrant for emulsifier system to work properly. Therefore, the Petitioner proposed to install one diesel engine driven pump having capacity of 171 cubic

meter/hour to augment the existing fire fighting system. The proposed diesel engine driven pump was not possible to be accommodated in the existing pump house of THDC due to space constraint. Therefore, the Petitioner proposed to extend the existing pump house building for installation of the same along with necessary drawings. THDC denied to do the modifications in their existing fire fighting pump house building and asked the Petitioner to do necessary arrangements on their own utilizing only their fire fighting headers available in switchyard. After discussing with THDC, it was decided to utilize the existing hydrant line by installing one diesel engine pump without doing much modification.

e) The petitioner took best and continuous efforts to complete Asset-II within scheduled time frame. The whole process took about 33 months from its scheduled COD.

Asset-III

a) The reactors were received outside the BBMB Dehar sub-station in June 2015. Due to pending civil works and shutdown issues in BBMB switchyard, the reactors were stored outside switchyard. In the meantime, all requisite tests were conducted including cc-cl, dew point, daily pressure monitoring and found correct during above storage. However, after completion of civil works and clearance of shut down, reactors were dragged approximately 200 meters and impact recorder was taken out jointly as per specified procedure. During analysis of reports, shock was observed in unit no. 2. After that, other detail testing including SFRA was carried out in May 2016. In April 2016, during internal inspection of reactor, some damages were observed. CGL through mail dated 27.9.2016 intimated that they have already deputed two persons to transport the reactor back to factory for rectification. After rectification of the problem, Asset-III was put into commercial operation on 13.10.2017.

Asset-IV

a) The time over-run in case of Asset-IV was due to delay in approval for shutdown by BBMB. BBMB Dehar authority was requested many times through various correspondences (letters enclosed for reference) to provide shutdown at

BBMB Dehar sub-station. However, no timely reply was received. Further, BBMB Dehar staff verbally denied for any shutdown. Correspondence made between the Petitioner and BBMB are as follows: -

Sl. No.	Date	From	To	Remarks
1	22.8.2016	Sr. Engineer (PGCIL)	Superintending Engineer Dehar Power House	Shutdown of Machine for removal of Jumper from Bus.
2	27.8.2016	DGM (PGCIL)	Superintending Engineer BBMB	Reminder against letter dated 22.8.2016 and request for shutdown
3	7.9.2016	Jr. Engineer (PGCIL)	Superintending Engineer BBMB	Reminder against letter dated 22.8.2016 and 27.8.2016 as teams and material were mobilized at site.

b) ICT shut down at BBMB Dehar was rejected in 125th OCC meeting citing high inflow of water in August 2016. The 127th OCC approved shutdown in October 2016 subject to BBMB's consent. Thereafter, Asset-IV achieved COD on 3.2.2017.

27. BRPL has submitted that the Petitioner is well conversant with the problems of this nature which are usually encountered in construction of transmission project. Accordingly, completion period of 24 months was approved by the Petitioner. The reasons given by the Petitioner for time over-run are only an excuse and it is entirely attributable to the slackness in project management for which the Petitioner is solely responsible. Besides the slackness, the Petitioner is also responsible for lack of proper planning and co-ordination. BRPL has also submitted that the justification for time over-run is not backed by the relevant statutory documents e.g. detailed project report, CPM analysis, PERT chart and Bar chart. As such, time over-run may not be allowed and, accordingly, IDC and IEDC during the period of time over-run be disallowed. In response, the Petitioner has submitted that the reasons for time over-run have already been submitted in main petition.

28. The Petitioner vide affidavit dated 4.5.2020 has made the following submissions regarding schedule of activities in commissioning of the transmission assets:

Asset-I

Activity	Period of activity				Time over-run	Reasons for Time over-run
	Planned		Achieved			
	From	To	From	To		
LOA	April 2013	April 2013	21.2.2014	28.2.2014	18 months	The delay in Asset-I is due to the delay in grant of NOC by RRVPNL to dismantle the Reactor at Merta sub-station. RRVPNL took around 15 months to issue NOC.
Supply of structure, equipment etc.	August 2013	July 2014	December 2014	January 2016		
Civil works & erection	September 2013	September 2014	July 2014	March 2016		
Delay due to grant of NOC by RRVPNL	Delay in grant of NOC by RRVPNL was taking into consideration while planning		September 2014	November 2015		
Testing & Commissioning	September 2014	October 2014	March 2016	April 2016		

Asset-II

Activity	Period of activity				Time over-run	Reasons for Time over-run
	Planned		Achieved			
	From	To	From	To		
LOA	April 2013	April 2013	28.2.2014	28.2.2014	33 months	The delay in Asset-II is due to the intervening structures outside the main block of reactor foundation.
Supply of structure, equipment etc.	August 2013	July 2014	February 2015	April 2017		
Civil works & erection	September 2013	September 2014	December 2014	June 2017		
Delay due to grant of NOC by RRVPNL	Delay was not planned		November 2014	March 2016		
Testing & Commissioning	September 2014	October 2014	June 2017	July 2017		

Asset-III

Activity	Period of activity				Time over-run	Reasons for Time over-run
	Planned		Achieved			
	From	To	From	To		
LOA	April 2013	April, 2013	21.2.2014	21.2.2014	36 months	The delay in Asset-III is due to damages and their rectification in bus reactor.
Supply of structure, equipment etc.	August 2013	July 2014	May 2015	July 2017		
Civil works & erection	September 2013	September 2014	June 2015	August 2017		
Delay due to grant of NOC by	Delay was not planned		April 2017	October 2018		
Testing & Commissioning	September 2014	October 2014	August 2017	October 2017		

Asset-IV

Activity	Period of activity				Time over-run	Reasons for Time over-run
	Planned		Achieved			
	From	To	From	To		
LOA	11.4.2013	11.4.2013	18.11.2014	18.11.2014	28 months	The delay in Asset-IV is due to delay in approval for shutdown from BBMB.
Supply of structure, equipment etc.	August 2013	July 2014	April 2016	July 2016		
Civil works & erection	September 2013	September 2014	October 2016	January 2017		
Delay due to grant of NOC by	Delay was not planned		August 2016	October 2016		
Testing & Commissioning	September 2014	October 2014	October 2016	February 2017		

29. We have considered the submissions of the Petitioner and BRPL regarding the time over-run of transmission assets. As per the investment approval dated 26.10.2012, the scheduled COD is 14.10.2014 against which Asset-I, Asset-II, Asset-III & Asset-IV achieved COD with a time over-run of 535 days,1012 days,1095 days and 843 days, respectively. We deal with them in the following paragraphs.

Analysis of time over-run for Asset-I

30. The Petitioner has attributed the time over-run in case of Asset-I due to the delay of 15 months in grant of NOC by RRVPNL to dismantle the reactor at Merta sub-station. The Petitioner has stated that Asset-I was put into commercial operation within 133 days of getting NOC from RRVPNL. The Petitioner has further submitted that if RRVPNL had given NOC on time, it would have put Asset-I into commercial operation much earlier.

31. From schedule of activities submitted by the Petitioner, it is also observed that though the Investment Approval was accorded on 26.10.2012, LoA was awarded only on 28.2.2014 against scheduled award in April 2013 (with a delay of about 10 months) wherein date of completion of supply and erection work was mentioned as 28.6.2015, i.e. about 10 month after the scheduled COD of 14.10.2014.

32. It is further observed that the Petitioner wrote letter to Superintending Engineer, RRVPNL on 6.9.2014 regarding diversion of 50 MVAR line reactor from Merta sub-station to Kota sub-station. The relevant portion of the said letter is as follows:

> "xxx
>
> Respected *sir,*
>
> *This is to bring in your information that the 50 MVAR CGL make line reactor installed on 400 kV Merta Beawar Line at Merta end is going to be diverted to our Kota Sub-station. Due to LILO work of 400 kV Kota- Merta Ckt-II at Shree Cement Generation Switchyard at Beawer, the line length of 400 kV Merta- Beawer line has been limited to 90 Kms (approx.). Hence due to small line length, the line reactor installed on this line is more required at Merta end. A Letter of Award (LOA) has been awarded to M/s Alstorm india Limited from our corporate office having reference no. CC-CS/388-NR2/SS-21403-GA/NOA-I/4889&NOA-II/4890 dated 28.2.2014 for dismantling the above said reactor with LA, isolator, etc.*
>
> *The* schedule *of work will be intimated to you as soon as possible.*
>
> Xxx"

33. The 50 MVAR line reactor at Merta sub-station was to be shifted and installed at Kota sub-station on 14.10.2014 and used as a bus reactor. On perusal of the Petitioner's letter dated 6.9.2014 addressed to RRVPNL, it is noticed that the Petitioner informed RRVPNL about shifting of the reactor just about one month before schedule COD of 14.10.2014. Further, there is no mention of seeking NOC of RRVPNL in the said letter. Moreover, on perusal of the letters dated 11.10.2014, 6.8.2015, 5.11.2015 and 20.11.2015 submitted by the Petitioner, it is noticed that the Petitioner vide letter dated 11.10.2014, just 3 days before the scheduled COD of 14.10.2014, requested RRVPNL to issue NOC so that it can intimate Alstom India Limited to mobilize the resource to Merta sub-station for dismantling the reactor. Further, after the letter dated 11.10.2014, the next letter was written on 6.08.2015 (gap of nearly 10 months). It clearly shows that no urgency was shown by petitioner in getting the NOC. The Petitioner has also not placed on record any letter/ correspondence from RRVPNL in response to letters of the Petitioner.

34. The reactor was dismantled and shifted to Kota sub-station on 1.4.2016 with time over-run of 535 days. In our view, delay in achieving COD of Asset-1 is on account of delay on the part of the Petitioner in placing LoA and approaching RRVPNL for NOC. We are not able agree with the Petitioner's contention that the time over-run of 535 days to the delay in grant of NOC by RRVPNL. The Petitioner has not explained the delay in placing the LoA and the delay in approaching RRVPNL for NOC. We are of the view that there is delay on the part of the Petitioner in initiating action for placing the LoA and obtaining NOC from RRVPNL. Accordingly, the time over-run of 535 days in case of Asset-I is not condoned.

Analysis of time over-run for Asset-II

35. There is time over-run of 1012 days in case of Asset-II. The Petitioner has attributed the time over-run in case of Asset-II to a cable trench along the peripheral road, intervening civil structures between the unloading platform and rail-cum-road outside the main block of reactor foundation and the time taken for working out a suitable solution with THDC. First of all, it is noticed from Form 5A submitted by the Petitioner that the date of award of supply and erection works of Asset-II was 28.2.2014 (as against scheduled LOA of April 2013) and it was just eight months before the scheduled COD of 14.10.2014. In LOA, date of completion of supply & erection work is 10.9.2015 which is 11 months after the scheduled COD.

36. Further, it is noticed from the minutes of meeting dated 26.5.2012, between the Petitioner and THDC that a cable trench existed along the peripheral road and that it was agreed that THDC will make necessary arrangements for crossing the cable trench and, thereafter, the rail-cum-road arrangement was to be provided by the Petitioner for bus reactor installation. On perusal of the second minutes of meeting dated 5.11.2014, which is after SCOD i.e. 14.10.2014, it is noticed that for the first time the Petitioner informed THDC that on examination of the drawings with actual site condition, the Petitioner noticed that certain civil structures are between the unloading platform and rail-cum-road outside the main block of reactor foundation. The relevant extracts of the minutes of meeting dated 5.11.2014 is as follows:

> *"POWERGRID is carrying out Bus Reactor work at THDC, KHEP premises. While examining the drawings with the actual site condition, it has been observed that the following civil structures are intervening with the unloading platform and Rail cum Road outside the main block of the Reactor foundation.*
>
> *(i) Fire Fighting pipeline*
> *(ii) Drain-Rain water*
> *(iii) Cable trench largest section….*

THDC requested POWERGRID to explore alternate solution for unloading the reactor and loading it on main reactor"

37. The reasons cited by the Petitioner for the time over-run in case of Asset-II was brought to the notice of THDC only on 5.11.2014, after the scheduled COD of 14.10.2014. We are of the view that the Petitioner should have studied the actual site conditions diligently and in case of any difficulties in laying of the foundation for installation of the reactor should have brought it to the notice of THDC in its first meeting held on 26.5.2012.

38. Apart from delay in placing LOA, failure on the part of the Petitioner to identify the difficulties in time and delay in communicating of the same to THDC for working out a suitable solution for smooth and timely execution of the work led to the time over-run in case of Asset-II. We are of the view that there was slackness on the part of the Petitioner in initiating action which led to the time over-run in case of Asset-II and, therefore, we are not inclined to condone the delay of 1012 days in case of Asset-II.

Analysis of Time over-run for Asset-III

39. There is time over-run of 1095 days in case of Asset-III. The Petitioner has submitted that reactors were received at BBMB Dehar sub-station in June 2015. However, due to pending civil works and shutdown issues in BBMB switchyard, the reactors were stored outside switchyard. All requisite tests were conducted including dew point, daily pressure monitoring and found correct during above storage. However, after completion of civil works and clearance of shut down, reactors were dragged approximately 200 meters and impact recorder was taken out as per specified procedure for analysis. On analysis of the reports, shock was observed in Unit No. 2. Detailed testing including SFRA was carried out in May 2016. During internal inspection of reactor in April 2016, some damages were observed onsite.

Thereafter, the reactor was taken back to factory for rectification and the reactor was put into commercial operation on 13.10.2018 after rectification of the problems.

40. It is observed that the reactors were received at Dehar sub-station only in June 2015, i.e. more than eight months after the scheduled COD of 14.10.2014. The Petitioner has explained the events after the receipt of the reactors at Dehar sub-station but has not explained why the reactors were received after the scheduled COD at Dehar sub-station. Moreover, the defects in Unit No.2 noticed at the time of analysis before the installation and subsequent time taken for rectification for the same are to be settled by the Petitioner with the OEM. The Commission vide order dated 17.10.2017 in Petition No. 234/TT/2016 had condoned time over-run of 365 days (out of total delay of 1095 days) on account of delay caused due to civil works and clearance of shut down. The relevant portion of the order is as follows:

> *"26. The Commission has gone through the submission of Petitioner. There is delay of 36 months in commissioning of the assets. From the submission of the petitioner it is observed that the reactors were received in June, 2015 and stored outside switchyard Dehar Sub-station due to pending civil work and shut down issue. All requisite tests were conducted and found correct during storage. After completion of civil work and clearance of shut down the reactor was dragged and impact recorder was taken out as per specified procedure. During analysis of reports the shock was observed in unit no. 2. Thereafter other test were conducted in May, 2016, thereafter the asset was commissioned on 13.10.2017. The time taken in civil work and clearance of shut down is 12 months (from receipt of reactor in June, 2015 to May, 2016) which is reasonably beyond the control of the petitioner. Therefore, we are inclined to condone the delay of 365 days out of total delay of 1095 days."*

41. In view of the above, out of the total time over-run of 1012 days, 365 days of time over-run (from receipt of reactor in June 2015 to May 2016) already condoned by the Commission in order dated 17.10.2017 is condoned. As the Petitioner has not explained the reasons for time over-run up to June 2015 and as the subsequent damage to the reactor leading to time over-run has to be settled between the Petitioner and the OEM, we are not inclined to consider any other claim of time over-

run over and above already allowed vide order dated 17.10.2017 in Petition No. 234/TT/2016.

Analysis of Time over-run for Asset-IV

42. There is time over-run of 843 days in case of Asset-IV. The Petitioner has attributed the same to the delay in approval of shutdown by BBMB. The Petitioner has submitted its letters dated 22.8.2016, 27.8.2016 and 7.9.2016 sent to BBMB and has also enclosed the minutes of meeting of 125th and 127th OCC meeting dated 27.7.2016 and 22.9.2016 respectively. As stated above, the scheduled COD of Asset-IV was 14.10.2014. However, the documents submitted by the Petitioner and the reasons given by the Petitioner all pertain to the period that is much after the scheduled COD of the asset. The Petitioner has not explained reasons for delay before it sent letters to BBMB. Moreover, the Petitioner has attributed the time over-run to the alleged delay in approval of shutdown by BBMB. However, it is noticed that the Petitioner approached BBMB for shutdown approval on 22.8.2016 for the first time which is much after the scheduled COD i.e. 14.10.2014. In our view, the Petitioner has not approached BBMB in a timely manner and it is inappropriate to blame BBMB for delays. Since the Petitioner has approached BBMB almost two years after SCOD, there is no ground for condoning the period of time over-run. We also note that LOA that was scheduled to be placed in April 2013 was itself placed on 18.11.2014 that is after SCOD.

43. In view of the above, request for condonation of time over-run in respect of Asset-IV stands rejected.

44. Based on the discussions above, the details of the time over-run condoned and not condoned in case of the transmission assets is as follows:

Asset	Schedule COD as per IA	COD	Time over-run (in days)	Time over-run condoned (in days)	Time over-run not condoned (in days)
Asset-I	14.10.2014	1.4.2016	535	-	535
Asset-II		22.7.2017	1012	-	1012
Asset-III		13.10.2017	1095	365	730
Asset-IV		3.2.2017	843	-	843

Treatment of IDC and IEDC

45. The Petitioner has claimed IDC for the transmission assets and in support of the same, it has also submitted the Auditor certificate. The Petitioner has submitted statement showing IDC claim, discharge of IDC liability as on COD and thereafter, which is as follows:

(₹ in lakh)

Asset	IDC as per Auditor Certificate	IDC Discharged up to COD	IDC discharged during 2016-17	IDC discharged during 2017-18	IDC discharged during 2018-19
Asset-I	10.02	0.93	9.09	0.00	0.00
Asset-II	28.03	6.04	21.57	0.42	0.00
Asset-III	0.18	0.00	0.00	0.00	0.18
Asset-IV	76.47	8.54	0.00	67.93	0.00

46. The allowable IDC is computed based on information submitted by the Petitioner. Further, the loan amount as on COD has been mentioned in Form 6 and Form 9C. The allowable IDC has been worked out based on the available information and relying on loan amount as given in Form 9C. Accordingly, the details of IDC considered for tariff computation, subject to revision at the true up is as follows:

(₹ in lakh)

Asset	IDC as per Auditor Certificate	IDC allowed	IDC allowed up to COD on cash basis	IDC disallowed due to time over run
	A	B	C	D=A-B
Asset-I	10.02	0.10	0.10	9.92
Asset-II	28.03	0.00	0.00	28.03
Asset-III	0.18	0.00	0.00	0.18
Asset-IV	76.47	0.30	0.30	76.17

47. The Petitioner has also claimed IEDC for the transmission assets as per the table given below. The Petitioner has claimed IEDC as on COD, which is within the

percentage of hard cost as indicated in the abstract cost estimate for all the assets except in case of Asset-3. Accordingly, IEDC details considered for the purpose of tariff calculation are as follows:

(₹ in lakh)

Asset	IEDC claimed by Petitioner (as per Auditor Certificate)	IEDC disallowed due to time over-run /excess claim	IEDC allowed on cash basis as on COD
	A	B	C=A-B
Asset-I	44.32	18.92	25.40
Asset-II	40.48	23.68	16.80
Asset-III	56.07	28.99	27.08
Asset-IV	121.34	65.53	55.81

Initial Spares

48. The Initial Spares claimed by the Petitioner are as follows:

(₹ in lakh)

Asset	Plant and machinery cost*	Initial Spares as claimed	Initial Spares % (sub-station)
Asset I	452.65	39.86	8.80
Asset II	956.79	37.5	3.91
Asset III	421.7	0.00	0.00
Asset IV	2357.16	150.13	6.36

* Excluding IDC, IEDC, land cost and cost of civil works

49. The Petitioner has submitted that Asset-IV is installed in an existing GIS sub-station and, therefore, is under brown-field category. The 2014 Tariff Regulations provides for higher norms for initial spares for non-GIS AC brown-field sub-stations than the green-filed sub-stations. However, there is no such differentiation in case of GIS sub-stations. As same initial spares are permissible for brown-field category as well as green-field category for GIS sub-stations, the Petitioner has requested to consider initial spares as claimed for the purpose of computation of tariff. In the case of brown field sub-station (unlike any green-field substation where large number of equipment are executed), only few GIS elements at Dehar Pooling Sub-station are executed. GIS installations are highly specialized and costly imported equipment

where bay equipment are through modular section housing all bay equipment which is assembled only in the factory. GIS modular sections are manufactured for fitting at a specific location and they cannot be used in any other location. Hence, inter-changeability of the GIS modular sections is limited resulting in higher initial spares than the conventional AC system. Further, generally the equipment vary from supplier to supplier and in case of any replacement, the element/ equipment has to be replaced by similar design of same manufacturer. If sufficient spares are not kept, any failure of equipment will lead to longer outage as procurement of spare from off-shore will require long duration which sometime may stretch to one and half years.

50. The Petitioner has submitted that Dehar sub-station extension involves only one transformer and two bus reactors with single bays. Since the scope of work in case of Dehar Sub-station extension work is of two reactors, the initial spares cost for this brown-field project is high at 6.80%. Further, in GIS sub-station, there is special type of bushings (i.e. SF6 to air connection type) and similarly for transformers also, there is special type of bushings (i.e. SF6 to oil connection type, oil to oil connection type RIP bushing). These bushings are not manufactured in India and only a few manufactures are supplying these bushings with lead time of procurement of around one year. To have a reliable system, one set of each type and rating bushing are kept as spares. These bushings are very costly in comparison to the conventional bushings of same ratings. Operating a GIS sub-station without adequate spares will render the system unreliable and may lead to long outages. The Petitioner has, therefore, requested to allow initial spares as claimed for smooth and reliable functioning of the Grid under Regulation 54 (Power to Relax) and Regulation 55 (Power to remove difficulty) of the 2014 Tariff Regulations.

51. BRPL has submitted that asset-wise initial spares may be allowed within the prescribed ceiling and strictly in accordance with Regulation 13 of the 2014 Tariff Regulations. The Commission has not distinguished between green-field and brown-field in respect of GIS and there is nothing to indicate that higher levels of Initial Spares are needed for brown-field GIS. Invoking 'Power to Relax' is a judicial discretion which cannot be exercised purely for profit motive and, therefore, the same may not be allowed.

52. In response, the Petitioner in its rejoinder has submitted that all the transmission assets are under brown-field sub-station and spares procured are essential for smooth and reliable functioning of the Grid. As overall % of initial spares (i.e. 5.74%) is within limits of 6% for brown-field category, the same may be allowed considering the overall plant & machinery cost of the transmission assets covered in the instant petition as provided in the Regulation.

53. Regulation 13 of the 2014 Tariff Regulations provides as follows:

"13. Initial Spares

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

(d) Transmission system
(i) Transmission line-1.00%
(ii) Transmission Sub-station (Green Field)-4.00%
(iii) Transmission Sub-station (Brown Field)-6.00%
(iv) Series Compensation devices and HVDC Station-4.00%
(v) Gas Insulated Sub-station (GIS)-5.00%
(vi) Communication system-3.5%

Provided that:

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

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

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

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

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

54. We have considered the submission of the Petitioner and BRPL. It is observed that the Petitioner has not claimed any Initial Spares for Asset-III. The Petitioner has claimed Initial Spares for Asset-I and Asset-II (in AIS sub-station) and Asset-IV is GIS sub-station and all the three assets are installed in existing sub-stations. Therefore, they fall under the brown-field category. Accordingly, Initial Spares are allowable @6% of the plant & machinery cost of Asset-I and Asset-II and @5% for Asset-IV as per Regulation 13 of the 2014 Tariff Regulations. However, the Petitioner has pleaded for allowing Initial Spares @6% of the total plant & machinery cost of all the three transmission assets taking into consideration special characteristics of Asset-IV, which is installed in an existing sub-station, under Regulation 54 (Power to Relax) and Regulation 55 (Power to remove difficulty) of the 2014 Tariff Regulations. The Petitioner has also contended that unlike in the case of AC sub-stations, no differential norms are allowed for green-field and brown-field sub-stations in case of GIS in the 2014 Tariff Regulations and, therefore, requested for relaxation of the norms specified in Regulation 13 of the 2014 Tariff Regulations.

55. The norms, including Initial Spares, are specified in the 2014 Tariff Regulations after consultation with the stakeholders and much deliberation and we are of the view that they can be relaxed only in exceptional cases and in case of any difficulty in implementation of the regulations and after production of sufficient cause for relaxation of the norms. We are of the view that the instant case does not fall in the category which necessitates relaxation of the norms specified in the 2014 Tariff Regulations as pleaded by the Petitioner. Therefore, the Initial Spares are as per the norms provided in Regulation 13 of the 2014 Tariff Regulations considering the plant and machinery cost excluding IDC, IEDC and land expenses up to 31.3.2019. Accordingly, the Initial Spares allowed are as follows:

Asset	Asset Type	Estimated Completion Cost (A) (₹ in lakh)	Initial Spares claimed (B) (₹ in lakh)	Ceiling limit (%) (C)	Initial Spares worked out D = [(A-B)*C /(100-C)] (₹ in lakh)	Excess Initial Spares E = B-D (₹ in lakh)	Initial Spares allowed (₹ in lakh)	Initial Spares disallowed from ACE (₹ in lakh)	Initial Spares to be disallowed in 2019-20 (₹ in lakh)
Asset-I	Sub-station	452.65	39.86	6.00	26.35	13.51	26.35	9.82 (in 2017-18)	3.69
Asset-II	Sub-station	956.79	37.50	6.00	58.68	0.00	37.50	0.00	0.00
Asset-IV	Sub-station (GIS)	2357.16	150.13	5.00	116.16	33.97	116.16	28.73 (in 2018-19)	5.24

Re-capitalisation of 50 MVAR line reactor

56. Asset-I i.e. 400 kV 50 MVAR line reactor at Merta sub-station was shifted to Kota sub-station for use as bus reactor. The Petitioner was directed to submit the details of the petition in which tariff for this line reactor was approved. In response, the Petitioner has submitted that it was put into commercial operation at Merta sub-station on 1.2.2009 under “System Strengthening in South West part of Northern Grid (Part-A) Transmission System in Northern Region”. The tariff of the said asset for 2009-14 period was trued up and tariff for the 2014-19 tariff period was approved vide order dated 8.12.2015 in Petition No. 203/TT/2014. The Petitioner has filed Petition No.

131/TT/2020 for truing up of tariff for 2014-19 tariff period and determination of tariff for 2019-24 tariff period for “System Strengthening in South West part of Northern Grid (Part-A) Transmission System in Northern Region”. The Petitioner has submitted that cost of the reactor has been de-capitalised from Petition No. 131/TT/2020 at the stage of true-up of tariff of the 2014-19 tariff period and has submitted copy of the Auditors Certificate as well as Form-10B filed showing de-capitalization of the reactor cost. The Petitioner has further submitted that the cost of the shifted reactor is not included in the capital cost of Asset-I of the instant petition except for the cost of shifting amounting to ₹18.06 lakh. Thus, the capital cost of Asset-I comprises of cost of shifting and other cost such as switchgear, structure for switchyard, bus bar/ conductors/ insulator etc. and not the cost of reactor. The Petitioner has further submitted that it has neither added capital cost of shifted asset in the instant petition nor claimed separate transmission tariff for shifted reactor. The Petitioner has prayed to allow the following tariff for shifted reactor along with tariff of Asset-I as claimed in the instant Petition as the cost is de-capitalized from the old project and submitted the tariff forms:

(₹ in lakh)

Name of the asset	2016-17	2017-18	2018-19
50 MVAR line reactor (shifted from Merta SS) for its use as Bus reactor at Kota SS (Only reactor)	68.55	66.11	63.67

57. The Petitioner has also submitted that as the life of new asset and shifted asset is not same, separate tariff is being claimed for shifted asset i.e.50 MVAR line reactor after incorporating the depreciation as on 31.3.2016.

58. BRPL has submitted that Asset-I has not been put under regular service by the Petitioner. The determination of tariff is required to be undertaken ab-initio by the Petitioner as and when the assets are put into regular service on completion of

successful charging and trial operation. Thus, the tariff for Asset-I included in the PoC charges may be excluded as it is against the 2009 Tariff Regulations, as incorrect decisions cannot be allowed in perpetuity as per judgment of APTEL dated 12.5.2015 in Appeal No. 129. In response, the Petitioner has submitted that the 50 MVAR line reactor shifted from Merta sub-station to Kota sub-station for use as bus reactor is part of Asset-I of the instant petition. The reactor was originally put into commercial operation on 1.2.2009 and covered under true up Petition No. 203/TT/2014 and the same has been de-capitalised from the "System Strengthening in South West part of Northern Grid (Part-A) Transmission System" while truing up the tariff of the tariff of the 2014-19 tariff period in Petition No. 131/TT/2020. The Petitioner has also submitted Form 10B along with the instant Petition.

59. We have considered the submissions of the Petitioner and BRPL. It is observed that the Petitioner has claimed separate tariff in respect of the shifted reactor after carrying out de-capitalisation of the same in Petition No. 131/TT/2020 wherein the Petitioner has claimed the date of de-capitalisation as 31.3.2016 and date of re-capitalisation in the instant petition as 1.4.2016. The Petitioner vide affidavit dated 23.9.2020 in Petition No. 131/TT/2020 has submitted that the actual date of removal of the reactor from Merta Sub-station was 14.12.2015. Accordingly, the re-capitalisation of shifted 50 MVAR line reactor is allowed in the instant petition with effect from 1.4.2016 as a separate asset (hereinafter referred to as "Asset-I(a)"). However, the date of decapitalisation of the reactor from Merta sub-station is 14.12.2015 (and not 31.3.2016) and the same is to be dealt with in Petition No. 131/TT/2020. Based on the information available on record, the cumulative depreciation till the date of de-capitalisation, i.e. 14.12.2015 in respect of Asset-I(a) corresponding to the gross block

value of ₹477.99 lakh works out to be ₹173.36 lakh and the same has been considered in the instant petition.

60. Further, Form-5 submitted in respect of Asset-I reveals that the Petitioner has included the amount of ₹18.06 lakh towards dismantling, shifting, transportation and re-erection in respect of shifted reactor in the estimated completion cost claimed for Asset-I. We are of the view that expenditure towards shifting, dismantling and transportation are of the nature of revenue expenditure and cannot be capitalised. On the other hand, the expenditure incurred towards re-erection is of capital nature and the same is required to be capitalised. Since head-wise expenditure viz. dismantling, shifting, transportation and re-erection is not available, segregation of the amount which is to be capitalised out of the total expenditure of ₹18.06 lakh at this stage is not possible. Accordingly, amount of ₹18.06 lakh towards dismantling, shifting, transportation and re-erection of the shifted reactor is not capitalised.

61. The Petitioner is allowed to recover the amount of ₹18.06 lakh towards dismantling, shifting, transportation and re-erection of the shifted reactor directly from the beneficiaries covered under the instant petition as a one-time exercise.

62. BRPL has submitted that Asset-IV which consists of replacement of 250 MVA ICT with 4x105 MVA, 1-phase ICT and retrofitting of associated 400/220 kV bay equipment and protection relays at Dehar Sub-station. BRPL has further submitted that the asset would require de-capitalization of 250 MVA ICT at Dehar Sub-station and capitalization of the asset at book value under this asset. BRPL has further requested not to allow any capitalization without de-capitalization of the replaced assets as per the 2014 Tariff Regulations.

63. The Commission directed the Petitioner to submit the details of tariff granted, petition number and de-capitalisation of the replaced 250 MVA ICT with 4X105 MVA ICT at Dehar sub-station. In response, the Petitioner has submitted the replaced ICT in case of Asset-IV pertains to BBMB. Therefore, the Petitioner has never claimed transmission tariff for replaced ICT and hence de-capitalization is not required in this case.

64. We have considered the submission of the Petitioner and BRPL. As the replaced ICT is owned by BBMB, the issue of decapitalization of the same does not arise.

Additional Capital Expenditure

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

> *"(1) The capital expenditure in respect of the new project or an existing project incurred or projected to be incurred, on the following counts within the original scope of work, after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check:*
> *(i) Undischarged liabilities recognised to be payable at a future date;*
> *(ii) Works deferred for execution;*
> *(iii) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 13;*
> *(iv) Liabilities to meet award of arbitration or for compliance of the order or decree of a court; and*
> *(v) Change in Law or compliance of any existing law:*
> *Provided that the details of works asset wise/work wise included in the original scope*
> *of work along with estimates of expenditure, liabilities recognized to be payable at a future date and the works deferred for execution shall be submitted along with the application for determination of tariff."*

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

> *"cut-off date" means 31st March of the year closing after two years of the year of commercial operation of whole or part of the project, and in case the whole or part of the project is declared under commercial operation in the last quarter of the year, the cut-off date shall be 31st March of the year closing after three years of the year of commercial operation".*

67. Thus, the cut-off date of the transmission assets {except Asset-I(a)} are as follows:

Asset	Cut-off date
Asset-I	31.3.2019
Asset-II	31.3.2020
Asset-III	31.3.2020
Asset-IV	31.3.2020

68. The Petitioner has submitted that ACE in 2016-17, 2017-18 and 2018-19 is on account of un-discharged liability towards final payment/ withheld payment due to contractual exigencies for works executed within the cut-off date and work to be executed within the cut-off date. The Petitioner has claimed the same under Regulation 14(1)(i) (un-discharged liabilities recognized to be payable at a future date) and Regulation 14(1)(ii) (works deferred for execution) of the 2014 Tariff Regulations. The break-up of ACE claimed by the Petitioner is as follows:

(₹ in lakh)

Asset Name	ACE Claimed		
	2016-17	2017-18	2018-19
Asset-I	148.47	21.82	138.50
Asset-II	0.00	33.10	188.91
Asset-III	0.00	18.68	29.77
Asset-IV	2.91	3.30	311.17

**Inclusive of undischarged liabilities*

69. We have considered the submissions made by the Petitioner. The excess Initial Spares claimed by the Petitioner has been reduced from ACE of the respective years. Accordingly, ACE allowed for the 2014-19 period is as follows:

(₹ in lakh)

Asset	Particulars	ACE allowed		
		2016-17	2017-18	2018-19
Asset-I	ACE claimed	148.47	21.82	138.50
	Less: Shifting charges for the shifted reactor	18.06	0.00	0.00
	Less: initial spares disallowed	0.00	9.82	0.00
	ACE allowed	**130.41**	**12.00**	**138.50**
Asset-II	ACE claimed	0.00	33.10	188.91
	ACE allowed	**0.00**	**33.10**	**188.91**

Asset-III	ACE claimed	0.00	18.68	29.77
	ACE allowed	**0.00**	**18.68**	**29.77**
Asset-IV	ACE claimed	2.91	3.30	311.17
	Less: initial spares disallowed	0.00	0.00	28.73
	ACE allowed	**2.91**	**3.30**	**282.44**

Capital Cost as on COD and 31.3.2019

70. Accordingly, capital cost considered for the purpose of tariff calculation is as follows:-

(₹ in lakh)

Asset	Capital cost claimed as on COD (A)	Disallowed as on COD		Capital cost considered for the purpose of tariff as on COD (E)=(A)-(B+C+D)
		IDC (B)	IEDC (C)	
Asset-I	198.20	9.92	18.92	169.36
Asset-II	803.29	28.03	23.68	751.58
Asset-III	422.06	0.18	28.99	392.89
Asset-IV	2237.59	76.17	65.53	2095.89

(₹ in lakh)

Asset	Original COD	Date of re-capitalisation in the instant petition	Date of de-capitalisation in Petition No. 131/TT/2020	Original book value of the asset being recapitalised asset	Corresponding cumulative depreciation as on date of de-capitalisation	Corresponding cumulative repayment as on date of de-capitalisation
Asset-I(a)	1.2.2009	1.4.2016	14.12.2015	477.99	173.36	173.36

71. Therefore, the total estimated completion cost of the transmission assets as on 31.3.2019 are as follows:

(₹ in lakh)

Asset	Capital cost allowed as on COD	Additional Capital Expenditure			Total estimated completion cost up to 31.3.2019
		2016-17	2017-18	2018-19	
Asset-I	169.36	130.41	12.00	138.50	450.27
Asset-II	751.58	0.00	33.10	188.91	973.59
Asset-III	392.89	0.00	18.68	29.77	441.34
Asset-IV	2095.89	2.91	3.30	282.44	2384.54
Asset-I(a)	477.99**	0.00	0.00	0.00	477.99

***Gross Block Value as on the date of to re-capitalisation*

Debt-Equity Ratio

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

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

is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan:

Provided that:

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

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

"(5) Any expenditure incurred or projected to be incurred on or after 1.4.2014 as may be admitted by the Commission as additional capital expenditure for determination of tariff, and renovation and modernisation expenditure for life extension shall be serviced
in the manner specified in clause (1) of this regulation."

73. 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 in Regulation 19 of the 2014 Tariff Regulations. The details of debt-equity ratio in respect of the transmission assets as on the date of commercial operation and as on 31.3.2019 are as under:

Asset I	**Capital cost as on COD (₹ in lakh)**	**(%)**	**Amount as on 31.3.2019 (₹ in lakh)**	**(%)**
Debt	118.55	70.00	315.19	70.00
Equity	50.81	30.00	135.07	30.00
Total	**169.36**	**100.00**	**450.27**	**100.00**

Asset II	**Capital cost as on COD (₹ in lakh)**	**(%)**	**Amount as on 31.3.2019 (₹ in lakh)**	**(%)**
Debt	526.11	70.00	681.51	70.00
Equity	225.47	30.00	292.08	30.00
Total	**751.58**	**100.00**	**973.59**	**100.00**

Asset III	Capital cost as on COD (₹ in lakh)	(%)	Amount as on 31.3.2019 (₹ in lakh)	(%)
Debt	275.02	70.00	308.94	70.00
Equity	117.87	30.00	132.40	30.00
Total	**392.89**	**100.00**	**441.34**	**100.00**

Asset IV	Capital cost as on COD (₹ in lakh)	(%)	Amount as on 31.3.2019 (₹ in lakh)	(%)
Debt	1467.13	70.00	1669.18	70.00
Equity	628.77	30.00	715.36	30.00
Total	**2095.89**	**100.00**	**2384.54**	**100.00**

Asset-I(a)	Capital cost as on the date of re-capitalisation (₹ in lakh)	(%)	Amount as on 31.3.2019 (₹ in lakh)	(%)
Debt	334.59	70.00	334.59	70.00
Equity	143.40	30.00	143.40	30.00
Total	**477.99**	**100.00**	**477.99**	**100.00**

Depreciation

74. Regulation 27 of the 2014 Tariff Regulations provides as follows:-

*"**27. Depreciation**:*

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

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

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

from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis.

(3) The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset:
Provided that in case of hydro generating station, the salvage value shall be as provided in the agreement signed by the developers with the State Government for development of the Plant:

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

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

4) Land other than the land held under lease and the land for reservoir in case of hydro generating station shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.

(5) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in Appendix-II to these regulations for the assets of the generating station and transmission system:

Provided that the remaining depreciable value as on 31st March of the year closing after a period of 12 years from the effective date of commercial operation of the station shall be spread over the balance useful life of the assets.

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

75. Depreciation has been allowed in accordance with Regulation 27 of the 2014 Tariff Regulations. Asset-I, Asset-II, Asset-III and Asset-IV were put under commercial operation during 2016-17 and 2017-18. Accordingly, the transmission assets will complete 12 years after 2018-19. Asset-I(a) re-capitalised in the instant petition, was originally put into commercial operation on 1.2.2009, will also complete 12 years after 2018-19. As such, depreciation has been calculated annually based on Straight Line Method at the rates specified in Appendix-II to the 2014 Tariff Regulations. The Gross Block during 2016-17, 2017-18 and 2018-19 has been depreciated at weighted average rate of depreciation (WAROD) (as placed in Annexure-1). WAROD has been worked out taking into account the depreciation rates as specified in the 2014 Tariff

Regulations. Details of the depreciation allowed for the transmission assets are as follows:

(₹ in lakh)

Asset-I	2016-17	2017-18	2018-19
Opening Gross Block	169.36	299.77	311.77
Additional Capitalisation	130.41	12.00	138.50
Closing Gross Block	299.77	311.77	450.27
Average Gross Block	234.56	305.77	381.02
Weighted average rate of Depreciation (WAROD) (%)	5.28	5.28	5.28
Balance useful life of the asset at the beginning of the year	25.00	24.00	23.00
Aggregated Depreciable Value	211.11	275.19	342.92
Depreciation during the year	**12.38**	**16.14**	**20.12**
Aggregate Cumulative Depreciation at the end of the year	12.38	28.53	48.65
Remaining Aggregated Depreciable Value at the end of the year	198.72	246.66	294.27

(₹ in lakh)

Asset-II	2017-18 (Pro-rata for 253 days)	2018-19
Opening Gross Block	751.58	784.68
Additional Capitalisation	33.10	188.91
Closing Gross Block	784.68	973.59
Average Gross Block	768.13	879.14
Weighted average rate of Depreciation (WAROD) (%)	5.28	5.28
Balance useful life of the asset at the beginning of the year	25.00	25.00
Aggregated Depreciable Value	691.32	791.22
Depreciation during the year	**28.11**	**46.42**
Aggregate Cumulative Depreciation at the end of the year	28.11	74.53
Remaining Aggregated Depreciable Value at the end of the year	663.21	716.69

(₹ in lakh)

Asset-III	2017-18 (Pro-rata for 170 days)	2018-19
Opening Gross Block	392.89	411.57
Additional Capitalisation	18.68	29.77
Closing Gross Block	411.57	441.34
Average Gross Block	402.23	426.45
Weighted average rate of Depreciation (WAROD) (%)	5.28	5.28
Balance useful life of the asset at the beginning of the year	25.00	25.00
Aggregated Depreciable Value	362.01	383.81
Depreciation during the year	**9.89**	**22.52**

Aggregate Cumulative Depreciation at the end of the year	9.89	32.41
Remaining Aggregated Depreciable Value at the end of the year	352.12	351.40

(₹ in lakh)

Asset-IV	2016-17 (Pro-rata for 57 days)	2017-18	2018-19
Opening Gross Block	2095.89	2098.80	2102.10
Additional Capitalisation	2.91	3.30	282.44
Closing Gross Block	2098.80	2102.10	2384.54
Average Gross Block	2097.35	2100.45	2243.32
Weighted average rate of Depreciation (WAROD) (%)	5.28%	5.28%	5.28%
Balance useful life of the asset at the beginning of the year	25.00	25.00	24.00
Aggregated Depreciable Value	1887.61	1890.41	2018.99
Depreciation during the year	**17.29**	**110.90**	**118.45**
Aggregate Cumulative Depreciation at the end of the year	17.29	128.20	246.65
Remaining Aggregated Depreciable Value at the end of the year	1870.32	1762.21	1772.35

(₹ in lakh)

Asset-I(a)	2016-17	2017-18	2018-19
Opening Gross Block	477.99	477.99	477.99
Additional Capitalisation	0.00	0.00	0.00
Closing Gross Block	477.99	477.99	477.99
Average Gross Block	477.99	477.99	477.99
Weighted average rate of Depreciation (WAROD) (%)	5.28%	5.28%	5.28%
Balance useful life of the asset at the beginning of the year	7.00	8.00	9.00
Aggregated Depreciable Value	430.19	430.19	430.19
Depreciation during the year	**25.24**	**25.24**	**25.24**
Aggregate Cumulative Depreciation at the end of the year	198.60	223.84	249.07
Remaining Aggregated Depreciable Value at the end of the year	231.59	206.36	181.12

Interest on Loan (IoL)

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

> *"(1) The loans arrived at in the manner indicated in regulation 19 shall be considered as gross normative loan for calculation of interest on loan*
>
> *(2) The normative loan outstanding as on 1.4.2014 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2014 from the gross normative loan.*
>
> *(3) The repayment for each of the year of the tariff period 2014-19 shall be deemed to be equal to the depreciation allowed for the corresponding year/period. In case of 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 up to 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."

77. IoL has been worked out as per Regulation 26 of the 2014 Tariff Regulations on the following basis:-

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

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

c) Weighted average rate of interest on actual average loan worked out as per (i) above is applied on the notional average loan during the year to arrive at the interest on loan.

78. Based on the above, details of IoL allowed for the transmission assets are as follows:

(₹ in lakh)

Asset-I	**2016-17**	**2017-18**	**2018-19**
Gross Normative Loan	118.55	209.84	218.24

Cumulative Repayments up to Previous Year	0.00	12.38	28.53
Net Loan-Opening	118.55	197.46	189.71
Addition due to Additional Capitalization	91.29	8.40	96.95
Repayment during the year	12.38	16.14	20.12
Net Loan-Closing	197.46	189.71	266.55
Average Loan	158.01	193.59	228.13
Weighted Average Rate of Interest on Loan (%)	8.373	8.306	8.292
Interest on Loan	**13.23**	**16.08**	**18.92**

(₹ in lakh)

Asset-II	2017-18 (Pro-rata for 253 days)	2018-19
Gross Normative Loan	526.11	549.28
Cumulative Repayments up to Previous Year	0.00	28.11
Net Loan-Opening	526.11	521.16
Addition due to Additional Capitalization	23.17	132.24
Repayment during the year	28.11	46.42
Net Loan-Closing	521.16	606.98
Average Loan	523.64	564.07
Weighted Average Rate of Interest on Loan (%)	7.396	7.400
Interest on Loan	**26.84**	**41.74**

(₹ in lakh)

Asset-III	2017-18 (Pro-rata for 170 days)	2018-19
Gross Normative Loan	275.02	288.10
Cumulative Repayments upto Previous Year	0.00	9.89
Net Loan-Opening	275.02	278.21
Addition due to Additional Capitalization	13.08	20.84
Repayment during the year	9.89	22.52
Net Loan-Closing	278.21	276.53
Average Loan	276.62	277.37
Weighted Average Rate of Interest on Loan (%)	7.714	7.715
Interest on Loan	**9.98**	**21.40**

(₹ in lakh)

Asset-IV	2016-17 (Pro-rata for 57 days)	2017-18	2018-19
Gross Normative Loan	1467.13	1469.17	1471.48
Cumulative Repayments up to Previous Year	0.00	17.29	128.20
Net Loan-Opening	1467.13	1451.87	1343.28
Addition due to ACE	2.04	2.31	197.71
Repayment during the year	17.29	110.90	118.45
Net Loan-Closing	1451.87	1343.28	1422.54
Average Loan	1459.50	1397.58	1382.91
Weighted Average Rate of Interest on Loan (%)	7.981	7.968	7.957
Interest on Loan	**18.19**	**111.36**	**110.04**

(₹ in lakh)

Asset-I(a)	2016-17	2017-18	2018-19
Gross Normative Loan	334.59	334.59	334.59
Cumulative Repayments upto Previous Year	173.36	198.60	223.84
Net Loan-Opening	161.23	136.00	110.76
Addition due to Additional Capitalization	0.00	0.00	0.00
Repayment during the year	25.24	25.24	25.24
Net Loan-Closing	136.00	110.76	85.52
Average Loan	148.61	123.38	98.14
Weighted Average Rate of Interest on Loan (%)	9.470%	9.470%	9.470%
Interest on Loan	**14.07**	**11.68**	**9.29**

Return on Equity (RoE)

79. Clauses (1) and (2) of Regulation 24 and Clause (2) of Regulation 25 of the 2014 Tariff Regulations provide as follows:-

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

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

Provided that:
(i) in case of projects commissioned on or after 1st April, 2014, an additional return of 0.50 % shall be allowed, if such projects are completed within the timeline specified in Appendix-I:

(ii) the additional return of 0.5% shall not be admissible if the project is not completed within the timeline specified above for reasons whatsoever:

(iii) additional RoE of 0.50% may be allowed if any element of the transmission project is completed within the specified timeline and it is certified by the Regional Power Committee/National Power Committee that commissioning of the particular element will benefit the system operation in the regional/national grid:

(iv) the rate of return of a new project shall be reduced by 1% for such period as may be decided by the Commission, if the generating station or transmission system is found to be declared under commercial operation without commissioning of any of the Restricted Governor Mode Operation (RGMO)/ Free Governor Mode Operation (FGMO), data telemetry, communication system up to load dispatch centre or protection system:

(v) as and when any of the above requirements are found lacking in a generating station based on the report submitted by the respective RLDC, RoE shall be reduced by 1% for the period for which the deficiency continues:

(vi) additional RoE shall not be admissible for transmission line having length of less than 50 kilometers."

"25. Tax on Return on Equity:

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

(2) Rate of return on equity shall be rounded off to three decimal places and shall be computed as per the formula given below:

Rate of pre-tax return on equity = Base rate / (1-t)

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

80. The Petitioner has submitted that RoE has been calculated at the rate of 19.610% after grossing up the RoE with MAT rate of 20.961% as per the above Regulations. The Petitioner has further submitted that the grossed up RoE is subject to truing up based on the actual tax paid along with any additional tax or interest, duly adjusted for any refund of tax including the interest received from IT authorities, pertaining to the tariff period 2014-19 on actual gross income of any financial year. Any under-recovery or over-recovery of grossed up RoE after truing up shall be recovered or refunded to the beneficiaries on year to year basis.

81. BRPL has submitted that the Petitioner should furnish details of working of effective tax rate alongwith tax audit report for 2014-15 and the reasons as to why it is opting for MAT Rate. BRPL has further submitted that the transmission assets are a new transmission project and entitled for Tax Holiday under Section 80IA of the

Income Tax Act, 1961 and that the Petitioner should submit the date from which it intends to claim such benefits.

82. The Petitioner has submitted that it is availing tax benefits under the provisions of Section 80IA of the Income Tax Act, 1961 for computing normal income tax. However, it is liable to pay MAT rate of tax under Section 115JB of the Income Tax Act, 1961 and any over/ under recovery of grossed up rate on RoE shall be adjusted at the time of truing-up on the basis of actual tax paid including interest and any additional demand by the tax authorities.

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

(₹ in lakh)

Asset-I	**2016-17**	**2017-18**	**2018-19**
Opening Equity	50.81	89.92	93.52
Addition due to ACE	39.12	3.60	41.55
Closing Equity	89.92	93.52	135.07
Average Equity	70.37	91.72	114.30
Return on Equity (Base Rate) (%)	15.500	15.500	15.500
Tax Rate applicable (%)	21.342	21.342	21.549
Rate of Return on Equity (Pre-tax)	19.705	19.705	19.758
Return on Equity (Pre-tax)	**13.87**	**18.07**	**22.58**

(₹ in lakh)

Asset-II	2017-18 (Pro-rata for 253 days)	2018-19
Opening Equity	225.47	235.40
Addition due to ACE	9.93	56.67
Closing Equity	235.40	292.08
Average Equity	230.44	263.74
Return on Equity (Base Rate) (%)	15.500	15.500
Tax Rate applicable (%)	21.342	21.549
Rate of Return on Equity (Pre-tax)	19.705	19.758
Return on Equity (Pre-tax)	**31.47**	**52.11**

(₹ in lakh)

Asset-III	2017-18 (Pro-rata for 170 days)	2018-19
Opening Equity	117.87	123.47
Addition due to ACE	5.60	8.93
Closing Equity	123.47	132.40
Average Equity	120.67	127.93
Return on Equity (Base Rate) (%)	15.500	15.500
Tax Rate applicable (%)	21.342	21.549
Rate of Return on Equity (Pre-tax)	19.705	19.758
Return on Equity (Pre-tax)	**11.07**	**25.28**

(₹ in lakh)

Asset-IV	2016-17 (Pro-rata for 57 days)	2017-18	2018-19
Opening Equity	628.77	629.64	630.63
Addition due to ACE	0.87	0.99	84.73
Closing Equity	629.64	630.63	715.36
Average Equity	629.20	630.13	672.99
Return on Equity (Base Rate) (%)	15.500	15.500	15.500
Tax Rate applicable (%)	21.342	21.342	21.549
Rate of Return on Equity (Pre-tax)	19.705	19.705	19.758
Return on Equity (Pre-tax)	**19.36**	**124.17**	**132.97**

(₹ in lakh)

Asset-I(a)	2016-17	2017-18	2018-19
Opening Equity	143.40	143.40	143.40
Addition due to ACE	0.00	0.00	0.00
Closing Equity	143.40	143.40	143.40
Average Equity	143.40	143.40	143.40
Return on Equity (Base Rate) (%)	15.500	15.500	15.500
Tax Rate applicable (%)	21.342	21.342	21.549
Rate of Return on Equity (Pre-tax)	19.705	19.705	19.758
Return on Equity (Pre-tax)	**28.26**	**28.26**	**28.33**

Operation & Maintenance Expenses (O & M Expenses)

84. Regulation 29(4)(a) of the 2014 Tariff Regulations specifies the norms for O&M Expenses for the transmission system based on the type of sub-station and

transmission line. Norms specified in respect of the elements covered in the instant petition are as under:

Element	2016-17	2017-18	2018-19
400 kV bay (₹ lakh/bay)	64.37	66.51	68.71
400 kV GIS bay (₹ lakh/bay)	55.02	56.84	58.73
220 kV bay (₹ lakh/bay)	45.06	46.55	48.10
220 kV GIS bay (₹ lakh/bay)	45.06	46.55	48.10

85. The Petitioner has claimed normative O&M Expenses as per sub-clause (a) of clause (4) of Regulation 29 of the 2014 Tariff Regulations. Accordingly, the Petitioner's entitlement to O&M Expenses has been worked out as follows:-

(₹ in lakh)

Element	2016-17	2017-18	2018-19
Asset-I	64.37	66.51	68.71
Asset-II	0.00	46.10	68.71
Asset-III	0.00	26.47	58.73
Asset-IV	15.63	103.39	106.83

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

87. The O&M Expenses have been worked out as per the norms of O&M Expenses specified in the 2014 Tariff Regulations. As regards impact of wage revision, any application filed by the petitioner in this regard will be dealt with in accordance with the provisions of the 2014 Tariff Regulations.

Interest on Working Capital (IWC)

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

> ***"28. Interest on Working Capital***
>
> *(1) The working capital shall cover:*
>
> *(c) Hydro generating station including pumped storage hydro electric generating station and transmission system including communication system:*
>
> *(i) Receivables equivalent to two months of fixed cost;*
>
> *(ii) Maintenance spares @ 15% of operation and maintenance expenses specified in regulation 29; and*
>
> *(iii) Operation and maintenance expenses for one month"*
>
> *(3) Rate of interest on working capital shall be on normative basis and shall be considered as the bank rate as on 1.4.2014 or as on 1st April of the year during the tariff period 2014-15 to 2018-19 in which the generating station or a unit thereof or the transmission system including communication system or element thereof, as the case may be, is declared under commercial operation, whichever is later.*
>
> *"(5) "Bank Rate" means the base rate of interest as specified by the State Bank of India*
> *from time to time or any replacement thereof for the time being in effect plus 350 basis points;"*

89. The Petitioner is entitled to claim IWC as per the 2014 Tariff Regulations. The components of the working capital and the Petitioner's entitlement to interest thereon are discussed hereinafter:

(i) Maintenance spares

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

(ii) O & M Expenses

O&M Expenses have been considered for one month as a component of working capital. The Petitioner has claimed O&M Expenses for one month of the respective year as claimed in the petition. This has been considered in the working capital.

(iii) Receivables

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

(iv) Rate of IWC

Rate of IWC is considered on normative basis in accordance with Clause (3) of Regulation 28 of the 2014 Tariff Regulations.

90. IWC is worked out in accordance with Regulation 28 of the 2014 Tariff Regulations. IWC allowed is as follows:-

(₹ in lakh)

Asset-I	2016-17	2017-18	2018-19
WC for O & M Expenses (O&M Expenses for 1 month)	5.36	5.54	5.73
WC for Maintenance Spares (15% of O&M Expenses)	9.66	9.98	10.31
WC for Receivables (Equivalent to 2 months of annual fixed cost / annual transmission charges)	18.01	20.23	22.54
Total Working Capital	33.03	35.75	38.58
Rate of IWC (%)	12.80	12.80	12.80
IWC	**4.23**	**4.58**	**4.94**

(₹ in lakh)

Asset-II	2017-18 (Pro-rata for 253 days)	2018-19
WC for O & M Expenses (O&M Expenses for 1 month)	5.54	5.73
WC for Maintenance Spares (15% of O&M Expenses)	9.98	10.31
WC for Receivables (Equivalent to 2 months of annual fixed cost / annual transmission charges)	32.88	35.92
Total Working Capital	**48.40**	**51.95**
Rate of IWC (%)	12.60	12.60
IWC	**4.23**	**6.55**

(₹ in lakh)

Asset-III	2017-18 (Pro-rata for 170 days)	2018-19
WC for O & M Expenses (O&M Expenses for 1 month)	4.74	4.89
WC for Maintenance Spares (15% of O&M Expenses)	8.53	8.81

WC for Receivables (Equivalent to 2 months of annual fixed cost / annual transmission charges)	21.26	22.07
Total Working Capital	**34.52**	**35.78**
Rate of IWC (%)	12.60	12.60
Total	**2.03**	**4.51**

(₹ in lakh)

Asset-IV	2016-17 (Pro- rata for 57 days)	2017-18	2018-19
WC for O & M Expenses (O&M Expenses for 1 month)	8.34	8.62	8.90
WC for Maintenance Spares (15% of O&M Expenses)	15.01	15.51	16.02
WC for Receivables (Equivalent to 2 months of annual fixed cost / annual transmission charges)	77.36	77.13	80.29
Total Working Capital	**100.71**	**101.26**	**105.22**
Rate of IWC (%)	12.80	12.80	12.80
IWC	**2.01**	**12.96**	**13.47**

(₹ in lakh)

Asset-I(a)	2016-17	2017-18	2018-19
WC for O & M Expenses (O&M Expenses for 1 month)	0.00	0.00	0.00
WC for Maintenance Spares (15% of O&M Expenses)	0.00	0.00	0.00
WC for Receivables (Equivalent to 2 months of annual fixed cost / annual transmission charges)	11.51	11.10	10.71
Total Working Capital	**11.51**	**11.10**	**10.71**
Rate of IWC (%)	12.80	12.80	12.80
IWC	**1.47**	**1.42**	**1.37**

Transmission charges

91. The transmission charges allowed for the transmission assets are as follows:

(₹ in lakh)

Asset-I	2016-17	2017-18	2018-19
Depreciation	12.38	16.14	20.12
Interest on Loan	13.23	16.08	18.92
Return on Equity	13.87	18.07	22.58
IWC	4.23	4.58	4.94
O&M Expenses	64.37	66.51	68.71
Total	**108.08**	**121.38**	**135.27**

(₹ in lakh)

Asset-II	2017-18 (Pro-rata for 253 days)	2018-19
Depreciation	28.11	46.42
Interest on Loan	26.84	41.74
Return on Equity	31.47	52.11
IWC	4.23	6.55
O&M Expenses	46.10	68.71

Total	**136.76**	**215.52**

(₹ in lakh)

Asset-III	2017-18 (Pro-rata for 170 days)	2018-19
Depreciation	9.89	22.52
Interest on Loan	9.94	21.40
Return on Equity	11.07	25.28
IWC	2.03	4.51
O&M Expenses	26.47	58.73
Total	**59.40**	**132.43**

(₹ in lakh)

Asset-IV	2016-17 (Pro-rata for 57 days)	2017-18	2018-19
Depreciation	17.29	110.90	118.45
Interest on Loan	18.19	111.36	110.04
Return on Equity	19.36	124.17	132.97
IWC	2.01	12.96	13.47
O&M Expenses	15.63	103.39	106.83
Total	**72.49**	**462.79**	**481.75**

(₹ in lakh)

Asset-I(a)	2016-17	2017-18	2018-19
Depreciation	25.24	25.24	25.24
Interest on Loan	14.07	11.68	9.29
Return on Equity	28.26	28.26	28.33
IWC	1.47	1.42	1.37
O&M Expenses	0.00	0.00	0.00
Total	**69.04**	**66.60**	**64.23**

Filing Fee and Publication Expenses

92. The Petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses, in terms of Regulation 52 of the 2014 Tariff Regulations. BRPL has submitted that as there is a statutory requirement of CPSUs to approach the Commission in furtherance of their business, the claim is liable to be rejected. We have considered the submissions of the Petitioner and BRPL. The Petitioner shall be entitled for reimbursement of the filing fees and publication expenses in connection with the present petition, directly from the beneficiaries on pro-rata basis in accordance with clause (1) of Regulation 52 of the 2014 Tariff Regulations.

Licence Fee and RLDC Fees and Charges

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

Goods and Service Tax

94. The Petitioner has sought to recover GST on transmission charges separately from the Respondents, if at any time GST on transmission is withdrawn from negative list in future.

95. We have considered the submission of the Petitioner. GST is not levied on transmission services at present. Therefore, we are of the view that Petitioner's prayer is premature and the Petitioner is at liberty to approach this Commission if GST is levied upon transmission services in future.

Sharing of Transmission Charges

96. With effect from 1.11.2020, the 2010 Sharing Regulations has been repealed and sharing of transmission charges is governed by the provisions of the 2020 Sharing Regulations. Accordingly, the liabilities of DICs for arrears of transmission charges determined through this order shall be computed DIC-wise in accordance with the provisions of respective Tariff Regulations and shall be recovered from the concerned DICs through Bill 2 under Regulation 15(2)(b) of the 2020 Sharing Regulations.

97. To summarise, AFC approved for the transmission assets for 2014-19 period are as follows:

(₹ in lakh)

Asset	2016-17	2017-18	2018-19
Asset-I	108.08	121.38	135.27
Asset-II	-	136.76	215.52
Asset-III	-	59.40	132.43
Asset-IV	72.49	462.79	481.75
Asset-I(a)	69.04	66.60	64.23

98. The Annexure-I given hereinafter shall form part of the order.

99. This order disposes of Petition No. 104/TT/2019 in terms of the above discussions and findings.

sd/-	**sd/-**	**sd/-**
(Arun Goyal)	**(I. S. Jha)**	**(P. K. Pujari)**
Member	**Member**	**Chairperson**

Asset - I **Annexure – I**

2014-19	Admitted Capital Cost as on COD	ACE (₹ in lakh)			Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (%)	Annual Depreciation as per Regulations (₹ in lakh)		
Capital Expenditure as on COD	(₹ in lakh)	2016-17	2017-18	2018-19			2016-17	2017-18	2018-19
Sub Station	169.36	130.41	12.00	138.50	450.27	5.28	12.38	16.14	20.12
TOTAL	**169.36**	**130.41**	**12.00**	**138.50**	**450.27**		**12.38**	**16.14**	**20.12**
					Average Gross Block (₹ in lakh)		**234.56**	**305.77**	**381.02**
					Weighted Average Rate of Depreciation (%)		**5.28**	**5.28**	**5.28**

Asset - II **Annexure – I**

2014-19	Admitted Capital Cost as on COD	ACE (₹ in lakh)		Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (%)	Annual Depreciation as per Regulations (₹ in lakh)	
Capital Expenditure as on COD	(₹ in lakh)	2017-18	2018-19			2017-18	2018-19
Sub Station	751.58	33.10	188.91	973.59	5.28	40.56	46.42
TOTAL	**751.58**	**33.10**	**188.91**	**973.59**		**40.56**	**46.42**
				Average Gross Block (₹ in lakh)		**768.13**	**879.14**
				Weighted Average Rate of Depreciation (%)		**5.28**	**5.28**

Asset - III **Annexure – I**

2014-19	Admitted Capital Cost as on COD	ACE (₹ in lakh)		Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (%)	Annual Depreciation as per Regulations (₹ in lakh)	
Capital Expenditure as on COD	(₹ in lakh)	2017-18	2018-19			2017-18	2018-19
Sub Station	392.89	18.68	29.77	**441.34**	5.28	21.24	22.52
TOTAL	**392.89**	**18.68**	**29.77**	**441.34**		**21.24**	**22.52**
				Average Gross Block (₹ in lakh)		**402.23**	**426.45**
				Weighted Average Rate of Depreciation (%)		**5.28**	**5.28**

Asset - IV **Annexure – I**

2014-19	Admitted Capital Cost as on COD	ACE (₹ in lakh)			Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (%)	Annual Depreciation as per Regulations (₹ in lakh)		
Capital Expenditure as on COD	(₹ in lakh)	2016-17	2017-18	2018-19			2016-17	2017-18	2018-19
Sub Station	2095.89	2.91	3.30	282.44	**2384.54**	5.28	110.74	110.90	118.45
TOTAL	**2095.89**	**2.91**	**3.30**	**282.44**	**2384.54**		**110.74**	**110.90**	**118.45**
					Average Gross Block (₹ in lakh)		**2097.35**	**2100.45**	**2243.32**
					Weighted Average Rate of Depreciation (%)		**5.28**	**5.28**	**5.28**

Asset-Ia **Annexure – I**

2014-19	Admitted Capital Cost as on COD	ACE (₹ in lakh)			Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (%)	Annual Depreciation as per Regulations (₹ in lakh)		
Capital Expenditure as on COD	(₹ in lakh)	2016-17	2017-18	2018-19			2016-17	2017-18	2018-19
Sub Station	477.99	0.00	0.00	0.00	477.99	5.28	25.24	25.24	25.24
TOTAL	**477.99**	**0.00**	**0.00**	**0.00**	**477.99**		25.24	25.24	25.24
					Average Gross Block (₹ in lakh)		**179.50**	**204.74**	**229.98**
					Weighted Average Rate of Depreciation (%)		**5.28**	**5.28**	**5.28**