CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI

Petition No. 234/TT/2016

Coram:

Shri Gireesh B. Pradhan, Chairperson
Shri A.K. Singhal, Member
Shri A.S. Bakshi, Member
Dr. M.K. Iyer, Member

Date of Order: 17.10.2017

In the matter of:

Approval of transmission tariff for **Asset-I:** 400 kV Main bay alongwith 50 MVAR Bus Reactor-2 at Kota Sub-station (50 MVAR line reactor shifted from Merta), **Asset-II:** 125 MVAR, 400 kV Bus Reactor alongwith associated bays at 400/220 kV Koteshwar Sub-station (THDC), **Asset-III:** 2x63 MVAR Bus Reactor at Dehar and **Asset-IV:** Replacement of 250 MVA ICT with 4x105 MVA at Dehar, under "Strengthening Scheme in Northern Region" in Northern Region from COD to 31.3.2019, under Regulation-86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014.

And in the matter of:

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

Vs

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

2. Ajmer Vidyut Vitran Nigam Limited,
   400 kV GSS Building (Ground Floor),
   Ajmer Road, Heerapura, Jaipur

3. Jaipur Vidyut Vitran Nigam Limited,
   400 kV GSS Building (Ground Floor)
   Ajmer Road, Heerapura, Jaipur

4. Jodhpur Vidyut Vitran Nigam Limited,
   400 kV GSS Building (Ground Floor),
   Ajmer Road, Heerapura, Jaipur

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

6. Punjab State Power Corporation Limited,
Thermal Shed TIA, Near 22 Phatak,
Patiala-147 001

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

8. Power Development Department,
Government of Jammu and 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. North Delhi Power Limited,
Power Trading & Load Dispatch Group,
Cennet Building, Adjacent to 66/11kV Pitampura-3 Grid Building,
Near PP Jewellers, Pitampura,
New Delhi-110 034

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.K. Venkatesan, PGCIL
Shri S.S. Raju, PGCIL
Shri Rakesh Prasad, PGCIL
Shri Jasbir Singh, PGCIL

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

ORDER

The present petition has been filed by Power Grid Corporation of India Limited ("the petitioner') for approval of the transmission tariff in respect of **Asset-I:** 400 kV Main bay alongwith 50 MVAR Bus Reactor-2 at Kota Sub-station (50 MVAR line reactor shifted from Merta), **Asset-II:** 125 MVAR, 400 kV Bus Reactor alongwith associated bays at 400/220 kV Koteshwar Sub-station (THDC), **Asset-III:** 2x63 MVAR Bus Reactor at Dehar and **Asset-IV:** Replacement of 250 MVA ICT with 4x105 MVA at Dehar under "Strengthening Scheme in the Northern Region" from the date of commercial operation to 31.3.2019 based on the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as "the 2014 Tariff Regulations").

2. This order has been issued after considering petitioner's affidavits dated 16.2.2017, 22.3.2017, 9.5.2017 and 2.6.2017.

3. The petitioner has been entrusted with the implementation of Transmission System associated with "Strengthening Scheme in Northern Region" in Northern Region. 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. 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 transmission system was scheduled to be commissioned within 24 months from the date of IA i.e. 14.10.2012. Therefore, the scheduled date of commissioning of the transmission system was 13.10.2014. 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. 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.

4. Details of petitions already filed under this project are as follows:-

Srl. No.	Scope as approved in Investment approval	Schedule of commissioning as per Investment approval	Actual COD	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)	13.10.2014	1.1.2014	Petition No. 28/TT/2014
2	Loop in of 2nd Ckt. of Jallandhar-Hamirpur T/L		2.3.2015	Petition No. 99/TT/2014

5. The petitioner vide affidavit dated 16.2.2017, 9.5.2017 and 2.6.2017 has submitted the current status of commissioning of instant assets and has also bifurcated Asset-III into Asset-III(a) and Asset-III(b). The details of elements covered under instant assets and date of actual/anticipated commercial operation are as under:-

Scope as approved in Investment approval	Scheduled date of commissioning	Actual/ anticipated COD	Delay
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	13.10.2014	1.4.2016 (Actual)	17 months approximately
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		31.8.2017 (Anticipated)	22 months approximately
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		14.12.2016 (Actual)	24 months
Asset-III(b): Extension of Dehar 400/220 kV Sub-station (BBMB)-Installation of 400 kV, 1x63 MVAR bus Reactor through a single 400 kV hybrid GIS bay		1.9.2017 (Anticipated)	22 months approximately
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		31.1.2017 (charged)	27 months approximately

6. The petitioner has submitted Auditors' certificate on the basis of actual COD of Asset-I alongwith the petition and Asset-III(a) vide affidavit dated 22.3.2017. The petitioner has claimed that Asset-IV was charged on 31.1.2017 and has stated that COD letter shall be submitted after receipt of RLDC certificate.

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/ 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 check

by 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.

12. In view of the above, tariff for Asset-III(a) is only allowed in the instant order. The petitioner is directed to file separate petition for remaining assets i.e. Asset-I, Asset-II, Asset-III(b) and Asset-IV after their commissioning along with all the relevant information as per requirements of the 2014 Tariff Regulations. The AFC allowed for Assets-I, II, III(b) and Asset-IV vide order dated 6.2.2017 is withdrawn.

13. Therefore, the tariff for Installation of 1x63 MVAR Bus Reactor I through a single 400 kV hybrid GIS bay at Dehar 400 kV/220 kV Sub-station (BBMB) (hereinafter referred to as "instant assets"), as stated above is allowed in this order.

14. The details of the transmission charges claimed by the petitioner for the instant asset are as under:-

(₹ in lakh)

Particulars	2016-17 (pro-rata)	2017-18	2018-19
Depreciation	30.90	130.08	147.03
Interest on Loan	32.74	131.55	138.40
Return on equity	34.43	144.94	163.82
Interest on Working Capital	3.00	11.84	12.87
O & M Expenses	16.42	56.84	58.73
Total	**117.49**	**475.25**	**520.85**

15. The details submitted by the petitioner in support of its claim for interest on working capital are as under:-

(₹ in lakh)

Particulars	2016-17 (pro-rata)	2017-18	2018-19
Maintenance Spares	8.25	8.53	8.81
O & M expenses	4.59	4.74	4.89
Receivables	65.63	79.21	86.81
Total	**78.47**	**92.48**	**100.51**
Interest	**7.87**	**11.84**	**12.87**

16. No comments or suggestions have been received from the general public in response to the notices published by the petitioner under Section 64 of the Electricity Act, 2003. U.P. Power Corporation Limited (UPPCL), Respondent No. 9 has filed reply dated 2.12.2016. UPPCL has raised the issues of non-submission of information regarding delegation of powers by the Government of India (GOI) to the Board of Directors of the petitioner for approval of projects, IDC and IEDC due to time over-run, cost variation, rate of interest on loan, lack of element wise liability flow statement for additional capitalisation and service tax etc. BSES Rajdhani Power Limited (BRPL), Respondent No. 12, has filed reply dated 13.12.2016. BRPL has raised the issues of cost over-run, non-filing of Transmission Service Agreement (TSA) and other statutory documents, initial spares, submission of unsatisfactory reasons for time over-run, non submission of DPR, CPM Analysis and Pert Chart and Bar Chart, effective tax rates, filing fee and expenditure incurred on publication of notices and O&M Expenses. The petitioner has filed rejoinder to the replies filed

by UPPCL and BRPL vide affidavits dated 28.12.2016 and 2.5.2017. The objections raised by the respondents and the clarifications given by the petitioner are addressed in the relevant paragraphs of this order.

17. UPPCL has submitted that the petitioner should be directed to submit the Office Memorandums vide which the Cabinet Committee for Economic Affairs has granted powers to the Board of Directors of public utilities for all the time to come. The petitioner has clarified that as per Clause 2 (i) of DPE's Office Memorandum No. DPE/11(2)/97-Fin dated 22.7.1997 Navratna Company has full power to incur expenditure on purchase of new items or for replacement, without any monetary ceiling. The petitioner has submitted a copy of OM No. 26(3)/2005-GM-GL-92 dated 1.5.2008 and OM No. DPE/11(2)/97-FIN dated 22.7.1997. It is observed from the above said Office Memorandums, that the Navratna status of the petitioner and other PSUs is reviewed by the Department of Public Enterprises, Ministry of Heavy Industries and Public Enterprises on yearly basis and if they do not fulfil the conditions laid down, the Navratna status is withdrawn. In the present case, PGCIL as a Navratna company has approved the investment approval and therefore, the same has been considered for the purpose of tariff.

18. BRPL has submitted that the petitioner has not filed the Transmission Service Agreement (TSA) between the transmission licensee and the designated inter-State customers as per provisions of Regulation 3(63) of the 2014 Tarff Regulations. The petitioner has submitted that as per clause 13(5) of 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, 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.

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

Capital Cost:-

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

> "(1) The Capital cost as determined by the Commission after prudence check in accordance with this regulation shall form the basis of determination of tariff for existing and new projects."
>
> (2) The Capital Cost of a new project shall include the following:
>
> (a) the expenditure incurred or projected to be incurred up to the date of commercial operation of the project;
>
> (b) Interest during construction and financing charges, on the loans (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed;
>
> (c) Increase in cost in contract packages as approved by the Commission;
>
> (d) Interest during construction and incidental expenditure during construction as computed in accordance with Regulation 11 of these regulations;
>
> (e) capitalised Initial spares subject to the ceiling rates specified in Regulation 13 of these regulations;
>
> (f) expenditure on account of additional capitalization and de-capitalisation determined in accordance with Regulation 14 of these regulations;"
>
> (g) adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the COD as specified under Regulation 18 of these regulations; and
>
> (h) adjustment of any revenue earned by the transmission licensee by using the assets before COD."

21. The petitioner has submitted Auditors' Certificates for the details of the

apportioned approved capital cost, capital cost as on the date of commercial operation and estimated additional capital expenditure incurred or projected to be incurred for the instant transmission asset. The details submitted by the petitioner are as under:-

(₹ in lakh)

Approved apportioned cost		Capital cost upto COD	Projected additional capital expenditure			Estimated completed cost as on 31.3.2019
As per FR	As per RCE		2016-17	2017-18	2018-19	
2190.52	3157.28	1696.13*	604.70	362.82	241.87	2905.52

(*Initial spares, IDC and IEDC included)

Cost Over-run/variation

22. Both UPPCL and BRPL have submitted the issue of cost over-run with reference to the original petition i.e. before the RCE. However, in response to query dated 6.2.2017 by the Commission, regarding cost over-run in the case of Asset-III and RCE, the petitioner vide affidavit dated 16.2.2107 has submitted as under:-

> "With regard to the cost variation of FR cost vis-à-vis the actual cost the petitioner has submitted that as per policy in POWERGRID, the procurement is carried out under open competitive route by providing equal opportunity to all eligible firms. The bid prices are invited for the complete scope of work on overall basis and the contracts are awarded to the qualified bidder, whose bid is determined as the lowest evaluated, techno-commercially responsive and who is considered to have the capacity and capability to perform the contract based on the assessment, if carried out. Thus the variation of awarded/actual cost may be because of various market forces and the pricing strategies followed by bidder(s)".

23. The estimated completion cost of instant asset is within the approved apportioned cost as per RCE and therefore is considered for tariff in this order.

Time Over-run

24. The instant asset was scheduled to be commissioned on 13.10.2014 as per Investment Approval dated 26.10.2012. However, the instant asset was commissioned on 14.12.2016. Thus, there is a time over-run of 26 months. BRPL has submitted that grounds for the delay submitted by the petitioner show that the

petitioner and its bidders are responsible for delay. BRPL has further submitted that the delay is due to slackness on the part of the petitioner. 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. The petitioner in its rejoinder to the reply of BRPL has submitted that reasons for time over-run have already been submitted.

25. The petitioner in the original petition has submitted that Reactors were received outside the BBMB Dehar Sub-station in June, 2015 but due to pending civil works and shutdown issues in BBMB switchyard, the reactors were stored outside switchyard. In the mean time all requisite tests were conducted including cc-cl, dew point, daily pressure monitoring and were found correct during above storage. The petitioner has submitted that however, after completion of civil works and clearance of shut down, reactors were dragged approx. 200 meters and impact recorder was taken out jointly as per specified procedure. The petitioner has further submitted that during analysis of reports the shock was observed in unit no. 2 and after that other detailed testing including SFRA was carried out in May, 2016. In April, 2016 during internal inspection of Reactor some damages have been observed at site. The petitioner has submitted that CGL has intimated that they have already deputed two persons to transport the reactor back to factory for rectification. The petitioner was directed to submit detailed reasons for delay in the commissioning of the instant asset vide RoP dated 6.2.2017. The petitioner vide affidavit dated 16.2.2017 has reiterated its submissions made in the petition and has submitted that finally, COD of 1st Reactor i.e. 1x63 MVAR Bus Reactor was declared w.e.f. 14.12.2016.

26. There is delay of 26 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 14.12.2016. 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 12 months out of total delay of 26 months.

Treatment of IDC and IEDC

27. The IDC and IEDC during the period of time over-run are to be treated as provided under Regulation 11 of the 2014 Tariff Regulations. Regulation 11 of the 2014 Tariff Regulations provides as follows:-

> **"11…..Interest during construction (IDC), Incidental Expenditure during Construction (IEDC)**
>
> (A) Interest during Construction (IDC):
>
> (1) Interest during construction shall be computed corresponding to the loan from the date of infusion of debt fund, and after taking into account the prudent phasing of funds upto SCOD.
>
> (2) In case of additional costs on account of IDC due to delay in achieving the SCOD, the generating company or the transmission licensee as the case may be, shall be required to furnish detailed justifications with supporting documents for such delay including prudent phasing of funds:
>
> Provided that if the delay is not attributable to the generating company or the transmission licensee as the case may be, and is due to uncontrollable factors as specified in Regulation 12 of these regulations, IDC may be allowed after due prudence check:

Provided further that only IDC on actual loan may be allowed beyond the SCOD to the extent, the delay is found beyond the control of generating company or the transmission licensee, as the case may be, after due prudence and taking into account prudent phasing of funds."

"**(B)……Incidental Expenditure during Construction (IEDC)**:
(1) Incidental expenditure during construction shall be computed from the zero date and after taking into account pre-operative expenses upto SCOD:

Provided that any revenue earned during construction period up to SCOD on account of interest on deposits or advances, or any other receipts may be taken into account for reduction in incidental expenditure during construction.

(2) In case of additional costs on account of IEDC due to delay in achieving the SCOD, the generating company or the transmission licensee as the case may be, shall be required to furnish detailed justification with supporting documents for such delay including the details of incidental expenditure during the period of delay and liquidated damages recovered or recoverable corresponding to the delay:

Provided that if the delay is not attributable to the generating company or the transmission licensee, as the case may be, and is due to uncontrollable factors as specified in regulation 12, IEDC may be allowed after due prudence check:

Provided further that where the delay is attributable to an agency or contractor or supplier engaged by the generating company or the transmission licensee, the liquidated damages recovered from such agency or contractor or supplier shall be taken into account for computation of capital cost.

(3) In case the time over-run beyond SCOD is not admissible after due prudence, the increase of capital cost on account of cost variation corresponding to the period of time over run may be excluded from capitalization irrespective of price variation provisions in the contracts with supplier or contractor of the generating company or the transmission licensee."

28. The petitioner has claimed ₹63.25 lakh as Interest during Construction (IDC). We have worked out allowable IDC amounting to ₹63.38 lakh based on information submitted by the petitioner. Thus, we have considered the claimed IDC amounting to ₹63.25 lakh for tariff purpose. However, as discussed above, the time overrun of 12 months out of 26 months has been condoned, therefore, the scheduled COD for the purpose of calculation of IDC has been shifted to 14.10.2015. Thus, IDC amounting to ₹4.26 lakh calculated up to 14.10.2015, has been allowed out of total IDC of ₹63.25 lakh claimed.

29. Similarly, the petitioner has claimed ₹118.62 lakh in respect of instant asset as Incidental Expenditure incurred and paid during Construction (IEDC) as on COD, which is within the percentage on Hard Cost as indicated in the Abstract Cost Estimate. Therefore, IEDC of ₹118.62 lakh is considered for tariff purpose.

Initial Spares

30. Regulation 13 of the 2014 Tariff Regulations specifies ceiling norms for capitalization of initial spares in respect of transmission system as under:-

> **"13. Initial Spares**
> Initial spares shall be capitalised as a percentage of the Plant and Machinery cost upto cut-off date, subject to following ceiling norms:
>
> (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."

31. BRPL has submitted that the petitioner has not disclosed if the initial spares are within the ceiling limits as prescribed. The petitioner has submitted that there is no provision of Brown Field norms for GIS sub-stations and in the absence of any norm the initial spares claimed may be considered. The initial spares claimed by the petitioner are more than the limit specified in Regulation 13 of the 2014 Tariff Regulations. Therefore, the initial spares for instant asset are restricted to 5% being a GIS sub-station. The details of admissible initial spares worked out are as under:-

(₹ in lakh)

Plant and Machinery	**Initial spares claimed**	**Ceiling Limit**	**Admissible initial spares**	**Excess initial spares**
2723.65	343.74	5.00%	125.26	218.48

Additional capital expenditure

32. 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."

33. 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".

34. Therefore, the cut-off date in the case of instant transmission asset is 31.3.2019.

35. The petitioner has claimed the additional capital expenditure vide affidavit dated 16.2.2017 and the details are as under:-

(₹ in lakh)

Projected additional capital expenditure			**Total estimated Add-cap**
2016-17	**2017-18**	**2018-19**	
604.70	362.82	241.87	1209.39

36. UPPCL has submitted that the petitioner may be directed to submit element wise liability flow statement to justify balance and retention payment and additional capitalisation. The petitioner has submitted liability flow statement vide its rejoinder dated 28.12.2016.

37. The petitioner has submitted that the additional capital expenditure incurred/projected to be incurred is on account of Balance and Retention Payments. We have considered the submission of the petitioner. The additional capital expenditure incurred/projected to be incurred is on account of Balance/Retention Payments and is within “cut-off date” and is covered under Regulation 14(1)(i) of the 2014 Tariff Regulations and accordingly it is allowed.

Capital Cost as on COD and 31.3.2019

38. Accordingly, capital costs considered for the purpose of tariff calculation is as below:-

(₹ in lakh)

Capital cost considered for the purpose of tariff before adjustment of IEDC/IDC & Initial Spares, if any, 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)	Excess initial spares (D)	
1696.13	58.99	-	218.48	**1418.66**

39. Therefore, the total estimated completion cost of the instant asset as on 31.3.2019 is as under:-

(₹ in lakh)

Capital cost allowed as on COD	Additional Capitalisation for			Total estimated completion cost up to 31.3.2019
	2016-17	2017-18	2018-19	
1418.66	604.70	362.82	241.87	2628.05

Debt-Equity Ratio

40. Clause 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."

41. 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 instant assets as on the date of commercial operation and as on 31.3.2019 are as under:-

(₹ in lakh)

Particulars	Capital cost as on tariff COD		Capital cost as on 31.3.2019	
	Amount	%	Amount	%
Debt	993.06	70.00	1839.64	70.00
Equity	425.60	30.00	788.42	30.00
Total	**1418.66**	**100.00**	**2628.05**	**100.00**

Return on Equity

42. Clause (1) and (2) of Regulation 24 and Clause (2) of Regulation 25 of the 2014 Tariff Regulations specify as under:-

> **"24. Return on Equity:** (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with regulation 19.
>
> (2) Return on equity shall be computed at the base rate of 15.50% for thermal generating stations, transmission system including communication system and run of the river hydro generating station, and at the base rate of 16.50% for the storage type hydro generating stations including pumped storage hydro generating stations and run of river generating station with pondage:
>
> Provided that:
> (i) in case of projects commissioned on or after 1st April, 2014, an additional return of 0.50 % shall be allowed, if such projects are completed within the timeline specified in **Appendix-I:**
> (ii) the additional return of 0.5% shall not be admissible if the project is not completed within the timeline specified above for reasons whatsoever:
> (iii) additional RoE of 0.50% may be allowed if any element of the transmission project is completed within the specified timeline and it is certified by the Regional Power Committee/National Power Committee that commissioning of the particular element will benefit the system operation in the regional/national grid:
> (iv) the rate of return of a new project shall be reduced by 1% for such period as may be decided by the Commission, if the generating station or transmission system is found to be declared under commercial operation without commissioning of any of the Restricted Governor Mode Operation (RGMO)/ Free Governor Mode Operation (FGMO), data telemetry, communication system up to load dispatch centre or protection system:
> (v) as and when any of the above requirements are found lacking in a generating station based on the report submitted by the respective RLDC, RoE shall be reduced by 1% for the period for which the deficiency continues:

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

"25. Tax on Return on Equity:

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

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

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

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

43. 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.

44. BRPL has submitted that the petitioner should furnish details in the working of effective tax rate alongwith tax audit report for 2014-15 and the reasons as to why it is opting for MAT. BRPL has further submitted that the instant asset is a new

transmission project and is also entitled for Tax Holiday under Section 80 IA of the Income Tax Act, 1961 and the petitioner should at least submit the date from which it intends to claim the benefits of Section 80 IA of the Income Tax Act, 1961. 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.

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

(₹ in lakh)

Particulars	**2016-17 (pro-rata)**	**2017-18**	**2018-19**
Opening Equity	425.60	607.01	715.85
Addition due to Additional Capitalisation	181.41	108.85	72.56
Closing Equity	607.01	715.85	788.42
Average Equity	516.30	661.43	752.13
Return on Equity (Base Rate)	15.50%	15.50%	15.50%
Tax rate for the year 2013-14 (MAT)	20.961%	20.961%	20.961%
Rate of Return on Equity (Pre-tax)	19.610%	19.610%	19.610%
Return on Equity (Pre-tax)	**29.68**	**129.71**	**147.49**

Interest on Loan

46. 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."

47. In keeping with the provisions of Regulation 26 of the 2014 Tariff Regulations, the petitioner's entitlement to IoL has been calculated on the following basis:-

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

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

(iii) 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.

48. The petitioner has submitted that it be allowed to bill and adjust impact on Interest on Loan due to change in interest due to floating rate of interest applicable, if any, from the respondents. UPPCL has submitted that the petitioner has taken loan as bond fixed rate of interest of 8.4680%. UPPCL has further submitted that therefore, there is no occasion of taking floating rate of interest. The petitioner in its rejoinder has submitted that loans are deployed in combination of fixed interest rate (Bonds XLVI, L and LI etc.) and floating interest rate (SBI 1000-Drawn Quarter4). We would like to clarify that the interest on loans has been calculated on the basis of rate prevailing as on the date of commercial operation. Any change in rate of interest subsequent to the date of commercial operation will be considered at the time of truing-up.

49. Detailed calculation of the weighted average rate of interest has been given in **Annexure** to this order.

50. Based on above, details of Interest on Loan calculated are as under:-

(₹ in lakh)

Particulars	**2016-17 (pro-rata)**	**2017-18**	**2018-19**
Gross Normative Loan	993.06	1416.35	1670.33
Cumulative Repayment upto Previous Year	0.00	26.64	143.05
Net Loan-Opening	993.06	1389.71	1527.28
Addition due to Additional Capitalisation	423.29	253.97	169.31
Repayment during the year	26.64	116.41	132.38
Net Loan-Closing	1389.71	1527.28	1564.21
Average Loan	1191.39	1458.50	1545.74
Weighted Average Rate of Interest on Loan	8.083%	8.077%	8.071%
Interest	**28.23**	**117.81**	**124.76**

51. The IOL is allowed considering all the loans submitted in Form-9C. However, the petitioner is directed to reconcile the total Gross Loan for the calculation of weighted average Rate of Interest and for the calculation of IDC, which would be reviewed at the time of truing-up.

Depreciation

52. Regulation 27 of the 2014 Tariff Regulations with regard to depreciation specifies as below:-

"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."

53. The petitioner has claimed actual depreciation as a component of annual fixed charges. Depreciation has been allowed in accordance with Regulation 27 of the 2014 Tariff Regulations. The instant asset was put under commercial operation during 2016-17. Accordingly, it will 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.

54. The details of the depreciation allowed are as under:-

(₹ in lakh)

Particulars	**2016-17 (pro-rata)**	**2017-18**	**2018-19**
Opening Gross Block	1418.66	2023.36	2386.18
Additional Capital expenditure	604.70	362.82	241.87
Closing Gross Block	2023.36	2386.18	2628.05
Average Gross Block	1721.01	2204.77	2507.12
Rate of Depreciation	5.2800%	5.2800%	5.2800%
Depreciable Value	1548.91	1984.29	2256.40
Remaining Depreciable Value	1548.91	1957.66	2113.35
Depreciation	**26.64**	**116.41**	**132.38**

Operation & Maintenance Expenses (O & M Expenses)

55. Regulation 29(4)(a) of the 2014 Tariff Regulations specifies the norms for operation and maintenance expenses for the transmission system based on the type of sub-station and the transmission line. Norms specified in respect of the elements covered in the instant petition are as under:-

(₹ in lakh)

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

56. 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 given hereunder:-

(₹ in lakh)

Element	2016-17	2017-18	2018-19
1 no 400 kV GIS bay	16.13	56.84	58.73

57. 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.

58. BRPL has submitted that the increase in the employee cost, if any, due to wage revision must be taken care of by improvement in productivity levels by the petitioner, so that the beneficiaries are not unduly burdened over and above the provisions made in the 2014 Tariff Regulations. The petitioner in its rejoinder has reiterated its submissions made in the petition.

59. 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 appropriate provisions of the 2014 Tariff Regulations.

Interest on Working Capital (IWC)

60. 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;"

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

Operation and maintenance expenses have been considered for one month as a component of working capital. The petitioner has claimed O&M expenses for 1 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 interest on working capital

As per Proviso 3 of Regulation 28 of the 2014 Tariff Regulations, SBI Base rate 9.30% as on 1.4.2016 plus 350 Bps i.e. 12.80% has been considered for the asset, as the rate of interest on working capital.

62. The interest on working capital is worked out in accordance with Regulation 28 of the 2014 Tariff Regulations. The rate of interest on working capital considered is 12.80% (SBI Base Rate of 9.30% plus 350 basis points). The interest on working capital worked out is as follows:-

(₹ in lakh)

Particulars	2016-17 (pro-rata)	2017-18	2018-19
Maintenance Spares	8.25	8.53	8.81
O & M expenses	4.59	4.74	4.89
Receivables	58.77	71.95	79.21
Total	**71.61**	**85.21**	**92.91**
Interest rate	12.80%	12.80%	12.80%
Interest	**2.69**	**10.91**	**11.89**

<u>Transmission charges</u>

63. The transmission charges being allowed for the instant asset are summarized hereunder:-

(₹ in lakh)

Particulars	2016-17 (pro-rata)	2017-18	2018-19
Depreciation	26.64	116.41	132.38
Interest on Loan	28.23	117.81	124.76
Return on equity	29.68	129.71	147.49
Interest on Working Capital	2.69	10.91	11.89
O & M Expenses	16.13	56.84	58.73
Total	**103.37**	**431.67**	**475.26**

64. The petitioner has submitted that the claim for transmission charges and other charges is exclusive of incentive, late payment surcharge, FERV, any statutory taxes, levies, duties, cess, or any other kind of impositions etc. The same, if imposed shall be borne and additionally paid by the respondents. We have considered the submissions of the petitioner. The petitioner is entitled for late payment surcharge and FERV as per Regulations 45 and 50 respectively of the 2014 Tariff Regulations.

Filing Fee and Publication Expenses

65. 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. 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

66. 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.

Sharing of Transmission Charges

67. The transmission charges shall be recovered on monthly basis in accordance with Regulation 43 of Central Electricity Regulatory Commission (Terms and

Condition of Tariff) Regulations, 2014 and shall be shared by the beneficiaries and long term transmission customers in CERC (Sharing of Inter State Transmission Charges and Losses) Regulations, 2010 as amended from time to time.

68. This order disposes of Petition No. 234/TT/2016.

sd/-	sd/-	sd/-	sd/-
(M.K. Iyer)	**(A.S. Bakshi)**	**(A.K. Singhal)**	**(Gireesh B. Pradhan)**
Member	**Member**	**Member**	**Chairperson**

Annexure

(₹ in lakh)

	CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN			
	Details of Loan	**2016-17**	**2017-18**	**2018-19**
1	**Bond L**			
	Gross loan opening	83.75	83.75	83.75
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	83.75	83.75	83.75
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	83.75	83.75	83.75
	Average Loan	83.75	83.75	83.75
	Rate of Interest	8.40%	8.40%	8.40%
	Interest	7.04	7.04	7.04
	Rep Schedule		-	
2	**Bond LI**			
	Gross loan opening	226.60	226.60	226.60
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	226.60	226.60	226.60
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	226.60	226.60	226.60
	Average Loan	226.60	226.60	226.60
	Rate of Interest	8.40%	8.40%	8.40%
	Interest	19.03	19.03	19.03
	Rep Schedule		-	
3	**Proposed Loan 2016-17 (7.97%)**			
	Gross loan opening	845.94	845.94	845.94
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	845.94	845.94	845.94
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	845.94	845.94	845.94
	Average Loan	845.94	845.94	845.94
	Rate of Interest	7.97%	7.97%	7.97%
	Interest	67.42	67.42	67.42
	Rep Schedule		-	
4	**Proposed Loan 2016-17 (7.55%)**			
	Gross loan opening	5.02	5.02	5.02
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	5.02	5.02	5.02
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	5.02	5.02	5.02
	Average Loan	5.02	5.02	5.02
	Rate of Interest	7.55%	7.55%	7.55%
	Interest	0.38	0.38	0.38
	Rep Schedule		-	
5	**Proposed Loan 2016-17 (7.55%)**			
	Gross loan opening	0.00	0.00	25.98
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00

	Net Loan-Opening	0.00	0.00	25.98
	Additions during the year	0.00	25.98	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	0.00	25.98	25.98
	Average Loan	0.00	12.99	25.98
	Rate of Interest	7.55%	7.55%	7.55%
	Interest	0.00	0.98	1.96
	Rep Schedule		-	
	Total Loan			
	Gross loan opening	1161.31	1161.31	1187.29
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	1161.31	1161.31	1187.29
	Additions during the year	0.00	25.98	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	1161.31	1187.29	1187.29
	Average Loan	1161.31	1174.30	1187.29
	Rate of Interest	8.0831%	8.0772%	8.0714%
	Interest	**93.87**	**94.85**	**95.83**