

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition No. 249/TT/2017**

**Coram:**

**Shri P.K. Pujari, Chairperson  
Shri A.K. Singhal, Member  
Shri A.S. Bakshi, Member  
Dr. M.K. Iyer, Member**

**Date of Order : 06.07.2018**

**In the matter of:**

Approval of transmission tariff for **Asset-I:** Extension of 400/220 kV Sikar Sub-station with 1X500 MVA, 400/220 kV auto transformer along with associated bays along with 2 nos. 220 kV line bays and **Asset-II:** Extension of 400/220 kV Manpuri Sub-station with 1X500 MVA, 400/220/33 kV auto Transformer and associated bays along with 2 nos. 220 kV line bays under “Augmentation of transformation capacity at Mainpuri and Sikar” 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-122001  
Haryana

**....Petitioner**

**Vs**

1. Rajasthan Rajya Vidyut Prasan Nigam Limited  
Vidyut Bhawan, Vidyut Marg,  
Jaipur - 302005
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-171004
6. Punjab State Electricity Board  
The Mall, Patiala-147001
7. Haryana Power Purchase Centre  
Shakti Bhawan, Sector-6  
Panchkula (Haryana) 134109
8. Power Development Department  
Government of Jammu & Kashmir  
Mini Secretariat, Jammu
9. Uttar Pradesh Power Corporation Limited  
(Formerly Uttar Pradesh State Electricity Board)  
Shakti Bhawan, 14, Ashok Marg  
Lucknow - 226001
10. Delhi Transco Ltd.  
Shakti Sadan, Kotla Road,  
New Delhi-110002
11. BSES Yamuna Power Ltd.  
BSES Bhawan, Nehru Place,  
New Delhi.
12. BSES Rajdhani Power Ltd.  
BSES Bhawan, Nehru Place,  
New Delhi
13. North Delhi Power Ltd.  
Power Trading and Load Dispatch Group  
Cennet Building, Adjacent to 66/11 kV Pitampura-3  
Grid Building, Near PP Jewellers  
Pitampura, New Delhi-110 034.
14. Chandigarh Administration  
Sector -9, Chandigarh.
15. Uttarakhand Power Corporation Ltd.  
UrjaBhawan, Kanwali Road,  
Dehradun.
16. North Central Railway,  
Allahabad.



17. New Delhi Municipal Council  
Palika Kendra, Sansad Marg,  
New Delhi-110002.

....Respondents

**For Petitioner** : Shri Vivek Kumar Singh, PGCIL  
Shri S. S. Raju, PGCIL  
Shri B. Dash, PGCIL  
Shri Rakesh Prasad, PGCIL

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

### ORDER

The present petition has been filed by Power Grid Corporation of India Ltd. ("PGCIL") seeking approval of transmission tariff for **Asset-I**: Extension of 400/220 kV Sikar Sub-station with 1X500 MVA, 400/220 kV auto transformer along with associated bays along with 2 nos. 220 kV line bays (with anticipated COD 15.9.2017) and **Asset-II**: Extension of 400/220 kV Manpuri Sub-station with 1X500 MVA, 400/220/33 kV auto Transformer and associated bays along with 2 nos. 220 kV line bays (hereinafter referred to as "transmission assets") under "Augmentation of transformation capacity at Mainpuri and Sikar" in Northern Region (hereinafter referred to as "transmission system") for 2014-19 tariff period under Central Electricity Regulation Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as "the 2014 Tariff Regulations"). The petitioner vide affidavit dated 11.5.2018 has split Assets-I and II. Asset-I was split on the basis of COD into **Asset I(A)** i.e. extension of 400/220 kV Sikar Sub-station with 1X500 MVA, 400/220/33 kV auto transformer along with associated bays, **Asset I(B)** i.e. extension of 400/220 kV Sikar Sub-station with 2 nos. 220 kV line bays. Asset-II was split on the basis of COD into **Asset II(A)** i.e. 400/220 kV, 500 MVA ICT along with associated bays at 400/220 kV



Mainpuri Sub-station and **Asset II(B)** i.e. 2 No. 220 kV line bays at 400/220 kV Mainpuri Sub-station.

2. The petitioner was entrusted with the implementation of Augmentation of transformation capacity at Manipuri and Sikar. It was discussed and agreed in the 34th meeting of Standing Committee held on 8.8.2014 and same was approved in the special meeting of NRPC held on 18.9.2014.

3. The Investment Approval for the transmission project was accorded by the Board of Directors of the petitioner vide Memorandum No. C/CP/ Aug of Tfr Mainpuri & Sikar dated 11.3.2016, at an estimated cost of ₹7648 lakh including an IDC of ₹450 lakh, price level - October, 2015.

4. The scope of work covered under the transmission system is broadly as follows:-

**Sub-Stations:**

(i) 400/220 kV Mainpuri Sub-station (Extn.)

400 kV

500MVA 400/220 kV transformer : 1

ICT Bays : 1

220 kV

ICT Bays : 1

Line Bays : 2

(ii) 400/220 kV Sikar Sub-station (Extn.)

400 kV

500MVA 400/220 kV transformer : 1

ICT bays : 1



220 kV

ICT bays : 1

Line Bays : 2

5. The Asset-I(B) and Asset-II (B) mentioned above each consists of 02 nos. 220 kV line bays for the connectivity with the downstream system of the RRVPNL and UPPTCL. The details of connecting line and the corresponding bays are given below:-

(i) 220 kV D/C line from Sikar (PG) – Sikar (RRVPN) Line or Nearby 220 kV lines (for 02 nos. of 220 kV Bays of Asset-I) (ICT commissioning is required to mitigate critical load condition of Sikar Sub-station and 02 nos 220 kV line bays are anticipated to be commissioned alongwith ICT to avoid contractual obligation)

(ii) 220 KV D/C Mainpuri (Bhogaon) - Neeb Karori (UPPTCL) lines (for 02 nos. of 220 kV Bays of Asset-II ) (Matching with 02 nos. of 220 kV Bays at Manpuri Sub-station (PG))

6. Annual Fixed Cost was granted only for Asset-II(A) which was put into commercial operation on 31.8.2017, vide order dated 20.4.2018 under the first proviso to Regulation 7(7) of the 2014 Tariff Regulations, for inclusion in the PoC charges.

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



(₹ in lakh)

Particulars	Asset-I(A)		Asset-I(B)	
	2017-18 (pro-rata)	2018-19	2017-18 (pro-rata)	2018-19
Depreciation	0.26	105.64	0.13	26.05
Interest on Loan	0.26	103.35	0.12	24.06
Return on Equity	0.29	117.70	0.14	27.77
Interest on working capital	0.03	12.15	0.03	6.73
O & M Expenses	0.25	96.20	0.50	96.20
<b>Total</b>	<b>1.09</b>	<b>435.04</b>	<b>0.92</b>	<b>180.81</b>

(₹ in lakh)

Particulars	Asset-II(A)		Asset-II(B)
	2017-18 (pro-rata)	2018-19	2018-19 (pro-rata)
Depreciation	62.03	117.81	29.62
Interest on Loan	59.88	107.29	27.34
Return on Equity	69.11	131.26	32.01
Interest on working capital	7.63	13.88	6.92
O & M Expenses	66.26	116.81	95.13
<b>Total</b>	<b>264.91</b>	<b>487.05</b>	<b>191.02</b>

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

(₹ in lakh)

Particulars	Asset-I (A)		Asset-I (B)	
	2017-18 (pro-rata)	2018-19	2018-19 (pro-rata)	2018-19
Maintenance Spares	13.95	14.43	13.95	14.43
O & M Expenses	7.75	8.02	7.75	8.02
Receivables	67.56	72.51	28.52	30.14
<b>Total</b>	<b>89.26</b>	<b>94.95</b>	<b>50.22</b>	<b>52.58</b>
Rate of Interest	12.80%	12.80%	12.80%	12.80%
<b>Interest</b>	<b>0.03</b>	<b>12.15</b>	<b>0.03</b>	<b>6.73</b>

(₹ in lakh)

Particulars	Asset-II (A)		Asset-II (B)
	2018-19 (pro-rata)	2018-19	2018-19 (pro-rata)
Maintenance Spares	16.96	17.52	14.43
O & M Expenses	9.42	9.73	8.02
Receivables	75.34	81.17	32.19
<b>Total</b>	<b>101.72</b>	<b>108.43</b>	<b>54.64</b>
Rate of Interest	12.80%	12.80%	12.80%
<b>Interest</b>	<b>7.63</b>	<b>13.88</b>	<b>6.92</b>



9. The petitioner has served the petition on the respondents and notice of this application has been published in the newspapers in accordance with Section 64 of the Electricity Act, 2003 (“the Act”). No comments have been received from the public in response to the notices published by the petitioner under Section 64 of the Act. Uttar Pradesh Power Corporation Limited, Respondent No. 9, (hereinafter referred to as “UPPCL”) has filed reply vide affidavit dated 28.2.2018 and BSES Rajdhani Power Limited, Respondent No. 12, (hereinafter referred to as “BRPL”) has filed reply vide affidavit dated 29.1.2018. The petitioner has filed its rejoinder to the reply of BRPL and UPPCL vide affidavits dated 13.3.2018 and 16.3.2018. The issues raised by BRPL and UPPCL and the clarifications given by the petitioner are dealt in relevant paragraphs of this order.

10. BRPL has submitted that the petitioner has not furnished the Transmission Service Agreement (TSA) and as per Regulation 3(63) of the 2014 Tariff Regulations, the petitioner is required to submit the TSA. In response, the petitioner in its rejoinder has submitted that as per clause 8 of Model TSA, signing of TSA is not mandatory. Further, BRPL has already signed TSA on 19.8.2011 and the petitioner has submitted a copy of TSA with BRPL. We have considered the submissions of BRPL and the response of the petitioner. It is observed that BRPL has already signed the TSA and copy of the same is filed by the petitioner.

11. BRPL has submitted that the petitioner has not filed the certificates required under Appendix-VI of the 2014 Tariff Regulations to comply with the CEA Regulations. In response, the petitioner has submitted that the CEA certificate for Asset-II (A), Asset-I (A) and Asset-II (B) has been filed vide affidavit



dated 16.2.2018 and 11.5.2018 respectively. It is observed that the petitioner has filed all the documents required for determination of tariff and accordingly the tariff is granted.

12. BRPL has submitted that one of the agencies may be asked to represent the interest of consumer in the instant petition, as the representation and participation in the proceedings is integral part of hearing in terms of Section 94(3) of the Electricity Act, 2003. In response, the petitioner submitted that there is no need to appoint any agency as the petitioner has provided a copy of the petition to the beneficiaries and published notices in newspapers inviting comments of general public.

13. Having heard the petitioner and perused the material on record, we proceed to dispose of the petition.

**Date of Commercial Operation (“COD”)**

14. As per the Investment Approval dated 11.3.2016, the scheduled COD of the instant assets was 10.3.2018. The petitioner has initially claimed anticipated date of commercial operation of the Asset-I and Asset-II as 15.9.2017 and 1.9.2017 respectively in the petition. During hearing on 18.1.2018, the representative of petitioner submitted that Asset-I is anticipated to be put into commercial operation on 30.3.2018 and part of Asset-II, i.e. ICT and the associated bays at Mainpuri Sub-station (Asset-II(A)) was put under commercial operation and the line bays at Mainpuri Sub-station (Asset-II(B)) are now anticipated to be put under commercial operation on 1.2.2018.

15. The petitioner vide affidavit dated 16.2.2018, has submitted the revised date





of commercial operation of Asset-I as 30.3.2018, Asset-II(A) as 31.8.2017 and Asset-II(B) as 1.3.2018. The petitioner has submitted RLDC certificate, CMD certificate and CEA letter w.r.t. Asset-II (A). The petitioner has further submitted that Auditor certificate of Asset-II(A) and management certificate of Asset-II(B) was already submitted vide affidavit dated 16.2.2018.

16. Later, vide affidavit dated 11.5.2018, the petitioner has submitted that the actual date of commercial operation of Asset-I (A) was 31.3.2018, Asset-II (A) was 31.8.2017 and Asset-II (B) was 5.4.2018 and Asset I (B) is anticipated to be put under commercial operation on 1.4.2018. With regard to Asset I (A) and Asset-II (B), the petitioner has submitted COD letter, RLDC charging certificate, and CEA clearance certificate. In case of Asset-I(B), certificate for first time charging was issued by NRLDC vide letter dated 20.4.2018 with first time charging date as 29.3.2018 and 30.3.2018. Due to non-availability of downstream network trial run certificate is not being issued by NRLDC. The petitioner therefore has prayed approval of COD of the date of commercial operation of Asset-I(B) in accordance with the proviso (ii) of Regulation 4(3) of the 2014 Tariff Regulations.

17. BRPL in its reply submitted that the petitioner is required to submit CMD certificate after approval of the Board and inspection report of the Electrical Inspector and Transmission Service Agreement (TSA). The petitioner has submitted that COD letter, RLDC certificate, CMD certificate and CEA letter for Asset-II(A) was already submitted vide affidavit dated 16.2.2018 and in case of Asset-I and II(B) the same will be submitted after actual COD.

## **Analysis**

18. We have considered the submissions of the petitioner and the respondents. As per Regulation 5(2) of the 2014 Tariff Regulations, a transmission licensee, including the petitioner is required to submit a certificate from the concerned RLDC certifying the successful charging of the transmission system or an element thereof for 24 hours at continuous flow of power and transmission of communication signal from the sending end to the receiving end and with requisite metering system, telemetry and protection system in service. Further, as per the Central Electricity Regulatory Commission (Indian Electricity Grid Code) Regulations, 2016, the CMD/CEO/MD of the Company shall certify that the transmission line, sub-station and communication system conform to the relevant Grid Standard and Grid Code and are capable of operation to their full capacity.

19. The petitioner vide affidavit dated 11.5.2018, has submitted COD letter, RLDC certificate and CEA letter in case of Asset-I(A) and Asset-II(B). The petitioner vide affidavit dated 16.2.2018 has submitted RLDC certificate, CMD certificate and CEA letter for Asset-II(A). Accordingly, the COD of Assets-I(A), II(A) and II(B) has been considered as 31.3.2018, 31.8.2017 and 5.4.2018 respectively.

20. In case of Asset-I(B), the petitioner vide affidavit dated 11.5.2018 has submitted the NRLDC certificate dated 20.4.2018, wherein it is mentioned that the first time charging of the 220 kV bay no 201 and 213 bays at Sikar Sub-station was done on 29.3.2018 and 30.3.2018. It has also been stated in the letter that only the bay was charged and the power flow for 24 hrs was to be



established. The petitioner has submitted that due to non-availability of the downstream network trial run certificate was not issued by NRLDC and therefore the COD of Asset-IB may be approved under proviso (ii) of Regulation 4(3) of the 2014 Tariff Regulations. Proviso (ii) of Regulation 4(3) provides as under:-

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

As per the said provision, if a transmission asset is prevented from being put into regular service for not reasons not attributable to the transmission licensee, like the petitioner, but due to delay in COD of upstream or downstream assets, the transmission licensee can approach the Commission for approval of COD of the transmission asset. In the instant case, the petitioner has submitted that it is ready with the two bays at extension of the Sikar Sub-station along with the two 220 kV line bays and in support has submitted the Energisation Certificate dated 26.3.2018 issued by CEA under Regulation 43 of the CEA (Measures relating to safety and Electric Supply) Regulations, 2010 approving the energisation of the extension of Sikar Sub-station along with the two 220 kV line bays. The petitioner has further submitted the letter dated 20.4.2018 of NRLDC regarding the first time charging of the 220 kV bay no. 201 and 213 at Sikar on 29.3.2018 and 30.3.2018 respectively. The petitioner has also submitted the certificates from its CMD certifying the bay nos. 201 and 213 at Sikar conform to the relevant Grid Standard and Grid Code and are capable of operation to their full capacity with effect from 28.3.2018 and 29.3.2018 respectively as required under Central Electricity Regulatory Commission (Indian Electricity Grid Code) Regulations,



2016. The petitioner has submitted that it is ready with the two bays at Sikar Sub-station but is prevented from being put into regular use as the downstream assets under the scope of RRVPNL were not ready. Accordingly, the petitioner has approached under proviso (ii) of Regulation 4(3) of the 2014 Tariff Regulations for approval of COD of the two bays at Sikar Sub-station. The petitioner has submitted the Energisation certificate issued by CEA and its CMD certificate to show that Asset-IB is ready and confirms to the Grid Standards and Grid Code but could not put Asset-IB to regular use as the downstream assets under the scope of RRVPNL were not ready. However, due to non-availability of downstream network of RRVPNL, trial run certificate was not issued by NRLDC. It is observed that the petitioner wrote letters dated 21.4.2017, 29.4.2017, 21.6.2017, 10.7.2017 and 24.1.2018 to RRVPNL informing about the progress of the work with regard to the two bays at Sikar Sub-station and enquiring about the progress and to expedite the work of the related transmission lines under the scope of RRVPNL. The petitioner has submitted that no response was received from RRVPNL in this regard. Further, RRVPNL, though arrayed as a respondent in the present proceedings has not filed any reply despite notice. The petitioner is ready with Asset-I(B) on 30.3.2018 but is prevented from putting Asset-I(B) into regular use as RRVPNL has not put into commercial operation the downstream assets under its scope. As the petitioner is unable to declare COD of Asset-I(B) due to reasons not attributable to it or its supplier or its contractors, but is prevented due to delay in COD of the downstream assets under the scope of RRVPNL, we approve its COD as 1.4.2018 as provided under proviso (ii) of Regulation 4(3) of the 2014 Tariff Regulations. The transmission charges for Asset-I(B) from 1.4.2018 upto COD of downstream assets under the scope of



RRVPNL shall be borne by RRVPNL and shall not be included in the PoC charges. We further direct that it shall be responsibility of the petitioner to ensure safety and insurance of the transmission assets.

### **Capital cost**

21. Clause (1) and (2) of Regulation 9 of the 2014 Tariff Regulations provide 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; 39

(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.

22. The petitioner vide affidavit dated 11.5.2018 has submitted the Auditor Certificate dated 4.5.2018, 12.1.2018 and 9.5.2018. The details of approved apportioned cost, capital cost as on the date of commercial operation and



estimated additional capital expenditure incurred or projected to be incurred during 2017-18, 2018-19, 2019-20 and 2020-21 along with estimated completion cost for the instant asset covered in the petition and considered for the purpose of computation of tariff are as under:-

Assets	Apportioned approved cost as per FR	Cost on DOCO	Estimated Expenditure				Total
			2017-18	2018-19	2019-20	2020-21	
Asset-I (A)	3832.05	1870.98	0.00	301.19	301.19	-	<b>2473.36</b>
Asset-I (B)		436.45	0.00	71.03	0.00	0.00	<b>507.48</b>
Asset-II(A)	3815.95	1890.86	257.29	180.30	180.30	-	<b>2508.75</b>
Asset-II(B)		523.86	-	65.77	49.33	49.33	<b>688.29</b>

23. BRPL has submitted that the petitioner needs to clarify as to whether it is a case of addition of transformation capacity or it is augmentation of the transformation capacity, in which case the existing ICT is required to be de-capitalised. In response, the petitioner has submitted that no de-capitalization of old assets has occurred while augmenting the Sikar and Mainpuri Sub-stations as new ICTs are being installed at both the sub-stations.

24. We have considered the submissions of the petitioner and BRPL. It is observed that the projected completion cost is within the approved apportioned cost and there is no cost over-run.

### **Time Over-run**

25. The instant project was scheduled to be commissioned within 24 months from the date of investment approval of 11.3.2016. Accordingly, the scheduled COD was 10.3.2018. The petitioner has claimed that the Asset-I(A), Asset-I(B), Asset-II(A) and Asset-II(B) were put under commercial operation w.e.f 31.3.2018, 1.4.2018, 31.8.2017 and 5.4.2018 respectively and same has been approved in



this order. Hence, there is a delay of 21 days and 22 days in COD of Assets-I(A) and I(B) respectively due to agitation by farmers and blockage of roads and there is delay of 26 days in commissioning of Asset-II(B) due to matching with the downstream network of UPPTCL. There is no time over-run in case of Asset-II(A).

26. As regards Asset-I(A) and I(B), the petitioner has submitted that there was an agitation of farmers from 1.9.2017 to 13.9.2017 wherein all the roads in the Sikar district were blocked for 13 days which badly affected the supplies of the petitioner. Later, similar type of agitation was planned and executed by the farmers from 21.2.2018 wherein all the major roads were blocked. Due to it supply of oil and transformer accessories, mobilization of erection team etc. were affected. The erection and testing teams at Sikar Sub-station were demobilized sensing agitation and aggression of local villagers and their remobilization took almost 25-30 days. As regards the time over-run in case of Asset-II(B), the petitioner has submitted that approval for energisation was accorded by CEA on 9.8.2017 i.e. much before the schedule COD of 10.3.2018. Correspondence was made with UPPTCL regarding status of the downstream assets under their scope but no response was received. The bays were finally put into commercial operation on 5.4.2018 along with the downstream network and there is regular power flow. The petitioner further sought condonation of time over-run in case of Assets-I(A) and I(B) under Regulation 12(2)(i) of the 2014 Tariff Regulations as the delay was beyond the control of the petitioner.

27. We have considered the submissions of the petitioner. There has been time over-run in case of Assets-I(A), I(A) and II(B) by 21 days, 22 days and 26 days



respectively and there is no delay in COD of Asset-II(A). The time over-run in case of Assets-I(A), I(B) and II(B) was due to agitation by farmers and blockage of roads and the non-availability of downstream network of UPPTCL respectively. It is observed that the time over-run in case of instant assets was due to reasons beyond the control of the petitioner. Accordingly, the time over-run in case of all the three assets is condoned.

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

28. The petitioner has claimed the following amount of IDC and IEDC for the instant assets:-

Particular	(₹ in lakh)	
	IDC	IEDC
Asset-I (A)	57.82	38.40
Asset-I (B)	17.74	10.26
Asset-II (A)	34.02	22.28
Asset-II (B)	19.26	25.07

As the entire period of time over-run in case of the instant assets has been condoned, the IDC and IEDC claimed by the petitioner have been approved.

**Treatment of Initial Spares**

29. 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

(5) Transmission line – 1.00%

(5) Transmission Sub-station (Green Field) – 4.00%

(5) Transmission Sub-station (Brown Field) – 6.00%

(5) Series Compensation devices and HVDC Station – 4.00%





(i) Gas Insulated Sub-station (GIS)-5.00%

(vi) Communication system-3.5%

Provided that:

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

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

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

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

30. The initial spares claimed by the petitioner for Assets I(A), II(A) and II(B) are as follows:-

(₹ in lakh)				
Assets	Cost of Plant and Machinery excluding IDC and IEDC	Cost of spares	Cost after deducting spares c=a-b	Percentage b/c
	(a)	(b)	l	
Asset-I (A)	2377.14	111.60	2265.54	5.24
Asset-I (B)	479.48	20.92	458.56	4.36
Asset-II(A)	2452.44	104.11	2348.33	4.71
Asset-II(B)	643.95	20.30	623.65	3.46

The initial spares claimed by the petitioner are within the ceiling limit specified in Regulation 13 of the 2014 Tariff Regulations. Accordingly, the petitioner's claim is allowed.



### **Capital cost as on COD**

31. The capital cost allowed as on COD under Regulation 9(2) of 2014 Tariff

Regulation is summarized under:-

Assets	(₹ in lakh)					
	Capital cost as on COD claimed by petitioner	Disallowed IDC due to time over-run	Undischarged IDC as on COD	IEDC disallowed on COD	Excess initial spare	Capital cost as on COD considered for tariff calculation
	1	2	3	4	5	6= (1-2-3-4-5)
Asset-I (A)	1870.98	0.00	41.80	0.00	0.00	1829.18
Asset-I (B)	436.45	0.00	0.00	0.00	0.00	436.45
Asset-II(A)	1890.86	0.00	15.52	0.00	0.00	1875.34
Asset-II(B)	523.86	0.00	13.11	0.00	0.00	510.74

### **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 31<sup>st</sup> 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 31<sup>st</sup> March of the year closing after three years of the year of commercial operation”.

34. The cut-off date in the case of Assets-I(A), I(B), II(A) and II(B) are 31.3.2021, 31.3.2020 and 31.3.2021 respectively.

35. The add-cap claimed by the petitioner, as per Form-7, is as under:-

**(₹ in lakh)**

<b>Asset</b>	<b>2018-19</b>	<b>2019-20</b>
Asset-I(A)	301.19	301.19
Asset-I (B)	71.03	0.00
Asset-II(A)	180.30	180.30
Asset-II(B)	65.77	49.33

36. UPPCL vide affidavit dated 28.2.2018 has submitted that petitioner needs to submit liability flow statement to justify balance and retention payment and O&M Expenses for Asset-II for 2017-18 should be ₹120.26 lakh instead of ₹154.62 lakh and inconsistency should be clarified.

37. We have considered the submissions made by the petitioner and UPPCL. The concerns raised by UPPCL are taken care of in the subsequent paragraphs. The add-cap claimed by the petitioner for 2019-20 for Asset-I(A) and Asset-II(A) and for 2019-20 and 2020-21 for Asset-II(B) are beyond the 2014-19 tariff period and hence not considered in the instant order. The petitioner has claimed add-cap for 2018-19 mainly on account of balance/retention payment which is within the provision of the 2014 Tariff Regulations and hence the same is allowed. The details of the capital cost and add-cap considered for the purpose of computation of tariff are as follows:-



(₹ in lakh)

Assets	Capital cost as on COD	2017-18	2018-19
Asset-I (A)	1829.18	0.00	342.99
Asset-I (B)	436.45	0.00	71.03
Asset-II(A)	1875.33	1.34	194.48
Asset-II(B)	510.74	0.00	78.88

### **Debt-Equity Ratio**

38. 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.”

39. 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)

Asset-I(A)				
Particulars	Capital cost as on COD		Capital cost as on 31.3.2019	
	Amount	%	Amount	%
Debt	1280.43	70.00	1520.52	70.00
Equity	548.75	30.00	651.65	30.00
<b>Total</b>	<b>1829.18</b>	<b>100.00</b>	<b>2172.17</b>	<b>100.00</b>

  

Asset-I(B)				
Particulars	Capital cost as on COD		Capital cost as on 31.3.2019	
	Amount	%	Amount	%
Debt	305.52	70.00	330.38	70.00
Equity	130.93	30.00	141.59	30.00
<b>Total</b>	<b>436.45</b>	<b>100.00</b>	<b>471.97</b>	<b>100.00</b>

  

Asset-II(A)				
Particulars	Capital cost as on COD		Capital cost as on 31.3.2019	
	Amount	%	Amount	%
Debt	1312.73	70.00	1449.81	70.00
Equity	562.60	30.00	621.34	30.00
<b>Total</b>	<b>1875.33</b>	<b>100.00</b>	<b>2071.15</b>	<b>100.00</b>

  

Asset-II(B)				
Particulars	Capital cost as on COD		Capital cost as on 31.3.2019	
	Amount	%	Amount	%
Debt	357.52	70.00	412.74	70.00
Equity	153.22	30.00	176.88	30.00
<b>Total</b>	<b>510.74</b>	<b>100.00</b>	<b>589.62</b>	<b>100.00</b>

### Return on Equity

40. 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:

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

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

41. The petitioner has submitted that it is liable to pay income tax at MAT rate, the RoE has been calculated @ 19.610% after grossing up the RoE with MAT rate of 20.961% as provided under Regulation 25(2)(i) of the 2014 Tariff



Regulations. As per Regulation 25(3) of the 2014 Tariff Regulations, the grossed up rate of RoE at the end of the financial year shall be trued up based on actual tax paid together with any additional tax demand including interest thereon duly adjusted for any refund of tax including interest received from the IT authorities pertaining to the 2014-19 period on actual gross income of any financial year.

42. 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 follows:-

(₹ in lakh)

Particulars	Asset-I (A)		Asset-I (B)	Asset-II (A)		Asset-II (B)
	2017-18 (pro-rata)	2018-19	2018-19	2017-18 (pro-rata)	2018-19	2018-19
Opening Equity	548.75	153.22	130.93	562.60	563.00	153.22
Addition due to Additional Capitalisation	0.00	23.66	21.31	0.40	58.34	23.66
Closing Equity	548.75	176.88	152.24	563.00	621.34	176.88
Average Equity	548.75	165.05	141.59	562.80	592.17	165.05
Return on Equity (Base Rate)	15.50%	15.50%	15.50%	15.50%	15.50%	15.50%
Tax rate for the year 2013-14 (MAT)	20.961%	20.961%	20.961%	20.961%	20.961%	20.961%
Rate of Return on Equity (Pre-tax)	19.610%	19.610%	19.610%	19.610%	19.610%	19.610%
<b>Return on Equity (Pre-tax)</b>	<b>0.29</b>	<b>32.01</b>	<b>27.77</b>	<b>64.40</b>	<b>116.12</b>	<b>32.01</b>



## **Interest on Loan**

43. 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 decapitalization of assets, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered upto the date of decapitalisation of such asset.

(4) Notwithstanding any moratorium period availed by the generating company or the transmission licensee, as the case may be, the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the depreciation allowed for the year or part of the year.

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

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

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

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

43. In these calculations, interest on loan has been worked out as hereinafter:-

(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 Form 9C given in the petition;

(ii) The normative 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.

45. 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 all the loan portfolios of the petitioner are fixed and there is no occasion for the application of floating rate of interest. We have considered the submissions of the petitioner and UPPCL. The interest on loan has been calculated on the basis of rate prevailing as on the tariff date of commercial operation. Any change in rate of interest subsequent to the tariff date of commercial operation will be considered at the time of truing-up.

46. Detailed calculation of the weighted average rate of interest has been given in **Annexure-I to IV** to this order.

47. Based on above, details of IOL calculated are as follows:-

Particulars	(₹ in lakh)					
	Asset-I (A)		Asset-I (B)	Asset-II (A)		Asset-II (B)
	2017-18 (pro-rata)	2018-19 (pro-rata)	2018-19	2017-18 (pro-rata)	2018-19	2018-19 (pro-rata)
Gross Normative Loan	1280.43	357.52	305.52	1312.73	1313.67	357.52
Cumulative Repayment upto Previous Year	0.00	0.00	0.00	0.00	57.80	0.00
Net Loan-Opening	1280.43	357.52	305.52	1312.73	1255.87	357.52
Addition due to Additional Capitalisation	0.00	55.22	49.72	0.94	136.14	55.22
Repayment during the year	0.26	29.61	26.05	57.80	104.22	29.61
Net Loan-Closing	1280.16	383.12	329.18	1255.87	1287.78	383.12



Average Loan	1280.29	370.32	317.35	1284.30	1271.82	370.32
Weighted Average Rate of Interest on Loan	7.67%	7.47%	7.58%	7.45%	7.45%	7.47%
<b>Interest</b>	<b>0.26</b>	<b>27.35</b>	<b>24.06</b>	<b>55.80</b>	<b>94.70</b>	<b>27.35</b>

### **Depreciation**

48. 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.”

49. 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 assets were 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.

50. Details of the depreciation allowed are as under:-

Particulars	Asset-I (A)		Asset-I (B)	Asset-II (A)		Asset-II (B)
	2017-18 (pro-rata)	2018-19		2017-18 (pro-rata)	2018-19	
Opening Gross Block	1829.18	1829.18	436.45	1875.33	1876.67	510.74
Additional Capital expenditure	0.00	342.99	71.03	1.34	194.48	78.88
Closing Gross Block	<b>1829.18</b>	<b>2172.17</b>	<b>507.48</b>	<b>1876.67</b>	<b>2071.15</b>	<b>589.62</b>
Average Gross Block	<b>1829.18</b>	<b>2000.68</b>	<b>471.97</b>	<b>1876.00</b>	<b>1973.91</b>	<b>550.18</b>
Rate of Depreciation	5.28%	5.28%	5.52%	5.28%	5.28%	5.44%
Depreciable Value	1646.26	1800.61	424.77	1688.40	1776.52	495.16
Remaining Depreciable Value	1646.26	1646.00	424.77	1688.40	1630.60	495.16
<b>Depreciation</b>	<b>0.26</b>	<b>105.64</b>	<b>26.05</b>	<b>57.80</b>	<b>104.22</b>	<b>29.61</b>

(₹ in lakh)



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

51. The norms specified in Regulation 29(4) of the 2014 Tariff Regulations for the instant assets covered in the instant petition are given below:-

<b>Element</b>	<b>2017-18</b>	<b>2018-19</b>
400 kV bay ₹ in lakh/bay	66.51	68.71
220 kV bay ₹ in lakh/bay	46.55	48.10

52. The O&M Expenses allowable as per Regulation 29(4) of the 2014 Tariff Regulations are as under:-

<b>Element</b>	<b>(₹ in lakh)</b>	
	<b>2017-18 (pro-rata)</b>	<b>2018-19</b>
Asset-I(A)	0.25	96.20
Asset-I (B)	0.00	96.20
Asset-II(A)	54.33	96.20
Asset-II(B)	-	95.13

53. 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. BRPL has submitted that the impact of the wage revision must be taken care by the petitioner by increasing its productivity.

54. We have considered the submissions both by petitioner and BRPL. The O&M Expenses have been worked out as per the norms specified in the 2014 Tariff Regulations. As regards the 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)**

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

#### **“28. Interest on Working Capital**

(1) 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;”

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

#### **(i) Receivables**

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



receivables have been worked out on the basis of 2 months' transmission charges.

**(ii) Maintenance spares**

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

**(iii) O & M expenses**

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.

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

As per proviso 3 of Regulation 28 of the 2014 Tariff Regulation, SBI Base rate 9.30% as on 1.4.2014 plus 350 Bps i.e. 12.80% has been considered for the instant assets, as the rate of interest on working capital.

57. The interest on working capital as determined is shown in the table given below:-

Particulars	(₹ in lakh)					
	Asset-I (A)		Asset-I (B)	Asset-II (A)		Asset-II (B)
	2017-18 (pro-rata)	2018-19	2018-19	2017-18 (pro-rata)	2018-19	2018-19 (pro-rata)
Maintenance Spares	0.04	14.43	14.43	8.15	14.43	14.27
O & M expenses	0.02	8.02	8.02	4.53	8.02	7.93
Receivables	0.18	72.51	30.13	39.84	70.52	31.84
<b>Total</b>	<b>0.24</b>	<b>94.95</b>	<b>52.58</b>	<b>52.52</b>	<b>92.97</b>	<b>54.03</b>
Interest	<b>0.03</b>	<b>12.15</b>	<b>6.73</b>	<b>6.72</b>	<b>11.90</b>	<b>6.92</b>



### **Transmission charges**

58. The transmission charges being allowed for the instant assets are summarized hereunder:-

Particulars	(₹ in lakh)					
	Asset-I (A)		Asset-I (B)	Asset-II (A)		Asset-II (B)
	2017-18 (pro-rata)	2018-19	2018-19	2017-18 (pro-rata)	2018-19	2018-19 (pro-rata)
Depreciation	0.26	105.64	26.05	57.80	104.22	29.61
Interest on Loan	0.26	103.35	24.06	55.80	94.70	27.35
Return on equity	0.29	117.70	27.77	64.40	116.12	32.01
Interest on Working Capital	0.03	12.15	6.73	6.72	11.90	6.92
O & M Expenses	0.25	96.20	96.20	54.33	96.20	95.13
<b>Total</b>	<b>1.09</b>	<b>435.04</b>	<b>180.80</b>	<b>239.06</b>	<b>423.14</b>	<b>191.02</b>

### **Filing Fee and Publication Expenses**

59. 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 filing fee and other expenses may not be allowed. 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**

60. 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.



### **Service Tax**

61. The petitioner has sought to recover service tax on transmission charges separately from the respondents, if at any time service tax on transmission is withdrawn from negative list in future. We have considered the submission of the petitioner. Service tax is not levied on transmission. Further, service tax is subsumed by GST and hence petitioner's prayer is infructuous.

### **Goods and Services Tax**

62. The petitioner has prayed for reimbursement of tax, if any, on account of implementation of GST. GST is not levied on transmission service at present and we are of the view that petitioner's prayer is premature.

### **Sharing of Transmission Charges**

63. As stated in para 20 above, the transmission charges allowed for Asset-I(B) from 1.4.2018 upto the COD of the downstream assets under the scope of RRVPNL shall be borne by RRVPNL and shall not be included in the PoC charges till the downstream assets under the scope of RRVPNL achieve COD.

64. In respect of Assets-I(A), II(A) and II(B) and in respect of Asset-I(B), after the COD of the downstream assets under the scope of RRVPNL as stated in para 20 and 63, the transmission charges allowed in this order shall be recovered on monthly basis in accordance with Regulation 43 of the 2014 Tariff Regulations. The billing, collection and disbursement of transmission charges shall be governed by provision of Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010 as amended from time to time.





65. This order disposes of Petition No. 249/TT/2017.

sd/-

**(Dr. M.K. Iyer)**  
**Member**

sd/-

**(A.S. Bakshi)**  
**Member**

sd/-

**(A.K. Singhal)**  
**Member**

sd/-

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



**Annexure-I**

**CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN  
OF ASSET-I (A)**

(₹ in lakh)

Sl. no.	Name of loan	Particulars	2017-18	2018-19
1	Bond LVII	Net opening loan	44.00	44.00
		Add: Addition during the period		
		Less: Repayment during the period	-	
		Net Closing Loan	<b>44.00</b>	<b>44.00</b>
		Average Loan	44.00	44.00
	Rate of Interest	7.2000%	7.2000%	
	<b>Interest</b>	<b>3.17</b>	<b>3.17</b>	
	Rep Scheduled			
2	<b>BOND LIV</b>	Net opening loan	114.28	114.28
		Add: Addition during the period		
		Less: Repayment during the period		
		Net Closing Loan	<b>114.28</b>	<b>114.28</b>
		Average Loan	114.28	114.28
		Rate of Interest	7.9700%	7.9700%
	<b>Interest</b>	<b>9.11</b>	<b>9.11</b>	
	<b>Rep Scheduled</b>			
3	<b>SBI 2016-17 Q4</b>	Net opening loan	44.00	44.00
		Add: Addition during the period		
		Less: Repayment during the period		-
		Net Closing Loan	<b>44.00</b>	<b>44.00</b>
		Average Loan	44.00	44.00
		Rate of Interest	8.9000%	8.9000%
	<b>Interest</b>	<b>3.92</b>	<b>3.92</b>	
	<b>Rep Scheduled</b>			
4	<b>Bond LIX</b>	Net opening loan	163.00	163.00
		Add: Addition during the period		
		Less: Repayment during the period		
		Net Closing Loan	<b>163.00</b>	<b>163.00</b>
		Average Loan	163.00	163.00
		Rate of Interest	7.3000%	7.3000%
	<b>Interest</b>	<b>11.90</b>	<b>11.90</b>	



	<b>Rep Scheduled</b>			
4	<b>Bond LX</b>	Net opening loan	133.00	133.00
		Add: Addition during the period		
		Less: Repayment during the period		
		<b>Net Closing Loan</b>	<b>133.00</b>	<b>133.00</b>
		Average Loan	133.00	133.00
		Rate of Interest	7.2000%	7.2000%
		<b>Interest</b>	<b>9.58</b>	<b>9.58</b>
	<b>Rep Scheduled</b>			
1	<b>Bond LXI 7.74%</b>	Net opening loan	782.14	782.14
		Add: Addition during the period	-	29.26
		Less: Repayment during the period		
		<b>Net Closing Loan</b>	<b>782.14</b>	<b>811.40</b>
		Average Loan	782.14	796.77
		Rate of Interest	7.7400%	7.7400%
		<b>Interest</b>	<b>60.54</b>	<b>61.67</b>
	<b>Gross Total</b>	Net opening loan	1280.42	1280.42
		Add: Addition during the period	0.00	29.26
		Less: Repayment during the period	0.00	0.00
		<b>Net Closing Loan</b>	<b>1280.42</b>	<b>1309.68</b>
		Average Loan	1280.42	1295.05
		<b>Rate of Interest</b>	<b>7.6697%</b>	<b>7.6705%</b>
		Interest	98.20	99.34



**Annexure-II****CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN OF ASSET-I (B)**

(₹ in lakh)

Sl. no.	Name of loan	Particulars	2017-18	2018-19
1	Bond LIV	Net opening loan	43.22	43.22
		Add: Addition du. the period		
		Less: Repayment du. the period	-	
		Net Closing Loan	<b>43.22</b>	<b>43.22</b>
		Average Loan	43.22	43.22
		Rate of Interest	7.9700%	7.9700%
		<b>Interest</b>	<b>3.44</b>	<b>3.44</b>
	Rep Scheduled			
2	<b>BOND LVIII</b>	Net opening loan	44.00	44.00
		Add: Addition du. the period		
		Less: Repayment du. the period		
		Net Closing Loan	<b>44.00</b>	<b>44.00</b>
		Average Loan	44.00	44.00
		Rate of Interest	7.8900%	7.8900%
		<b>Interest</b>	<b>3.47</b>	<b>3.47</b>
	Rep Scheduled			
3	<b>BOND LIX</b>	Net opening loan	29.80	29.80
		Add: Addition du. the period		
		Less: Repayment du. the period		-
		Net Closing Loan	<b>29.80</b>	<b>29.80</b>
		Average Loan	29.80	29.80
		Rate of Interest	7.3000%	7.3000%
		<b>Interest</b>	<b>2.18</b>	<b>2.18</b>
	Rep Scheduled			
4	<b>Bond LX</b>	Net opening loan	94.64	94.64
		Add: Addition du. the period		
		Less: Repayment du. the period		
		Net Closing Loan	<b>94.64</b>	<b>94.64</b>
		Average Loan	94.64	94.64
		Rate of Interest	7.2000%	7.2000%
		<b>Interest</b>	<b>6.81</b>	<b>6.81</b>
	Rep Scheduled			
1	<b>Proposed Loan 2017-18</b>	Net opening loan	93.85	93.85



	<b>7.74%</b>	Add: Addition du. the period	-	-
		Less: Repayment du. the period		
		Net Closing Loan	<b>93.85</b>	<b>93.85</b>
		Average Loan	93.85	93.85
		Rate of Interest	7.7400%	7.7400%
		<b>Interest</b>	<b>7.26</b>	<b>7.26</b>
	<b>Gross Total</b>	Net opening loan	305.51	305.51
		Add: Addition du. the period	0.00	0.00
		Less: Repayment du. the period	0.00	0.00
		Net Closing Loan	305.51	305.51
		Average Loan	305.51	305.51
		<b>Rate of Interest</b>	<b>7.58%</b>	<b>7.58%</b>
		Interest	23.17	23.17



**Annexure-III****CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN  
OF ASSET-II (A)**

(₹ in lakh)

Sl. no.	Name of loan	Particulars	2017-18	2018-19
1	Bond LVIII	Net opening loan	27.56	27.56
		Add: Addition during the period		
		Less: Repayment during the period	-	
		Net Closing Loan	<b>27.56</b>	<b>27.56</b>
		Average Loan	27.56	27.56
		Rate of Interest	7.8900%	7.8900%
	<b>Interest</b>	<b>2.17</b>	<b>2.17</b>	
	Rep Scheduled			
2	<b>BOND LIV</b>	Net opening loan	213.25	213.25
		Add: Addition during the period		
		Less: Repayment during the period		
		Net Closing Loan	<b>213.25</b>	<b>213.25</b>
		Average Loan	213.25	213.25
		Rate of Interest	7.9700%	7.9700%
	<b>Interest</b>	<b>17.00</b>	<b>17.00</b>	
	Rep Scheduled			
3	<b>SBI 2016-17 Q4</b>	Net opening loan	40.00	40.00
		Add: Addition during the period		
		Less: Repayment during the period		-
		Net Closing Loan	<b>40.00</b>	<b>40.00</b>
		Average Loan	40.00	40.00
		Rate of Interest	8.9000%	8.9000%
	<b>Interest</b>	<b>3.56</b>	<b>3.56</b>	
	Rep Scheduled			
4	<b>Bond LIX</b>	Net opening loan	728.00	728.00
		Add: Addition during the period		
		Less: Repayment during the period		
		Net Closing Loan	<b>728.00</b>	<b>728.00</b>
		Average Loan	728.00	728.00
		Rate of Interest	7.3000%	7.3000%
	<b>Interest</b>	<b>53.14</b>	<b>53.14</b>	



	<b>Rep Scheduled</b>			
4	<b>Bond LX</b>	Net opening loan	303.92	304.85
		Add: Addition during the period	0.93	9.93
		Less: Repayment during the period		
		<b>Net Closing Loan</b>	<b>304.85</b>	<b>314.78</b>
		Average Loan	304.39	309.82
		Rate of Interest	7.2000%	7.2000%
		<b>Interest</b>	<b>21.92</b>	<b>22.31</b>
	<b>Rep Scheduled</b>			
	<b>Gross Total</b>	Net opening loan	1312.73	1313.66
		Add: Addition during the period	0.93	9.93
		Less: Repayment during the period	0.00	0.00
		<b>Net Closing Loan</b>	<b>1313.66</b>	<b>1323.59</b>
		Average Loan	1313.20	1318.63
		<b>Rate of Interest</b>	<b>7.4467%</b>	<b>7.4457%</b>
		<b>Interest</b>	<b>97.79</b>	<b>98.18</b>



**Annexure-IV**

**CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN  
OF ASSET-II (B)**

(₹ in lakh)

Sl. no.	Name of loan	Particulars	2017-18	2018-19
1	Bond LVII	Net opening loan		40.00
		Add: Addition during the period		
		Less: Repayment during the period	-	
		Net Closing Loan	-	<b>40.00</b>
		Average Loan	-	40.00
		Rate of Interest	7.2000%	7.2000%
		<b>Interest</b>	-	<b>2.88</b>
#	<b>BOND LIV</b>	Net opening loan		28.75
		Add: Addition during the period		
		Less: Repayment during the period		
		Net Closing Loan	-	<b>28.75</b>
		Average Loan	-	28.75
		Rate of Interest	7.9700%	7.9700%
		<b>Interest</b>	-	<b>2.29</b>
2	<b>BOND LVIII</b>	Net opening loan		12.44
		Add: Addition during the period		
		Less: Repayment during the period		
		Net Closing Loan	-	<b>12.44</b>
		Average Loan	-	12.44
		Rate of Interest	7.9700%	7.8900%
		<b>Interest</b>	-	<b>0.98</b>
	<b>Rep Scheduled</b>			
3	<b>SBI 2018-19</b>	Net opening loan		-
		Add: Addition during the period		1.28
		Less: Repayment during the period		-
		Net Closing Loan	-	<b>1.28</b>
		Average Loan	-	0.64
		Rate of Interest	8.9000%	8.9000%
		<b>Interest</b>	-	<b>0.06</b>





	<b>Rep Scheduled</b>			
4	<b>Bond LX</b>	Net opening loan		160.22
		Add: Addition during the period		
		Less: Repayment during the period		
		Net Closing Loan	-	<b>160.22</b>
		Average Loan	-	160.22
		Rate of Interest	7.3000%	7.2000%
		<b>Interest</b>	-	<b>11.54</b>
	<b>Rep Scheduled</b>			
1	<b>Bond LXI 7.74%</b>	Net opening loan		116.11
		Add: Addition during the period	-	7.90
		Less: Repayment during the period		
		Net Closing Loan	-	<b>124.01</b>
		Average Loan	-	120.06
		Rate of Interest	7.7400%	7.7400%
		<b>Interest</b>	-	<b>9.29</b>
	<b>Gross Total</b>	Net opening loan	0.00	357.52
		Add: Addition during the period	0.00	9.18
		Less: Repayment during the period	0.00	0.00
		Net Closing Loan	0.00	366.70
		Average Loan	0.00	362.11
		<b>Rate of Interest</b>	<b>0.00</b>	<b>7.4669%</b>
		Interest	0.00	27.04

