CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

Petition No. 206/TT/2017

Coram:

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

Date of Order : 19.09.2018

In the matter of:

Approval of transmission tariff of Rapp-Kota 400 kV D/C line (part of Rapp-Jaipur (South) 400 kV D/C line with one ckt LILOed at Kota) along with associated bay at Kota under transmission system associated with Rapp 7 and 8 Part-A 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 - 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.

18. Nuclear Power Corporation of India Ltd.
    Corporate Office
    Nabhikiya Urja Bhavan, Anushakti Nagar,
    Mumbai-400094. **….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 the petitioner, Power Grid Corporation of India Ltd. ("PGCIL") seeking approval of transmission tariff for Rapp–Kota 400 kV D/C line (part of Rapp-Jaipur (South) 400 kV D/C line with one ckt LILOed at Kota) along with associated bay at Kota (hereinafter referred to as "transmission assets") under transmission system associated with RAPP 7 and 8 Part-A (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").

2. The petitioner has made the following prayers:-

"1) Approve the Transmission Tariff for the tariff block 2014-19 block for the assets covered under this petition, as per para –6 above.

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

3) Allow tariff upto 90% of the Annual Fixed Charges in accordance with clause 7 (i) of Regulation 7 CERC (Terms and Conditions of tariff) Regulations,2014 for purpose of inclusion in the PoC charges.

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

5) Allow the petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission as provided under clause 25 of the Tariff regulations 2014.

6) Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in

terms of Regulation 52 Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014, and other expenditure (if any) in relation to the filing of petition.

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

8) Allow the petitioner to bill and adjust impact on Interest on Loan due to change in Interest rate on account of floating rate of interest applicable during 2014-19 period, if any, from the respondents.

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

10) Allow the petitioner to bill and recover GST on Transmission charges separately from the respondents, if GST on Transmission of electricity is withdrawn from the exempted (negative) list at any time in future. Further any taxes and duties including cess, etc. imposed by any Statutory/Govt./Municipal Authorities shall be allowed to be recovered from the beneficiaries.

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

3. The Investment Approval (IA) for implementation of "transmission system associated with RAPP 7 and 8 Part-A" was accorded by the Board of Directors of the petitioner on 28.3.2013 vide the Memorandum Ref: C/CP/RAPP 7&8 Part A dated 5.4.2013 at an estimated cost of ₹10040 lakh including IDC of ₹501 lakh (based on February, 2013 price level).

4. The transmission system is designed for power evacuation from RAPP-7&8 and for stable operation of RAPP 5&6 units as discussed and agreed in 30th Standing Committee Meeting on Transmission System planning of Northern Region held on 19.12.2011 and further in 22nd Meeting of TCC and 25th meeting of NRPC meeting held on 23.2.2012 and 24.2.2012.

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

A. Transmission Lines:

RAPP-Kota 400 kV D/C line (bunched at both ends) [part of RAPP-Jaipur (south) 400 kV D/C line with one ckt LILOed at Kota]*.

*(11 km. of Multi Circuit portion which was constructed and strung under Transmission System associated with RAPP- 5&6, shall be part of the line)

B. Sub-station Works:

Extension of 400 kV Sub-station at Kota -1 no. of 400 kV line bay at Kota.

Implementation Schedule

6. As per the IA dated 28.3.2013, the instant assets were scheduled to be put into commercial operation within 24 months. Accordingly, the scheduled date of commercial operation of the instant assets 27.3.2015. However, the instant assets were put into commercial operation on 3.8.2017. With the COD of the instant assets, the entire scope of work as per Investment Approval has been completed.

7. Annual Fixed Charges was allowed for the instant assets in order dated 20.4.2018 under Regulation 7(7) of the 2014 Tariff Regulations for inclusion in the PoC computation.

8. The details of the transmission charges claimed by the petitioner are as under:-

(₹ in lakh)

Particulars	**2017-18 (pro-rata)**	**2018-19**
Depreciation	287.84	491.67
Interest on Loan	306.57	492.39
Return on Equity	320.22	546.98
Interest on Working Capital	23.93	39.61
O&MExpenses	76.30	119.21
Total	**1014.86**	**1689.86**

9. The details of the interest on working capital claimed by the petitioner are as

under:-

Particulars	2017-18 (pro-rata)	2018-19
		(₹ in lakh)
Maintenance Spares	17.31	17.88
O&M expenses	9.62	9.93
Receivables	255.78	281.64
Total	**282.70**	**309.46**
Interest	23.93	39.61
Rate of Interest	12.80%	12.80%

10. 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. BSES Rajdhani Power Limited (BRPL), Respondent No. 12 has filed reply vide affidavit dated 2.12.2016 and Uttar Pradesh Power Corporation Limited (UPPCL), Respondent No.9 has filed its reply vide affidavit dated 1.12.2017. BRPL and UPPCL have raised the issue of time over-run, cost variation, effective tax rate, reimbursement of expenditure towards filing fee, license fee etc. The petitioner has filed rejoinders dated 5.4.2017 and 10.1.2018 to the reply of BRPL and UPPCL respectively. BRPL has also filed additional reply vide affidavit dated 16.8.2018 wherein it has raised the issue of Transmission Service Agreement. The objections raised by the respondents and the clarifications given by the petitioner are addressed in the relevant paragraphs of this order.

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

Date of Commercial Operation (COD)

12. The petitioner has initially submitted that the anticipated COD of the instant assets was 30.7.2017. Subsequently, vide affidavit dated 9.1.2018, the petitioner has submitted that the asset was put into commercial operation on 3.8.2017. The

petitioner has submitted that Units 7 and 8 of RAPP have been delayed and expected to be commissioned in March, 2020 and March, 2021 respectively. The COD of the instant asset was discussed in 25th NRPC meeting held on 23.2.2012 and 24.2.2012 wherein it was agreed to pre-pone of RAPP-Kota section of 400 kV RAPP-Jaipur D/C (with one circuit via Kota) covered under the evacuation system of RAPP-7 and 8. It was also agreed that the RAPP-Kota section of RAPP-Jaipur 400 kV D/C line shall be implemented and both ckts shall be bunched at both ends till the commissioning of RAPP 7 and 8. The RAPP Kota 400 kV D/C line (part of RAPP-Jaipur (South) 400 kV D/C line of which one circuit to be LILOed at Kota) was pre-poned to strengthen the system. The instant asset has been utilized for evacuation of power from Unit-5 and 6 de-linking Unit-7 and 8 of RAPP.

13. The petitioner was directed to submit the status of associated units of RAPP and the bays at RAPP end and the CTU was directed to clarify whether the instant line is of dedicated nature. In response, the petitioner vide affidavit dated 16.2.2018, on behalf of CTU has submitted that RAPP-C (Unit-5 and 6) was connected to Kankroli through 400 kV D/C line and to Kota through 400 kV S/C line. There were operational difficulties while evacuating power from RAPP-C (Unit 5 & 6). High voltage issues at RAPP-5 and 6 compelled the opening of one circuit of RAPP-Kankroli 400 kV D/C line many times. Further, tripping of Kota line led to oscillations while evacuating power from RAPP-5 and 6. The petitioner submitted that considering the operational difficulty, the matter was discussed in 30th SCM of NR held on 19.12.2011 wherein it was decided to prepone the RAPP-Kota section of 400 kV RAPP-Jaipur D/C line (with one circuit via Kota) covered under the evacuation system of RAPP-7 and 8. This would provide two numbers of 400 kV lines from RAPP to Kota. The petitioner has

further submitted that the matter was discussed in 25th NRPC meeting held on 23.2.2012 and 24.2.2012 wherein it was agreed to prepone of RAPP-Kota section of 400 kV RAPP-Jaipur D/C (with one circuit via Kota) covered under the evacuation system of RAPP-7 and 8. It was also agreed that the RAPP-Kota section of RAPP-Jaipur 400 kV D/C line shall be implemented and both ckts shall be bunched at both ends till the commissioning of RAPP-7 and 8.

14. In response to the query of the Commission regarding the status of RAPP, the Nuclear Power Corporation of India Limited (NPCIL) vide letter dated 14.2.2018 has submitted that the construction activities of Rajasthan Atomic Power Project (RAPP) Unit-7 and 8, India's second pair of indigenously designed Pressurized Heavy Water Reactors of 700 MWe unit size, are presently in progress after achieving First Pour of Concrete in July, 2011 and September, 2011 respectively. Delivery of equipment and components is in progress. Calandria and End Shield Installation for both units have been completed. In Unit-7, concreting of ring beam, which is a part of Inner Containment dome, is completed. Fabrication and ground assembly of dome supporting structure as well as construction of steam generator vaults is completed. A major milestone 'Installation of Coolant tube' has been accomplished and Feeders installation is in progress. The existing 400 kV Switchyard of Rajasthan Atomic Power Station-5 and 6 (RAPS-5 and 6, 2X220 MWe) has been extended to accommodate 400 kV transmission lines and Generator Transformers (GTs) of Unit-7 and 8. 400 kV Sujalpur-I, Sujalpur-II lines along with respective line reactors (50 MVAR each) and High Velocity Water Spray [HVWS] system have been charged and synchronized. 400 kV RAPP-Kota S/C line (Loop in and Loop out i.e. LILO of one circuit of 400 kV RAPP-Jaipur D/C at Kota) was put into commercial operation on 1.8.2017. This line is a part of Northern Regional Transmission System and not

dedicated to RAPP alone. 220 kV switchyard to energise the Start Up Transformer (SUT) for supplying downstream unit auxiliaries (via 220/6.6 kV Transformation) has been commissioned from adjacent 220 kV switchyard of RAPS-5 and 6. Erection of SUT is being taken up. Based on the current progress the projected COD dates for RAPP-7 and RAPP-8 are March, 2020 and March, 2021 respectively.

15. We have considered the submissions of the petitioner. The petitioner has submitted the CEA certificate, RLDC certificate and the CMD certificate vide affidavit dated 9.1.2018. Further, the instant asset has been put into use from 3.8.2017 for evacuation of power from Units 5 and 6 of RAPP as per the revised arrangement. Accordingly, the COD of the instant asset has been approved as 3.8.2017.

<u>Transmission Service Agreement (TSA)</u>

16. During the hearing on 8.8.2018, learned counsel for BRPL requested to direct the petitioner to submit the power flow details of the instant asset on the date of energisation, TSA pertaining to the instant assets and copy of the LTA entered into by the petitioner with the generators. In response, the petitioner vide affidavit dated 18.8.2018 has submitted the power flow status of the RAPP-Kota line for three months from its COD i.e. from 30.8.2017 to 3.10.2017. The petitioner has further submitted that the instant asset was initially included in the LTA granted to RAPP 7 & 8 and subsequently considering the system requirement in the 25th NRPC meeting held on 23-24 February, 2012 and 31st Northern Region Standing Committee held on 2.1.2013, the instant asset was delinked from the evacuation system of RAPP 7 & 8 generation. Therefore, LTA is not applicable for the instant assets.

17. As regards TSA, BRPL has submitted that as per Regulation 3(63) of the 2014 Tariff Regulations, TSA means the agreement between transmission license and designated inter-State transmission customers in accordance with the Central Electricity Regulatory Commission (Sharing of Inter State Transmission Charges and Losses) Regulations, 2010 (hereinafter referred to as the “2010 Sharing Regulations”) and any other agreement between the transmission licensee and the long term transmission customer where the payment of transmission charges is not made through PoC mechanism under the 2010 Sharing Regulations. BRPL has submitted that accordingly, there is need to enter into another agreement for recovery of the transmission charges through PoC mechanism. In response, the petitioner has submitted that the petitioner has complied with the provisions of 2010 Sharing Regulations and the terms of the model TSA entered into with the designated customers including BRPL.

18. We have considered the submissions of the petitioner and BRPL. As per Regulation 2(u) of the 2010 Sharing Regulations, TSA means an agreement to be entered into between the designated ISTS customers and ISTS licensee in terms of the said Regulation. Regulation 2(u) provides as under:-

> “(u) Transmission Service Agreement (TSA) shall mean the agreement to be entered into between the Designated ISTS Customer(s) and ISTS Licensee(s) in terms of Chapter 6;”

As per Regulation 13 of the 2010 Sharing Regulations, the designated ISTS customers and the CTU have to enter into new TSA or modify the existing BPTA to incorporate the new tariff and related conditions and it shall govern the provisions of transmission services and the charges for the same and the agreement be called TSA. Further, as per the said Regulation, the CTU shall notify a model TSA and it shall be the default transmission agreement and shall mandatorily apply to all the designated ISTS customers. The relevant provisions of Regulation 13 of the 2010 Sharing Regulations are as under:-

> "(1) The Designated ISTS Customers and the CTU shall enter into new transmission services agreement or modify the existing Bulk Power Transmission Agreements to incorporate the new tariff and related conditions. Such agreement shall govern the provision of transmission services and charging for the same and shall be called the Transmission Service Agreement (TSA) and shall, inter-alia, provide for:"
>
> "(4) The final version of the Model Transmission Service Agreement, as approved by the Commission shall be notified and used as the base transmission service agreement by the ISTS Licensees.
>
> (5) The notified Model Transmission Service Agreement shall be the default transmission agreement and shall mandatorily apply to all Designated ISTS Customers."

Accordingly, the petitioner and all the DICs entered into model TSA and the petitioner signed the model TSA with BRPL on 19.8.2011. As per clause 4 of the model TSA, the existing ISTS owned, operated and maintained by it are given in Schedule II of the model TSA. Any new ISTS, on approval of the concerned RPC, shall be intimated to the DICs and shall become part of Schedule-II of the TSA. Clause 4 of the TSA provides as follows:-

> **"4.0 Description of inter-State Transmission System (ISTS)**
>
> **4.1 Existing ISTS**
>
> 4.1.1 The list of ISTS presently owned, operated and maintained by ISTS Licensees in the country is detailed in Schedule-II
>
> **4.2 Deemed ISTS**
>
> 4.2.1 The provisions of the Agreement shall be applicable to Deemed ISTS, as detailed in **Schedule-II.**
>
> 4.2.2 Any additions/deletions to the existing list as certified by the RPCs and approved by the Commission shall be intimated to the DICs by the Regional Power Committee (RPC). Such modifications shall form part of **Schedule-II** of the Agreement and shall be governed by the terms and conditions contained herein.
>
> 4.3 New ISTS Schemes
>
> 4.3.1 New ISTS Schemes shall be as identified in consultation with the stakeholders, by CEA and CTU.

4.3.2 Any element that may be added to the ISTS detailed in Article 4.1.1 and declared for commercial operation by the concerned ISTS Licensee will be intimated to the DICs by the ISTS License or the CTU, as and when these are declared under commercial operation. Such addition shall form a part of Schedule-II of this Agreement and shall be governed by the terms and conditions as contained herein.

4.3.3 CTU shall notify all the ISTS Licensees and the DICs, as and when such element, as mentioned in Article 4.3.2 comes into operation."

The petitioner has submitted that the DICs are intimated about the COD of the new ISTS and are included in the Scheduled II of the TSA. The petitioner has submitted that the TSA is posted on the petitioner's website and has also submitted a copy of the same. It is observed that the petitioner has entered into a TSA as required under the provisions of 2010 Sharing Regulations and has complied with the requirement of the TSA by including the new ISTS in Schedule-II of the TSA.

Capital Cost

19. The petitioner vide affidavit dated 9.1.2018 and Auditor certificate dated 29.8.2017 has claimed the following capital cost as on COD and additional capital expenditure:-

(₹ in lakh)

Approved apportioned cost as per FR	Cost as on COD	Projected Additional Capital Expenditure		Total
		2017-18	2018-19	
10040.13	6912.18	2233.34	277.44	**9422.96**

20. The estimated completion cost of the instant assets is within the approved apportioned cost.

Time over-run

21. As per IA, the scheduled COD of the instant asset was 27.3.2015. However, the instant asset was put into commercial operation on 3.8.2017 and hence there is a time over-run of 28 months 7 days. The petitioner has submitted that the time over-run was due to delay in forest clearance, time taken for getting permission

from RAPP to undertake work in the premises of RAPP and delay in getting explosives. As regards delay in getting forest clearance, the petitioner has submitted that the proposal for diversion of 92.676 Ha of forest land was forwarded to forest Department on 28.2.2014. The petitioner has submitted that on joint inspection by the petitioner and forest officials, it was found that the land involved falls in two forest divisions (Bundi and Kota) and hence two proposals were sent. Approval for diversion of land involves hierarchy of various government departments like DM office, Forest Office Rajasthan, Municipal Corporation Kota, Gram Sabha etc. The splitting of proposal into two divisions further complicated the approval. Due to the rigorous efforts by the petitioner, the in-principle approval was received on 16.10.2015 and 21.10.2015 for Bundi and Kota forest divisions respectively and the final approval was received on 3.12.2015. Thus, the forest approval took 21 months 5 days.

22. The petitioner has submitted that around 8 towers and gentry of the transmission line are located within the premises of RAPP Nuclear generation plant. As the RAPP premises is on hard rocky terrain, permission for blast at every location has to be taken and work was to be done under the supervision of RAPP official which delayed the work. The petitioner has submitted that the time schedule for completing the work within the RAPP premises was 12 months. Therefore, the petitioner approached RAPP on 3.12.2015 for permission to work in its premise, blasting permit was granted by NPCIL on 28.11.2016 to 20.7.2017 and the work permit was granted from 16.1.2017 to 24.8.2017. Therefore, it took the petitioner 11 months and 25 days to get the permission to work from NPCIL. The petitioner has submitted that on 11.8.2016 there was a huge blast in Shiv Shakti Factory Rawat Bhata, the supplier of explosive required for evacuation of pit, which resulted in stoppage of supply of explosive for a month. The work

started on 28.11.2016 and was completed on 3.8.2017 and it took 8 months and 5 days to complete the work. The petitioner has requested to condone the time over-run of 8 months due to this reason.

23. BRPL has submitted that the PERT chart enclosed with the petition is merely of the schedule completion of projects and the actual completion has not been superimposed on the Chart. An erroneous PERT and CPM does not show the correct reasons for time over-run and it is difficult to determine whether the reasons for time over-run were beyond the control of the petitioner. In response, the petitioner submitted that the reasons for delay, PERT chart and CPM analysis were submitted with the petition. The petitioner has further submitted that the delay in forest clearance, constrained working conditions in RAPP led to the time over-run of instant asset.

24. We have considered the submissions of the petitioner and BRPL. There is a time over-run of 28 months and 7 days in COD of the instant assets. The time over-run has been attributed mainly to the delay in obtaining the forest clearance, the delay in getting the permission to work in the NPCIL including delay in getting explosives due to blast in the explosive factory.

25. As regards delay in getting forest clearance, it is observed that petitioner approached the forest department for forest clearance on 28.2.2014 and the final approval was received on 3.12.2015. Thus, it took 21 months and 5 days for obtaining forest clearance. The mandatory period of obtaining the approval of forest clearance is 10 months and accordingly the petitioner should have built in these 10 months while fixing the timeline for completion of the project. Accordingly, the mandatory period of 10 months is excluded from 21 months and

5 days, the time taken for obtaining the forest clearances. The remaining period of 11 months and 5 days taken for obtaining the forest clearances is condoned as the same cannot be attributed to the petitioner.

26. The second reason given by the petitioner for the time over-run is the delay in getting the permission to work in the premises of RAPP and the delay in supply of explosives due to blast in the explosives factory. It is observed that the petitioner took 20 months to complete the work (11 months and 25 days to obtain the permission and 8 months and 6 days to carry out the work). The petitioner has not submitted the time schedule for completion of work in the premises of RAPP. Taking into consideration the work to be done in the RAPP premises, we have considered 12 months to complete the work in the RAPP premises. Thus, it took 8 months more for the petitioner to complete the work in RAPP premises. We are of the view that both the petitioner and NPCIL are equally responsible for delay in completion of the work in the RAPP premises. Accordingly, the time over-run of 8 months cannot be entirely attributable to the petitioner and thus 50% of the time over-run, i.e. 4 months is condoned and the remaining 4 months period is not condoned.

27. In view of the above, out of the total time over-run of 28 months and 7 days, time over-run of 11 months and 5 days due to delay in forest clearance and 4 months due to delay in getting the permission to work in RAPP is condoned. The remaining period of time over-run of 13 months and 2 days is not condoned. Accordingly, the IDC and IEDC for the period of time over-run of 13 months and 2 days are not capitalised.

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

28. The petitioner has claimed ₹98.30 lakh and ₹651.32 lakh towards IDC and IEDC. UPPCL has submitted that the petitioner has not submitted the details of the IDC and IEDC discharged and hence the petitioner may be directed to submit the same. The petitioner has submitted the following breakup of IDC and IEDC in its rejoinder:-

(₹ in lakh)

	IEDC	IDC
From Investment approval date to schedule COD	45.39	300.74
Breakup from schedule COD to actual COD	52.91	350.58
Total as per Auditor certificate dated 28.12.2017	98.30	651.32

29. As the time over-run of 13 months and 28 days are not condoned, the IDC and IEDC claimed by the petitioner is disallowed as discussed in subsequent paragraph.

Initial spares

30. BRPL has submitted that the initial spares claimed are beyond the norms and the petitioner may be asked to justify the excess claim of initial spares. In response, the petitioner submitted that spare procured for the present asset are essential spare for smooth running of transmission system. Hence, it is prayed that initial spares claimed may be allowed. UPPCL has submitted that the petitioner has claimed initial spares of 16.85% of the capital cost which is higher than the permissible limit of 6% in case of Brownfield sub-stations and hence the claim may be restricted to 6%. In response, the petitioner has submitted that the initial spares claimed may be allowed and submitted the following discharge details of initial spares:-

(₹ in lakh)

Sr. No.	Particulars	Transmission line	Sub-station
1	Expenditure Up to COD and Included in the auditor certificate upto COD (3.8.2017)	0.00	61.95
2	Estimated Expenditure in add-cap 2017-18 (Included in auditor certificate as add-cap 2017-18)	70.08	6.36
	Total	**70.08**	**68.31**

31. The instant assets are part of the Brown Field Sub-station. As per Regulation 13 of the 2014 Tariff Regulations initial spares are to be capitalised @ 6% of the cost of plant and machinery upto cut-off date. The initial spares claimed by the petitioner for transmission line is within the specified limit. However, it is more than the limit specified in the case of sub-station. The initial spares are allowed as specified in Regulation 13 of the 2014 Tariff Regulations. The details of initial spares claimed and allowed are as follows:-

(₹ in lakh)

Asset	Initial spares claimed	Initial spares allowed	Initial spares disallowed
Sub-Station	68.31	21.95	46.36
Transmission line	70.08	70.08	0.00

Capital cost allowed as on COD

32. The capital cost allowed as on COD under Regulation 9(2) of 2014 Tariff Regulation is summarized under:-

(₹ in lakh)

Capital cost as on COD claimed by petitioner	IDC allowed	IEDC allowed	Initial spares Disallowed	Capital cost as on COD considered for tariff calculation
1	2	3	4	5= (1+2+3-4)
6560.55	471.77*	71.20	46.36	7057.16

(*Out of ₹651.32 lakh and ₹98.30 lakh, IDC of ₹471.77 lakh and IEDC of ₹71.20 lakh allowed after adjusting IDC and IEDC corresponding to the time over-run not condoned).

Additional Capital expenditure

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. The cut-off date in case of instant asset is 31.3.2020.

Capital Cost summary from COD to 31.3.2019

35. The capital cost as on COD and the additional capital expenditure considered for the purpose of computation of tariff:-

(₹ in lakh)

Considered Capital Cost as on COD	2017-18	2018-19	Capital cost as on 31.3.2019
7057.16	1801.36	277.44	9135.96

Debt- Equity ratio

36. The capital cost on the dates of commercial operation arrived at as above and additional capitalization allowed have been considered in the normative debt-equity ratio of 70:30. Accordingly, the Debt-Equity Ratio for the instant assets is as under:-

(₹ in lakh)

Particular	Capital cost as on COD		Projected additional capital expenditure		Capital cost as on 31.3.2019	
	Amount	%	Amount	%	Amount	%
Debt	4940.02	70.00	1455.16	70.00	6395.18	70.00
Equity	2117.15	30.00	623.64	30.00	2740.79	30.00
Total	**7057.16**	**100.00**	**2078.80**	**100.00**	**9135.96**	**100.00**

Return on Equity (RoE)

37. 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. 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. The petitioner has also submitted that adjustment due to any additional tax demand including interest duly adjusted for any refund of the tax including interest received from IT authorities shall be recoverable/adjustable after completion of income tax assessment of the financial year.

38. We have considered the submissions made by the petitioner. Regulation 24 read with Regulation 25 of the 2014 Tariff Regulations provides for grossing up of RoE with the effective tax rate for the purpose of return on equity. It further provides that in case the generating company or transmission licensee is paying Minimum Alternative Tax (MAT), the MAT rate including surcharge and cess will be considered for the grossing up of RoE. Accordingly, the MAT rate applicable during 2013-14 has been considered for the purpose of 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	**2017-18 (pro-rata)**	**2018-19**
Opening Equity	2117.15	2657.56
Addition due to Additional Capitalization	540.41	83.23
Closing Equity	2657.56	2740.79
Average Equity	2387.35	2699.17
Return on Equity (Base Rate)	15.50%	15.50%
MAT rate for the Financial year 2013-14	20.961%	20.961%

Rate of Return on Equity (Pre-tax)	19.610%	19.610%
Return on Equity (Pre-tax)	**309.11**	**529.31**

Interest on Loan (IoL)

39. The petitioner has prayed to allow it to bill and adjust the impact of interest on loan due to change in the interest rate on account of floating rate of interest applicable during 2014-19 period from the respondents. Interest on loan is allowed for the instant assets as provided in Regulation 26 of the 2014 Tariff Regulations. Interest on loan has been worked out as under:-

(i) Gross amount of loan, repayment of installments and rate of interest 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.

(iii) Weighted average rate of interest on actual average loan considered as per (i) above, is applied on the notional average loan during the year to arrive at the IoL.

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

(₹ in lakh)

Particulars	**2017-18 (pro-rata)**	**2018-19**
Gross Normative Loan	4940.02	6200.97
Cumulative Repayment upto previous Year	0.00	277.86
Net Loan-Opening	4940.02	5923.11
Addition due to Additional Capitalization	1260.95	194.21
Repayment during the year	277.86	475.79
Net Loan-Closing	5923.11	5641.53
Average Loan	5431.56	5782.32
Weighted Average Rate of Interest on Loan	8.25%	8.24%
Interest on Loan	**295.86**	**476.46**

Depreciation

41. The petitioner has claimed actual depreciation as a component of Annual Fixed Charges. Depreciation has been calculated in accordance with Regulation 27 (5) of the 2014 Tariff Regulations.

42. The instant asset has been put under commercial operation as on 3.8.2017 respectively. The asset will complete 12 years beyond the tariff period 2014-19. Accordingly, the depreciation for entire tariff period i.e. 2014-19 has been worked out based on Straight Line Method and at rates specified in Appendix-II to 2014 Tariff Regulations.

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

(₹ in lakh)

Particulars	**2017-18 (pro-rata)**	**2018-19**
Opening Gross Block	7057.16	8858.52
Additional Capital expenditure	1801.36	277.44
Closing Gross Block	**8858.52**	**9135.96**
Average Gross Block	**7957.84**	**8997.24**
Rate of Depreciation	5.29%	5.29%
Depreciable Value	7162.06	8097.52
Remaining Depreciable Value	7162.06	6884.20
Depreciation	**277.86**	**475.79**

Operation and Maintenance Expenses (O&M Expenses)

44. As per Regulation 39(4) of the 2014 Tariff Regulation, the normative O&M Expenses specified for the instant transmission assets are as under:-

Element	**2017-18**	**2018-19**
D/C twin conductor transmission line (₹ lakh/KM)	0.780	0.806
M/C twin conductor transmission line (₹lakh/KM)	1.368	1.413
S/C twin conductor transmission line (₹ lakh/KM)	0.446	0.461
400 kV bays (₹ lakh/bays)	66.510	68.710

45. O&M Expenses allowed is given as under:-

(₹ in lakh)

Element	2017-18	2018-19
44.607 KM D/C twin conductor transmission line	22.973	35.953
9.998 KM M/C twin conductor transmission line	9.031	14.127
0.905 KM S/C twin conductor transmission line	0.266	0.417
RAPP-Kota bays at Kota 1 No 400 kV bays	43.91	68.710
Total	76.18	119.217

46. 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.

47. BRPL has submitted that the increase in the employee cost, if any, due to wage revision must be taken care by improvement in their productivity levels by the petitioner company so that the beneficiaries are not unduly burdened over and above the provisions made in the 2014 Tariff Regulations. In response, the petitioner submitted that the wage revision of the employees of the petitioner is due w.e.f. 1.1.2017 and actual impact of wage hike which will be effective from a future date has also not been factored in fixation of the normative O&M rates prescribed for the tariff block 2014-19. The scheme of wage revision applicable to CPSUs is binding on the petitioner and hence it would approach the Commission for suitable revision in the norms for O&M Expenses for claiming the impact of wage hike from 1.1.2017 onwards.

48. 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

49. 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:-

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.

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.

O&M Expenses

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

Rate of IWC

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

50. Accordingly, the IWC allowed is summarized as under:-

(₹ in lakh)

Particulars	2017-18 (pro-rata)	2018-19
Maintenance Spares	11.43	17.88
O & M expenses	6.35	9.93
Receivables	163.71	273.22
Total	**181.48**	**301.03**
Interest	**23.23**	**38.53**

51. The present asset i.e. "Rapp– Kota 400 kV D/C line" contains multi-circuit (M/C) portion of 9.998 km that was commissioned on 1.4.2009 for 400 kV S/C Rapp-Kota line. The true-up transmission tariff of 400 kV S/C Rapp-Kota line was allowed vide order dated 23.2.2016 in Petition No. 557/TT/2015 in which M/C of 9.998 km is claimed as S/C from 1.4.2009 onwards. Further, the COD of the present asset i.e. "Rapp– Kota 400 kV D/C line", the M/C portion of 9.998 km is being claimed now as M/C and the same will be removed on truing-up of 2014-19 from Petition No. 557/TT/2015 (400 kV S/C Rapp-Kota line) from the date of commercial operation of the present asset.

52. In view of the above, the annual transmission charges being allowed for the instant assets are summarized hereunder:-

(₹ in lakh)

Particulars	2017-18 (pro-rata)	2018-19
Depreciation	277.86	475.79
Interest on Loan	295.86	476.46
Return on Equity	309.11	529.31
Interest on Working Capital	23.23	38.53
O&MExpenses	76.18	119.21
Total	**982.25**	**1639.30**

Filing Fee and Publication Expenses

53. 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 publication expenses should be borne by the petitioner. We have considered the submissions of the petitioner

and BRPL. The petitioner shall be entitled for reimbursement of the filing fees and publication expenses in connection with the present petition, directly from the beneficiaries on pro-rata basis in accordance with clause (1) of Regulation 52 of the 2014 Tariff Regulations.

<u>Licence Fee and RLDC Fees and Charges</u>

54. 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.

<u>Goods and Services Tax</u>

55. The petitioner has prayed to allow to bill and recover GST on transmission charges separately from the respondents, if GST on transmission of electricity is withdrawn from the exempted list in future. GST is not imposed on transmission charges under the present GST regime. Hence, we are of the view that petitioner's prayer is premature.

<u>Sharing of Transmission Charges</u>

56. The transmission charges allowed in this order shall be recovered on monthly basis in accordance with Regulation 43 of the 2014 Tariff Regulations and shall be shared by the beneficiaries and long term transmission customers in in terms of the 2010 Sharing Regulations as amended from time to time.

57. This order disposes of Petition No. 206/TT/2017.

sd/-	sd/-	sd/-
(Dr. M. K. Iyer)	**(A. K. Singhal)**	**(P. K. Pujari)**
Member	**Member**	**Chairperson**