

# CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI

Petition No. 84/TT/2019

**Coram:**

**Shri P. K. Pujari, Chairperson**

**Shri I. S. Jha, Member**

**Shri Arun Goyal, Member**

**Date of Order: 27.05.2021**

**In the Matter of:**

Approval under regulation-86 of CERC (Conduct of Business) Regulations, 1999 and CERC (Terms and Conditions of Tariff) Regulations, 2014 for determination of Transmission Tariff from COD to 31.3.2019 for **Asset 1:** 765 kV S/C Jaipur (RVPN)-Bhiwani TL (CKT-II) along with associated bays under "Northern Region system Strengthening Scheme XXV" in Northern Region in pursuance to direction of commission in Review Petition No. 41/RP/2017.

**And in the matter of:**

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

.....**Petitioner**

**Versus**

1. Uttar Pradesh Power Corporation Limited (UPPCL)  
(Formerly Uttar Pradesh State Electricity Board)  
Shakti Bhawan, 14, Ashok Marg  
Lucknow - 226 001
2. Rajasthan Rajya Vidyut Prasaran Nigam Limited  
Vidyut Bhawan, Vidyut Marg,  
Jaipur - 302 005
3. Ajmer Vidyut Vitran Nigam Limited  
132 kV, GSS RVPNL Sub- Station Building,  
Caligiri Road, Malviya Nagar,



Jaipur- 302 017 (Rajasthan)

4. Jaipur Vidyut Vitran Nigam Limited  
132 kV, GSS RVPNL Sub- Station Building,  
Caligiri Road, Malviya Nagar,  
Jaipur-302 017 (Rajasthan)
5. Jodhpur Vidyut Vitran Nigam Limited  
132 kV, GSS RVPNL Sub- Station Building,  
Caligiri Road, Malviya Nagar,  
Jaipur-302 017 (Rajasthan)
6. Himachal Pradesh State Electricity Board  
Vidyut Bhawan, Kumar House Complex Building II  
Shimla-171 004
7. Punjab State Electricity Board  
Thermal Shed TIA, Near 22 Phatak  
Patiala-147 001
8. Haryana Power Purchase Centre  
Shakti Bhawan, Sector-6  
Panchkula (Haryana) 134 109
9. Power Development Department  
Government of Jammu & Kashmir  
Mini Secretariat, Jammu
10. Delhi Transco Limited  
Shakti Sadan, Kotla Road,  
New Delhi-110 002
11. BSES Yamuna Power Limited  
BSES Bhawan, Behind Nehru Place,  
New Delhi-110 019
12. BSES Rajdhani Power Limited (BRPL)  
BSES Bhawan, Behind Nehru Place,  
New Delhi-110 019
13. Tata Power Delhi Distribution Limited  
NDPL HOUSE, HUDSON LINES, Kingsway Camp,  
North Delhi – 110 009
14. Chandigarh Administration  
Sector -9, Chandigarh
15. Uttarakhand Power Corporation Limited



Urja Bhawan, Kanwali Road  
Dehradun

16. North Central Railway  
Allahabad.
17. New Delhi Municipal Council  
Palika Kendra, Sansad Marg  
New Delhi-110 002

...Respondent

**Parties present:**

**For Petitioner:** Shri Ved Prakash Rastogi, PGCIL

**For Respondent:** Ms. Megha Bajpai, BRPL

**ORDER**

The present petition has been filed by the Petitioner, Power Grid Corporation of India Ltd. (PGCIL) in pursuance to direction of the Commission in Review Petition No. 41/RP/2017 for determination of transmission tariff from COD to 31.3.2019 for the following transmission asset (Asset-1) under “Northern Region System Strengthening Scheme XXV” in Northern Region (hereinafter also referred to as “the Transmission Project”) under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as “the 2014 Tariff Regulations”):

**Asset-1:** 765 kV S/C Jaipur (RVPN)-Bhiwani transmission line (part –I & II) along with associated bays;

2. The Petitioner has made the following prayers:

*“1) Approve the Transmission Tariff for the tariff block 2014-19 for the assets covered under this petition.*

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



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

4) Allow the petitioner to recover FERV on the foreign loans deployed as provided under clause 50 of the Tariff Regulations, 2014.

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

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

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

8) Allow the Petitioner to bill and recover GST on Transmission charges separately from the respondents, if 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 the Commission deems fit and appropriate under the circumstances of the case and in the interest of justice.”

### **Background**

3. The Petitioner had earlier filed Petition No. 213/TT/2016 for determination of tariff for the subject transmission asset (Asset-1) Wherein the Commission vide order dated 7.9.2017 restricted the capital cost of the transmission lines to ₹1.56 crore/km as per the indicative cost submitted by CTU.

4. Aggrieved by the order dated 7.9.2017 in Petition No. 213/TT/2016, the Petitioner filed Review Petition No. 41/RP/2017. The Commission, vide order dated 6.7.2018 in Review Petition No. 41/RP/2017, directed the Petitioner to file fresh petition for the assets covered under the Petition No. 213/TT/2016. The relevant extracts of the order dated 6.7.2018 is reproduced below:



*“17. We are of the view that review of the order needs to be allowed limited to the extent of inclusion of additional elements in the capital cost which was not considered while determining the tariff as the same was based on the indicative cost provided by CTU for computation of PoC charges. The Commission has sought certain information/documents in para 18 of the impugned order. Therefore, we direct the Review Petitioner to file a fresh petition including all relevant information for determination of tariff of the instant assets in terms of the directions in this order.”*

5. In compliance of the direction of the Commission in the order dated 6.7.2018 in Petition No. 41/RP/2017, the Petitioner has filed the instant petition.

6. The Investment Approval (hereinafter referred to as "IA") for implementation of assets under the Transmission Project i.e., “Northern Region System Strengthening Scheme XXV” in Northern Region was accorded by the Board of Directors of the Petitioner in 291<sup>st</sup> meeting held on 19.9.2013 at an estimated cost of ₹68069 lakh including IDC of ₹3595 lakh based on June 2013 price level (communicated vide Memorandum Ref no. C/CP/NRSS XXV dated 24.9.2013).

7. The Transmission Project was discussed and agreed in the 29<sup>th</sup> meeting of Standing Committee on Transmission System Planning of Northern Region held on 29.12.2010. Subsequently, the scheme was also discussed and agreed in the 19<sup>th</sup> meeting of Northern Regional Power Committee held on 4.1.2011.

8. The scope of work covered under the Transmission Project “Northern Region System Strengthening Scheme XXV” is as follows:

**Transmission Line**

- (i) Jaipur (RVPNL) - Bhiwani 765 kV S/C line (2nd)-255 kms.
- (ii) Bhiwani – Hisar 400 kV D/C line-55 kms.
- (iii) LILO of Moga - Bhiwadi 400 kV D/C line at Hisar-2 kms.

**Substation**

- (i) Extension of 765/400 kV Bhiwani Substation.



(ii) Extension of 400/220 kV Hisar Substation.

(iii) Extension of 765/400 kV Jaipur (RVPN) Substation.

**Reactive Compensation**

(i) 765 kV, 240 MVAR Line Reactors at each end of Jaipur (RVPNL) - Bhiwani line.

9. The COD of various transmission assets under the Transmission Project is as follows:

S. N.	Assets	COD	Remarks
1	Bhiwani-Hisar 400 kV D/C line along with associated bays at Bhiwani and Hissar	2.11.2015 (Actual)	Covered under Order dated 26.4.2016 in Petition No. 208/TT/2015
2	LILO of Moga-Bhiwadi 400 kV D/C line at Hisar along with associated bays at Hissar	2.7.2015 (Actual)	
3	<b>Asset-1:</b> 765 kV S/C Jaipur (RVPN)-Bhiwani transmission line (Ckt-II) along with associated bays	7.10.2016 (Actual)	Earlier covered under Petition No. 213/TT/2016. Being re-filed as per Commission's Order dated 6.7.2018 in Review Petition No. 41/RP/2017 and now covered under the instant Petition.

10. With the commissioning of instant transmission asset, the entire scope of the project gets commissioned.

11. The details of the Annual Transmission Charges claimed by the Petitioner are as under:

**(₹ in lakh)**

Particulars	Asset-1		
	2016-17 (pro-rata)	2017-18	2018-19
Depreciation	1,268.58	2,855.21	2,953.88
Interest on Loan	1,148.61	2,465.03	2,366.95
Return on Equity	1,415.11	3,186.99	3,298.92
Interest on Working Capital	92.63	204.86	207.96
O & M Expenses	173.76	371.16	383.42
<b>Total</b>	<b>4,098.69</b>	<b>9,083.25</b>	<b>9,211.13</b>



12. The details of the interest on working capital claimed by the Petitioner are as under:

Particulars	Asset-1		
	2016-17 (pro-rata)	2017-18	2018-19
Maintenance Spares	53.87	55.67	57.51
O&M expenses	29.93	30.93	31.95
Receivables	1,411.77	1,513.88	1,535.19
<b>Total</b>	<b>1,495.57</b>	<b>1,600.48</b>	<b>1,624.65</b>
Rate of Interest	12.80%	12.80%	12.80%
<b>Interest on working capital</b>	<b>92.63</b>	<b>204.86</b>	<b>207.96</b>

13. The Petitioner has served copy of this petition on the respondents and notice of this petition has been published in the newspapers in accordance with Section 64 of the Electricity Act, 2003. No comments/ objections have been received from the general public in response to the notices published in the newspapers by the Petitioner. Notice dated 14.1.2020 directing the beneficiaries/ Respondents to file reply in the matter was also published on Commission's website. Reply to the petition has been filed by UPPCL (Respondent No. 1), vide affidavit dated 4.4.2019 and has raised the issues of cost overrun, additional capitalisation, interest on loan and recovery of application filing fee and the expenses. The Petitioner vide its affidavit dated 10.2.2020 filed its rejoinder to the reply of UPPCL. Reply to the petition has also been filed by BRPL (Respondent No. 12), vide affidavit dated 16.5.2019 that has raised the issues of cost overrun and time overrun, accrual IDC, computation of income tax, Return on Equity (RoE), Effective Tax Rate, recovery of tax on truing up exercise of RoE, applicability and recovery of GST, impact of wage revision on O&M charges, recovery of security expenses, passing of tax benefits to consumers and recovery of application filing fee and the expenses. The Petitioner vide its affidavit



dated 6.2.2020 filed its rejoinder to the reply of BRPL. The issues raised by Respondents and the clarifications given by the Petitioner have been dealt in the relevant portions of this order.

14. The hearing in this matter was held on 28.8.2020 through video conference and the order was reserved.

15. This order is issued considering the submissions made by the Petitioner in the petition dated 15.11.2018; submissions/ rejoinder by the Petitioner vide affidavits dated 6.2.2020, 10.2.2020 and 18.3.2020; and replies of UPPCL and BRPL vide affidavits dated 4.4.2019 and 16.5.2019, respectively.

16. Having heard the representatives of the Petitioner present at the hearing and perused the material on record, we proceed to dispose of the petition.

#### **Date of Commercial Operation (COD)**

17. The Commission vide order dated 7.9.2017 in Petition No. 213/TT/2016 has already approved the COD for Asset-1 as 7.10.2016. The relevant extract is as under:

*“10. The petitioner has claimed date of commercial operation of the instant assets as 7.10.2016 and in support thereof the petitioner has submitted RLDC charging certificate dated 10.11.2016 and CEA clearance certificate dated 27.9.2016. Taking into consideration the submissions made by the Petitioner and the RLDC certificate in support of trial operation, the COD of the instant asset is approved as 7.10.2016”.*

#### **Capital Cost**

18. Clauses (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;
- (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.”

19. The Petitioner has submitted details of apportioned approved cost (FR), capital cost as on COD and estimated additional capital expenditure incurred or projected to be incurred during 2016-17, 2017-18 and 2018-19 along with estimated completion cost and submitted Auditor’s certificate dated 17.8.2018 and the same is summarized as under:

Asset	Apportioned Approved Cost (FR)	Cost up to COD	Projected Additional Capitalisation			Estimated Completion Cost
			2016-17	2017-18	2018-19	
Asset-1	56643.90	47272.66	5575.16	2727.59	1000.00	56575.41

### **Cost Over-run**

20. The estimated completion cost of Asset-1 based on the Auditor’s Certificate works out to ₹56575.41 lakh including IEDC and IDC which is within the approved apportioned FR cost of ₹56643.90 lakh. Hence, there is no cost overrun.

21. The Commission vide order dated 7.9.2017 in Petition No. 213/TT/2016 has



directed to submit the following detailed justification at the time of true up:

a) The reason for considering the glass insulators in place of long rod insulators and the cost-benefit analysis in terms of the saving in cost due to early completion.

b) The justification for considering horizontal configuration in place of delta configuration, explanation as to why there is no cost reduction considering horizontal configuration for tower and reason for not obtaining consent on revision of scope in the RPC forum.

c) The details of cost estimates along with Board Agenda note and relevant calculation of capital cost, basis of considering rate estimates as per standard order rate (latest order rate) and based on steel/land usage.

22. The Commission vide order dated 6.7.2018 in Review Petition No. 41/RP/2017 in Petition No. 213/TT/2016 directed the Review Petitioner to file a fresh petition including all relevant information for determination of tariff of the assets covered in that petition. The Petitioner's submission are indicated in the following paragraphs.

23. The petitioner has submitted the following reasons for cost variation:

a) **Cost reduction under tower steel head (₹11.85 crore):**

During FR Stage, the weight of tower parts was considered based on 'Delta Configuration'. However, during detailed engineering, configuration was changed from 'Delta' to 'Horizontal'. The 'Horizontal Configuration' towers are easier to erect and are also lighter in weight as they are of low height in comparison to towers of 'Delta Configuration'. There has also been reduction in total quantity of tower steel of 1744 MT [i.e. 21029 MT (estimated weight as per FR) minus 19285 MT (actual weight)] due to considering 'Horizontal Configuration' over 'Delta Configuration'. This reduction in quantity of tower steel was achieved in spite of increase in line length by approx. 21 km. Total saving on account of change in configuration of the towers is ₹1185.83 lakh.

b) **Cost increase towards conductor head (₹6.47 crore):**



Cost variation under this head is due to increase in line length and subsequent increase in conductor quantity by 260 km. The quantity envisaged in FR was 3091 km. However, as per actual, length increased to 3351 km.

**c) Cost increase towards insulators head (₹8.54 crore):**

The cost increased due to increase in insulator quantity from 15096 to 72595. The insulators quantity has increased due to the use of glass insulators instead of composite long rod insulators (CLR) which was used to avoid further delays in commissioning of the instant asset. The increase in line length from 255 km to 276.44 km (to cater Right of Way issues) resulted in addition of 66 towers which increased the requirement of additional insulators that were required to be procured.

**d) Cost increase under Erection, Stringing and Civil works (₹5.50 crore):**

Cost variation under this head is due to increase in line length from 255 km to 276.44 km.

**e) Cost decrease under overheads, including contingency and IEDC (₹22 crore):**

During preparation of DPR, contingency had been calculated @3% of equipment cost and IEDC was taken as @5% of equipment hard cost. IEDC has been considered on actual basis up to COD at the time of claim of tariff, whereas no contingency has been taken in instant asset.

**f) Price variation:**

(i) Price variation under the project is attributable to the inflationary trend (except tower steel and copper) prevailing during execution of project and also market forces prevailing at the time of bidding process of various packages. These may be seen from the trend of variation in indices of various major raw materials.

(ii) Increase/ decrease in award cost received in competitive bidding with respect to initial estimates (FR cost) is mainly due to open competitive bidding route which is followed by providing equal opportunity to all eligible firms



wherein lowest possible market prices for required product/ services is obtained and contracts are awarded on the basis of lowest evaluated eligible bidder. The best competitive bid prices against tenders may happen to be lower or higher than the cost estimate depending upon prevailing market conditions.

24. The Petitioner also submitted the justification of capital cost in compliance with the Commission's direction as per order dated 6.7.2018 in Review Petition No. 41/RP/2017 and Petition No. 213/TT/2016 and the same is as follows:

**a) *Justification for considering glass insulators in place of long rod insulators:***

(i) The Petitioner had used glass insulators instead of composite long rod insulators (CLR) in order to avoid further delays in commissioning of the instant asset. The increase in line length from 255 km to 276 km (to cater to right of way issues) resulted in addition of 66 towers, which increased the requirement of additional insulators. The Petitioner had two options: either to make procurement of additional insulators through amendment in existing contract or to utilize the glass insulators which were readily available with the Petitioner. In the former case, there was inevitable lead time of at least 3 months due to the procurement, manufacturing and supply process, which would have further delayed the implementation of the project. In view of above, it was prudent to optimize the project timeline by utilizing the existing glass insulators.

(ii) The cost differential due to use of glass insulators in place of long road insulators is approximately ₹3.6 crore which is less than the incremental IDC of approx. ₹5.78 crore due to additional delay of 3 months in commissioning of the instant asset. The Petitioner has put all the efforts to commission the subject transmission line in time to minimize the overall cost of the project. Further, the Petitioner has utilized the project management skills to get multiple benefits in terms of saving in IDC/IEDC on the delay in completion of the project thereby non-burdening the customer, and other economic cost to the country at large. On commissioning of 765 KV S/C Jaipur (RVPN) - Bhiwani transmission line and RAPP-Shujalpur 400 kV D/C line, 700 MW of ATC has also got enhanced



in WR-NR Corridor which ultimately improved the transfer capability of the WR-NR corridor.

**b) Justification for considering horizontal configuration in place of delta configuration and reason for not obtaining consent of the RPC:**

(i) During FR Stage, the weights of tower parts were considered based on 'Delta Configuration' of towers. However, during detailed engineering, configuration was changed from 'Delta Configuration' to 'Horizontal Configuration'. The 'Horizontal Configuration' towers are easier to erect and are lighter in weight as they are of low height in comparison to towers of 'Delta Configuration'. Further, it has been incorrectly mentioned in the order of the Commission that there is no cost reduction by considering 'Horizontal Configuration' towers. In fact, there has been reduction in total quantity of tower steel of 1744 MT (Estimated Weight as per FR – minus actual weight) by using towers with 'Horizontal Configuration'. This reduction in quantity of tower steel was achieved in spite of increase in line length by approx. 21 km. Total saving on account of change in configuration of the tower is ₹1273.12 lakh.

(ii) Further, Jaipur-Bhiwani 765 kV S/C (2<sup>nd</sup>) was discussed and agreed as a part of strengthening scheme in 29<sup>th</sup> SCM and the same was implemented by the Petitioner. During implementation, there was no change in the scope. Therefore, it was not required to go to RPC during its implementation. Moreover, selection of tower configuration, type of conductor, type of insulators etc. are part of detailed engineering process and its optimization is done based on route alignment, availability of ROW, time available for implementation for commissioning of assets etc. The Petitioner has taken the best possible efforts to minimize the cost of the project and changing configuration of tower to 'horizontal' from 'delta' is one of them.

**c) Details of cost estimates and relevant calculation of capital cost:**

i) The Petitioner has submitted details of Board agenda and relevant calculation of capital cost.



ii) The Petitioner has submitted that the supply and services have been procured through open tendering process, selecting the lowest technical and financial bid on overall basis. The bidder has flexibility of quoting low value for individual items. The market dynamics as well as bidder pricing strategy for individual item is responsible for this variation. The mentioned items constitute very small portion of overall package awarded to the contractor for sub-station. The Petitioner has well developed mechanism for ensuring quality of supply and services with proper control at different point of project lifecycle.

25. As regards the Commission limiting the capital cost to benchmark cost, the Petitioner has submitted the following:

(a) In the absence of any reference data or benchmarking norms for 765 kV S/C transmission lines, the Commission ought to have followed the principles enshrined in Regulation 10(1) of the 2014 Tariff Regulations for prudence check of capital cost instead of pegging the capital cost of the transmission assets to the PoC charges.

(b) The indicative capital cost submitted by CTU for the purpose of computation of PoC charges estimated under the Sharing Regulations are fundamentally not suited for the purpose of determining capital cost or other components of transmission tariff, as these indicative costs are based on an average cost of all the transmission elements commissioned in a particular region and does not account for uncertainties and impediments associated with terrain, area and region, which would impact the capital cost on account of RoW, land compensations, IDC, time over run etc.

(c) The reliance on the indicative capital cost submitted by CTU for the purpose of computation of PoC charges mechanism for determining the capital cost of transmission projects, is contrary to the express provisions of the 2014 Tariff Regulations, and a significant departure from the cost-plus philosophy that underpins determination of tariff under Section 62 of the Act. Such a linkage with the PoC charge mechanism will inevitably lead to under or over-recovery of tariff for every transmission element, which is undesirable.

(d) It appears that the figure of ₹1.56 crore/km relied upon by the Commission for computing the capital cost of the transmission assets, purportedly based on the indicative capital cost submitted by CTU for the purposes of computation of PoC charges, does not take into account various other elements that are essential for the determination of transmission tariff and mandated by the 2014 Tariff Regulations, including: (a) Interest During Construction (IDC); (b) Incidental Expenditure During Construction (IEDC); (c) costs associated with obtaining RoW; (d) tree and crop compensation; (e) land acquisition etc., and a variety of other factors that are inextricably linked with the capital cost incurred in establishing transmission assets. Determination of transmission tariff other than the aforesaid essential elements is contrary to the 2014 Tariff Regulations.

(e) The Petitioner follows a robust and time-tested system of preparing cost estimates before obtaining Investment Approval. After Investment Approval, the award letters are placed on the executing agencies on the basis of tendering process as per best industry practices and due diligence is undertaken including justification of bid prices vis-à-vis estimated cost before placing the awards. Further, the cost control measures are taken during execution of the project and only under unavoidable situations caused by the actual soil/ terrain conditions, crossing requirements (river, power line, railway line, forest stretches and any other compelling technical reason), the cost may undergo changes.

(f) The basis of cost estimate as recorded in the Board of Directors approval states that:

*“Cost estimates for all equipment for 765 kV and 400 kV transmission lines and substations are based on Schedule of Rates (which was prepared based on the average of unit rates of latest three Bids/LOAs/ raw material prices) for June 2013 price level.”*

(g) The schedule of rates was prepared based on the average of unit rates of latest three bids/ LOAs/ raw material prices in order to achieve the cost efficiency by estimating the capital cost of the instant Transmission Project.

(h) Subsequently, the award for execution of the project was placed after following the transparent process of tendering, bid evaluation and award of work



to lowest technical and commercially responsive bid. The detail of bids is tabulated below:

S.N.	Name of package	Contractor name	No. of bids	Bid type
1	Tower Package	M/s KEC International	4	DCB
2	Conductor Package	M/s Gupta Power Infrastructure Limited	4	ICB
3	Substation extension package	M/s ALSTOM T&D India Limited	4	DCB

26. Respondent BRPL vide affidavit dated 16.5.2019 has submitted the following:

(a) The insulator package for this line was awarded on 9.1.2015 with the date of completion as 9.8.2015 on a firm price basis. Nothing has been mentioned as to when the Petitioner came to know that the line length is going to increase needing more long rod insulators as the cost benefit analysis is required to be made from that date with lead time of three months for additional supply of long rod insulators. It is also noted from the petition that the quantity of tower steel has decreased although the line length is increased which is a contradiction and thus the claim of the Petitioner for using the glass insulators and resulting an additional amount of ₹3.6 crore is liable to be rejected for filing inadequate and contradictory information. It is further submitted that the Commission has already condoned the time over-run of 6 months and 19 days and thus the question of early completion of the line by three months by using the glass insulators which were readily available with the Petitioner is without any basis. By resolution of ROW problem by increasing the line length and time overrun of 6 months and 19 days, IDC for this period has already been loaded on to the beneficiaries besides the cost of increased length from 255 km to 276 km. Therefore, the loading of ₹3.6 crore may be disallowed by the Commission.

(b) The Petitioner has stated that at the FR stage, 'Delta Configuration' was adopted which was subsequently changed to 'Horizontal Configuration' during detailed engineering. It is also stated in the DPR for NRSS-XXV that the Petitioner vigorously pursues standardization of transmission line designs to economize the cost and implementation period. In spite of such endeavour, the Petitioner considered the 'Delta Configuration' at the FR stage which does not





seem justified.

(c) Another issue raised in Petition No. 213/TT/2016 was the details of cost estimates along with Board Agenda note and relevant calculation of capital cost. This has not been filed by the Petitioner.

27. In response, the Petitioner has submitted that the detailed justification of cost variation as sought by the Commission vide order dated 7.9.2017 in Petition No. 213/TT/2016 is already provided in the instant Petition.

28. The Respondent UPPCL has submitted that in Petition No. 213/TT/2016, the estimated capital cost shown by the Petitioner was ₹55312.47 lakh against which the Commission approved total capital cost of ₹47019.26 lakh, since the Commission did not agree with the indicative cost of ₹1.86 crore/km as advised by CTU for 765 kV transmission line and allowed the indicated cost only to the extent of ₹1.56 crore/km. Therefore, the approved cost was scaled down from ₹55312.47 lakh to ₹47019.26 lakh. The Petitioner, in the present petition, has claimed total cost of transmission line as ₹56575.41 lakh. Therefore, the Petitioner may be directed to elaborate the difference of ₹1262.94 lakh in capital cost with respect of the initially claimed capital cost of ₹55312.46 lakh.

29. In response to the submissions of BRPL and UPPCL, the Petitioner has given the same reply as was submitted by the Petitioner in response to reply to the queries of the Commission.

30. The Commission vide RoP for hearing dated 11.2.2020 directed the Petitioner to submit, as under:

*“a) The details of cost estimates along with Board Agenda note; relevant calculation of capital cost; basis of considering rate estimates as per standard order rate (latest order rate) and based on steel/land usage. Also to submit the complete*



*details as sought vide order dated 7.9.2017 In Petition No. 213/TT/2016.*

*b) The estimated completion cost in respect of instant asset claimed vide Audit certificate dated 17.8.2018 exceeds the estimated cost claimed earlier vide Audit certificate dated 7.3.2017. Clarify the same.*

*c) Clarify how the cost of the subject asset is low when number of insulators has increased.*

*d) The line length has increased. However; there is reduction in number of towers and quantity of tower steel used. Clarify the same.”*

31. In response to the Commission's queries raised vide RoP of the hearing dated 11.2.2020, the Petitioner vide affidavit dated 18.3.2020 has submitted the following:

(a) The expenditure in Auditor certificate dated 7.3.2017 were on estimated basis. However, Auditor certificate dated 17.8.2018 submitted with the present petition is prepared on actual expenditure up to 31.3.2018 and expenditure during FY 2018-19 is on estimated basis. The increase is mainly on account of increase in crop/ tree/ borewell compensation which is paid after due certification by the concerned executive magistrate.

(b) Although the cost of insulator has increased, but its effect has been compensated by the decrease in cost of tower steel and overheads. Thus, there has been overall reduction in the actual cost as compared to FR.

(c) The number of towers has increased from 685 in FR to 763 as per actuals due to increase in line length, but there is overall reduction in the tower steel tonnage due to change in tower configuration from 'Delta' in FR to 'Horizontal' in actuals.

32. We have considered the submissions of the Petitioner and Respondents. The Commission vide order dated 7.9.2017 in Petition No. 213/TT/2016, has determined the tariff based on indicative cost as interim measure pending the justification of the Petitioner in respect of cost variation and estimated cost.

33. Aggrieved by the order dated 7.9.2017 in Petition No. 213/TT/2016, a Review



Petition No. 41/RP/2017 was filed by the Petitioner. Subsequently, the Commission vide order dated 6.7.2018 in Review Petition No. 41/RP/2017, directed the Petitioner to file fresh petition for the subject assets. The relevant extracts of the order dated 6.7.2018 is reproduced below:

*17. We are of the view that review of the order needs to be allowed limited to the extent of inclusion of additional elements in the capital cost which was not considered while determining the tariff as the same was based on the indicative cost provided by CTU for computation of PoC charges. The Commission has sought certain information/documents in para 18 of the impugned order. Therefore, we direct the Review Petitioner to file a fresh petition including all relevant information for determination of tariff of the instant assets in terms of the directions in this order.*

34. The Petitioner in the instant petition has submitted these details. Form-5 submitted in respect of instant asset reveals that the estimated completion cost of the transmission line is ₹42550.29 lakh, against which the actual completion cost is about ₹44974.62 lakh. Therefore, there is an increase of about ₹2424.33 lakh in actual cost vis-à-vis FR estimate. The major cost variation particulars as per Form-5 is as under:

Particulars	(₹ in lakh)		
	FR Estimated Cost	Actual Cost	Variation
Preliminary Investigation, Right of Way, forest clearance, PTCC, general civil works etc.	1590.73	1788.86	198.13
Insulators	974.86	1829.82	854.96
Hardware Fittings	1457.89	1599.39	141.5
Erection, Stringing & Civil works, including foundation	8416.47	8967.34	550.9
	12439.95	14185.41	1745.49

35. The variation in the capital cost is mainly due to increase of line length from 255 km in FR to the actual line length of 276.44 km. Because of this, the amount paid to the concerned authorities in terms of RoW, PTCC, forest etc. increased. The tower configuration was changed from 'Delta' type to 'Horizontal' type, due to which the actual tower steel quantity got reduced. The conductor cost, insulators, hardware fittings, erection, stringing and civil works including foundation increased due to



increase of line length. However, the estimated completion cost of ₹56575.41 lakh of the instant asset is within the apportioned approved FR cost of ₹56643.90 lakh. Hence, there is no cost overrun. Accordingly, the capital cost claimed by the Petitioner is considered for determination of tariff.

### **Time Overrun**

36. As per the Investment Approval (IA) dated 4.3.2015, the transmission assets under the Transmission Project were scheduled to be commissioned within 30 months from the date of Investment Approval. Accordingly, the scheduled COD was 19.3.2016, against which Asset-1 was put under commercial operation with effect from 7.10.2016, with a delay of around 6 months and 19 days. The Commission vide order dated 7.9.2017 in Petition No. 213/TT/2016 has already condoned the time over-run of 6 months and 19 days.

### **Interest During Construction (IDC)**

37. The Petitioner has claimed Interest During Construction (IDC) for the instant asset and submitted Auditor Certificate in support of the same. In addition, the Petitioner has submitted the IDC statement containing details of IDC computation along with year-wise IDC discharges in respect of Asset-1. IDC claimed by the Petitioner is as follows:

Asset	IDC as per Auditor's certificate	IDC discharged up to COD	IDC discharged during FY	
			₹ in lakh	
			2016-17	2017-18
Asset-1	3362.16	2743.16	541.33	77.67

38. We have considered the submission of the Petitioner. The Petitioner has submitted IDC computation statements which consist of the name of the loan, drawl date, loan amount, interest rate and Interest claimed. IDC is worked out based on the



details given in the IDC statement. Further, the loan amount as on COD has been mentioned in Form 6 and Form 9C. While going through these documents, certain discrepancies have been observed such as mismatch in loan amount between IDC statement and in Form 6 & Form 9C.

39. The allowable IDC has been worked out based on the available information and relying on loan amount as per tariff form 9C. However, the Petitioner is directed to submit the detailed IDC statement by rectifying the above-mentioned deviation at the time of true up of 2014-19 for Asset-1. Accordingly, details of IDC considered for tariff computation, subject to revision at the true up is as below:

Asset	IDC claimed as per Auditor's certificate	IDC allowed on accrual basis	Allowable IDC as on COD (Cash basis)	Un-discharged IDC liability as on COD	(₹ in lakh)	
					IDC discharged during	
					2016-17	2017-18
Asset-1	3362.16	3362.16	2743.16	619.00	541.33	77.67

#### **Incidental Expenditure During Construction (IEDC)**

40. The Petitioner has claimed Incidental Expenditure During Construction (IEDC) of ₹1569.00 lakh in respect of the instant asset and submitted Auditor's Certificate dated 17.8.2018 in support of the same. The Petitioner has submitted that entire IEDC has been discharged up to COD. IEDC claimed is within the percentage of hard cost i.e. 5% as indicated in the abstract cost estimate. Accordingly, following IEDC is allowed, subject to true up:

Asset	IEDC claimed as per Auditor's certificate	Allowable IEDC as on COD
Asset-1	1569.00	1569.00

41. IEDC allowed for the instant asset will be reconsidered in the light of the directions of Appellate Tribunal for Electricity (APTEL) in judgment dated 2.12.2019 in Appeal No. 95 of 2018 and Appeal No. 140 of 2018 against Commission's orders



dated 29.7.2016 and 5.10.2017 in Petition No. 46/TT/2014 and Petition No. 2/RP/2017 respectively, at the time of truing up.

### **Initial Spares**

42. The Petitioner has claimed initial spares corresponding to transmission line and green field sub-station for instant asset and has submitted Auditor's Certificate dated 17.8.2018 in support of the same. The same has been summarised as under:

**(₹ in lakh)**

<b>Asset</b>	<b>Element</b>	<b>Plant and machinery Cost excluding IDC, IEDC, Land Expenditure</b>	<b>Initial spares claimed</b>
Asset-1	Transmission Line	48188.63	436.73
	Substation (Green field)	6756.41	102.41

43. We have considered the submissions made by the Petitioner. As per Regulation 13(d) of the 2014 Tariff Regulations, the allowable initial spares for transmission line are 1% and for greenfield sub-station is 4%. The initial spares claimed by the Petitioner are within ceiling limits. Therefore, the initial spares as claimed in the petition are allowed as under:

**(₹ in lakh)**

<b>Asset</b>	<b>Element</b>	<b>Plant and machinery Cost excluding IDC, IEDC, Land Expenditure up to 31.03.2019</b>	<b>Initial spares claimed</b>	<b>Ceiling limit as per the 2014 Tariff Regulations</b>	<b>Initial spares worked out</b>	<b>Excess Initial spares claimed</b>	<b>Initial spares allowed</b>
Asset-1	Transmission Line	48188.63	436.73	1%	482.34	0.00	436.73
	Substation (Green field)	6756.41	102.41	4%	277.25	0.00	102.41

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

44. Accordingly, the capital cost allowed as on COD under Regulation 9(2) of the 2014 Tariff Regulations is summarized as under:

**(₹ in lakh)**



Asset	Capital Cost as on COD as per Auditor's Cost Certificate	Less: Un-discharged IDC as on COD	Capital Cost as on COD considered for tariff calculation
	1	2	3= (1-2)
Asset-1	47272.66	619.00	46653.66

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

45. As per Clause (13) of Regulation 3 of the 2014 Tariff Regulations, the cut-off date for Asset-1 is 31.3.2019. The Petitioner has submitted Auditor's Certificate dated 17.8.2018 for Asset-1 in support of ACE for 2016-17, 2017-18 and 2018-19 which are as follows:

Asset	Additional Capital Expenditure claimed vide Auditor's certificate			Total ACE
	2016-17	2017-18	2018-19	
Asset-1	5575.16	2727.59	1000.00	9302.75

46. BRPL has submitted that the Petitioner has projected an additional capitalization amounting Rs.6116.49 lakh during FY 2016-17, Rs.2805.26 lakh during FY 2017-18 and Rs.1000.00 lakh during FY 2018-19 under Regulation 14(1)(i) of the 2014 Tariff Regulations. This also included accrual IDC of Rs.513.32 lakh in domestic loan and Rs.28.01 lakh in foreign loan during FY 2016-17 and Rs.77.27 lakh in domestic loan during FY 2017-18. As the entire additional capitalization is for balance and retention payments, there is no provision of Additional capitalization under Regulation 14(1)(i) of the 2014 Tariff Regulations for inclusion of accrual IDC totalling an amount of Rs.618.60 lakh. Accordingly, the accrual IDC may not be allowed by the Commission.

47. In response, the Petitioner has submitted that ACE incurred/ projected to be incurred is mainly on account of balance/ retention payments which are incurred within cut-off date and hence covered under Regulation 14(1)(i) of the 2014 Tariff

Regulations.

48. We have considered the submissions of the Petitioner and BRPL. The additional capital expenditure (ACE) claimed by the petitioner for 2016-17, 2017-18 and 2018-19 is towards balance and retention payment discharged within cut-off date and is allowed under Regulations 14(1)(i) and 14(1)(ii) of the 2014 Tariff Regulations. Accordingly, the ACE allowed is summarised as under, subject to true up:

(₹ in lakh)				
Asset-1	Regulation	2016-17	2017-18	2018-19
Particulars				
ACE to the extent of Balance & Retention Payment and Unexecuted work	14(1)(i) & 14(1)(ii)	5575.16	2727.59	1000.00
Add: IDC Discharged	14 (1)(i)	541.33	77.67	0.00
<b>Total Add-Cap allowed</b>		<b>6116.48</b>	<b>2805.26</b>	<b>1000.00</b>

#### **Capital cost for the tariff period 2014-19**

49. Accordingly, the capital cost considered for the tariff period 2014-19, subject to truing up, is as follows:

(₹ in lakh)						
Asset	Apportioned Approved Cost (FR)	Capital Cost as on COD considered for tariff calculation	ACE allowed			Total Estimated Completion Cost as on 31.03.2019
			2016-17	2017-18	2018-19	
Asset-1	56643.90	46653.66	6116.48	2805.26	1000.00	56575.40

#### **Debt-Equity Ratio**

50. Debt-Equity Ratio is considered as per Regulation 19 of the 2014 tariff Regulations. The financial package up to COD as submitted in Form 6 has been considered to determine the debt-equity Ratio. The capital cost allowed as on the date of commercial operation as well as additional capitalization allowed have been considered in the debt-equity ratio of 70:30. The debt-equity as on dates of





commercial operation and 31.3.2019 considered on normative basis are as under:

(₹ in lakh)

Asset-1 Particulars	As on COD		As on 31.03.2019	
	Debt	32657.55	70.00%	39602.77
Equity	13996.11	30.00%	16972.63	30.00%
<b>Total</b>	<b>46653.66</b>	<b>100.00%</b>	<b>56575.40</b>	<b>100.00%</b>

### Depreciation

51. Depreciation has been dealt with in line of Regulation 27 of 2014 Tariff Regulations. The instant asset was put under commercial operation during 2016-17. Accordingly, it will complete 12 years beyond the tariff period 2014-19. Depreciation has been calculated annually based on Straight Line Method. The Gross Block during 2016-17, 2017-18 and 2018-19 has been depreciated at weighted average rate of depreciation (WAROD) (as placed in Annexure-1). WAROD has been worked out after taking into account the depreciation rates of assets as prescribed in the 2014 Tariff Regulations and depreciation allowed is as follows:

(₹ in lakh)

Particulars	Asset-1		
	2016-17 (pro-rata 176 days)	2017-18	2018-19
Opening Gross Block	46653.66	52770.14	55575.40
Additional Capital expenditure	6116.48	2805.26	1000.00
Closing Gross Block	52770.14	55575.40	56575.40
Average Gross Block	49711.90	54172.77	56075.40
Freehold Land	0.00	0.00	0.00
Weighted Average Rate of Depreciation (WAROD) (%)	5.2739	5.2706	5.2677
Balance useful life of the asset at the beginning of the FY	34	34	33
Elapsed life of the asset at the beginning of the year	0	0	1
Aggregated Depreciable Value	44740.71	48755.49	50467.86
<b>Combined Depreciation during the Year</b>	<b>1264.18</b>	<b>2855.21</b>	<b>2953.88</b>
Aggregate Cumulative Depreciation	1264.18	4119.39	7073.28



### **Interest on Loan (IOL)**

52. IOL has been calculated as per the provisions of Regulation 26 of the 2014 Tariff Regulations as detailed below:

- (i) Gross amount of loan, repayment of instalments and rate of interest on actual loans have been considered as per petition including additional information.
- (ii) The yearly repayment for the tariff period 2014-19 has been considered to be equal to the depreciation allowed for that year.
- (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.

53. The Petitioner has submitted that IOL has been claimed on the basis of rate prevailing as on COD and the change in interest due to floating rate of interest applicable, if any, needs to be claimed/ adjusted over the tariff block 2014-19.

54. We have considered the submissions of Petitioner. We have calculated IOL on the basis of rate prevailing as on the date of commercial operation. Any change in rate of interest subsequent to the date of commercial operation will be considered at the time of truing-up. IOL is allowed considering all the loans submitted in Form-9C. The Petitioner is directed to submit the loan details (including foreign currency loan), i.e. drawl dates, repayment schedule, exchange rates, interest rates etc. and also directed to reconcile the total Gross Loan for the calculation of weighted average Rate of Interest and for the calculation of IDC, which would be reviewed at the time of truing-up.

55. The details of IOL calculated are as follows:



(₹ in lakh)

Particulars	Asset-1		
	2016-17 (pro-rata- 176 days)	2017-18	2018-19
Gross Normative Loan	32657.55	36939.09	38902.77
Cumulative Repayment up to previous Year	0.00	1264.18	4119.39
Net Loan-Opening	32657.55	35674.91	34783.38
Addition due to Additional Capitalization	4281.54	1963.68	700.00
Repayment during the year	1264.18	2855.21	2953.88
Net Loan-Closing	35674.91	34783.38	32529.49
Average Loan	34166.23	35229.14	33656.44
Weighted Average Rate of Interest on Loan (%)	6.95	7.00	7.03
<b>Interest on Loan</b>	<b>1144.69</b>	<b>2465.33</b>	<b>2367.27</b>

### Return on Equity (ROE)

56. The Petitioner has submitted that ROE has been calculated at the rate of 19.61% after grossing up ROE with MAT rate of 20.961% as per the 2014 Tariff Regulations. The Petitioner has further submitted that the grossed-up ROE is subject to truing up based on the effective tax rate of respective financial year applicable to the Petitioner Company.

57. The Respondent BRPL has submitted that the Petitioner has mentioned the effective tax rate of 20.96% in Form 3 for each year of tariff period for which no details have been furnished. The Petitioner may be directed to furnish the following details in the working of effective tax rate along with tax audit report for financial year 2014-15:

- (i) Block-wise and plant-wise deferred tax liabilities as on 31.3.2009 along with asset wise breakup details;
- (ii) Year on year block-wise and plant-wise depreciation as per Companies Act, 2013 and Income Tax Act, 1961 in respect of the assets, existing as on 31.03.2009 and deferred tax liability materialized since 31.03.2009 along with backup details;



(iii) Comparison of computed depreciation as per Companies Act, 2013 and Income Tax Act, 1961 from COD of Asset-1 to 31.03.2019.

58. Respondent BRPL further submitted that the existing Regulation provides for recovery of tax amount only on deferred tax liabilities up to 31<sup>st</sup> March, 2009 whenever they materialize. Accordingly, the Petitioner may also be directed to clarify whether it is charging the tax amount on deferred tax liabilities materializing during the period 2004-19 or it is grossing up such tax amount with effective tax rate. It has further submitted that Petitioner is also entitled for Tax Holiday under Section 80IA of the Income Tax Act, 1961 and the Petitioner is required to disclose the date from which it intends to claim the benefits of Section 80IA of the Income Tax Act, 1961.

59. In response, the Petitioner has submitted that as per Income Tax Act, 1961, MAT rate is the minimum tax rate to be paid by the company and the Petitioner is availing tax benefits under provisions of section 80IA of income tax act 1961 for computing normal income tax. However, under Section 115JB of Income tax Act 1961 company is liable for payment of Minimum Alternate Tax (MAT) @18.5% plus surcharge and cess as applicable. As per Regulation 25(3) of the 2014 Tariff Regulations, any over/ under recovery of grossed up rate on RoE shall be adjusted at the time of truing up on the basis of actual tax paid including interest and additional demand by the IT authorities. The tax audit report will be submitted after the assessment and will be taken care at the time of truing-up. Further, as per clause 49 of the 2014 Tariff Regulations, the deferred tax liability before 1.4.2009 shall be recovered from the beneficiaries or the long term transmission customers/ DICs, as the case may be, as and when the same gets materialized. As the present asset is under 2014-19, the same is not applicable.



60. We have considered the submissions made by the Petitioner and the Respondent BRPL. 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 return on equity. Accordingly, MAT rate of 21.342% for the years 2016-17 & 2017-18 and 21.549% for 2018-19 as applicable during the respective years have 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.

61. Accordingly, ROE allowed is as follows:

(₹ in lakh)

Particulars	Asset-1		
	2016-17 (pro-rata- 176 days)	2017-18	2018-19
Opening Equity	13996.11	15831.05	16672.63
Addition due to Additional Capitalization	1834.94	841.58	300.00
Closing Equity	15831.05	16672.63	16972.63
Average Equity	14913.58	16251.84	16822.63
Return on Equity (Base Rate) (%)	15.50	15.50	15.50
MAT rate for the FY (%)	21.342	21.342	21.549
Rate of Return on Equity (Pre-tax) (%)	19.705	19.705	19.758
<b>Return on Equity (Pre-tax)</b>	<b>1417.03</b>	<b>3202.43</b>	<b>3323.82</b>

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

62. The Petitioner has claimed the following O&M expenses for instant asset, and the same is as follows:

(₹ in lakh)

Asset	2016-17 (pro-rata)	2017-18	2018-19
<b>Asset 1: 765 kV S/C Jaipur (RVPN)-Bhiwani TL (Ckt-II) along with associated bays</b>	173.76	371.16	383.42

63. The Petitioner in the instant petition has submitted that O&M rates for the tariff period 2014-19 had been arrived 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.

64. BRPL has submitted that increase in employee cost, if any, due to wage revision must be taken care by increasing the productivity levels of the Petitioner and the beneficiaries should not be burdened over and above the provisions in the 2014 Tariff Regulations. In response, the Petitioner has submitted that the wage revision of the employees of the petitioner company has been made effective from 1.1.2017 and actual impact of wage hike which has been effective from a time to time 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. Therefore, the Petitioner reserves the right to approach the Commission for suitable revision in the norms for O&M expenditure for claiming the impact of wage hike from 1.1.2017 onwards. Further, it is submitted that Petitioner has claimed O&M as per the 2014 Tariff Regulations.

65. We have considered the submissions of Petitioner and BRPL. Norms for O&M expenditure for transmission system have been specified under Regulation 29(4) of the 2014 Tariff Regulations as follows:

<b>Element</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Substation: 765 kV bay - (₹ lakh/bay)	90.12	93.11	96.20
Transmission Line: Single Circuit, four sub-conductors – (₹ lakh/Km)	0.647	0.669	0.691

66. 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. The Petitioner has computed normative O&M Expenses as per sub-clause (a) of clause (4) of Regulation 29 of the 2014 tariff regulations. Accordingly, the allowed O&M Expenses is given below:

		(₹ in lakh)		
<b>Asset</b>	<b>Details</b>	<b>2016-17 (Pro-rata-176 days)</b>	<b>2017-18</b>	<b>2018-19</b>
Asset-1	765 kV Jaipur (RVPN)-Bhiwani (Ckt-II) (Single circuit, four sub-conductor, line length - 276.44 Km)	86.24	184.93	191.02
	2 number of 765 kV bays (AIS)	86.91	186.22	192.40
	<b>Total O&amp;M Expenses Allowed</b>	<b>173.15</b>	<b>371.15</b>	<b>383.42</b>

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

67. As per the 2014 Tariff Regulations, the components of the working capital and the interest thereon are discussed hereinafter:

**a) Maintenance spares:**

Maintenance spares @ 15% of Operation and maintenance expenses specified in Regulation 28 of the 2014 Tariff Regulations.

**b) O & M expenses:**

Operation and maintenance expenses have been considered for one month of the O&M expenses.

**c) Receivables:**



The receivables have been worked out on the basis of 2 months of annual fixed cost as worked out above.

**d) Rate of interest on working capital:**

As per Clause 28 (3) of the 2014 Tariff Regulations, SBI Base Rate as on 1.4.2016 (9.30%) plus 350 Bps i.e. 12.80% has been considered as the rate of interest on working capital for FY 2016-17.

68. Accordingly, the interest on working capital (IWC) is summarized as under:

Particulars	Asset-1		
	2016-17 (pro-rata- 176 days)	2017-18	2018-19
Maintenance Spares (15% of O&M Expenses)	53.86	55.67	57.51
O&M Expenses (O&M Expenses for 1 month)	29.92	30.93	31.95
Receivables (Equivalent to 2 months of annual fixed cost)	1414.20	1516.55	1539.48
<b>Total</b>	<b>1497.99</b>	<b>1603.15</b>	<b>1628.95</b>
Rate of Interest	12.80%	12.80%	12.80%
<b>Interest on working capital</b>	<b>92.46</b>	<b>205.20</b>	<b>208.51</b>

**Annual Transmission charges**

69. Accordingly, the annual transmission charges being allowed for the instant assets are as under:

Particulars	Asset-1		
	2016-17 (pro-rata- 176 days)	2017-18	2018-19
Depreciation	1264.18	2855.21	2953.88
Interest on Loan	1144.69	2465.33	2367.27
Return on Equity	1417.03	3202.43	3323.82
Interest on Working Capital	92.46	205.20	208.51
O & M Expenses	173.15	371.15	383.42
<b>Total</b>	<b>4091.51</b>	<b>9099.32</b>	<b>9236.89</b>



### **Filing fee and the publication expenses**

70. 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. 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.

### **License fee and RLDC Fees and Charges**

71. The Petitioner has prayed to allow the Petitioner to bill and recover License fee and RLDC fees and charges, separately from the respondents. UPPCL has submitted that license fee is onus of the Petitioner. In response, the Petitioner has submitted that fees and charges to be paid by the Petitioner as ISTS licensee (deemed ISTS licensee) under CERC (Fees and Charges of RLDC and other matters) Regulations, 2014 as amended from time to time shall also be recoverable from the DICs as provided under Regulation 52(2) (a) of 2014 Tariff Regulation. 92.

72. We have considered the submissions of the Petitioner and UPPCL. We are of the view that the Petitioner shall be entitled for reimbursement of license fee and RLDC fees and charges in accordance with Clause (2)(b) and (2)(a) of Regulation 52 in the 2014 Tariff Regulations.

### **Goods and Services Tax**

73. 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.



### **Transmission Service Agreement (TSA)**

74. The Respondent, BRPL, vide affidavit dated 16.5.2019 has submitted that the Petitioner has not filed the 'Transmission Service Agreement' between the Transmission Licensee and the Designated Inter-State Customers as per provisions of Regulation 3(63) of the 2014 Tariff Regulations. The discussions during the NRPC meetings cited by the Petitioner cannot be treated as the 'Transmission service Agreement' under Regulation 3(63) of the 2014 Tariff Regulations as these bodies are statutorily not empowered to approve the Transmission Service Agreement nor all the Discoms who are expected to pay for such tariff are its members. The Petitioner may be directed to file the 'Transmission service Agreement' as per provisions of Regulation 3(63) of the 2014 Tariff Regulations. In response, the Petitioner has submitted a copy of the Model TSA dated 19.8.2011 entered into between the petitioner and BRPL and also submitted details regarding compliance of TSA.

75. We have considered the submissions of Petitioner and BRPL. It is observed that the Petitioner has complied with the 2010 Sharing Regulations by entering into a TSA with BRPL and has also complied with the requirement of the TSA.

### **Sharing of Transmission Charges**

76. Transmission Charges 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 terms of the provisions of the Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010 as amended time to time.



77. Annexure-1 given hereinafter forms part of this order.

78. This order disposes of Petition No.84/TT/2019.

**sd/-**  
**(Arun Goyal)**  
**Member**

**sd/-**  
**(I. S. Jha)**  
**Member**

**sd/-**  
**(P. K. Pujari)**  
**Chairperson**



**ANNEXURE-1****DETAILS OF WEIGHTED AVERAGE RATE OF DEPRECIATION (WAROD)  
FOR THE 2014-19 TARIFF PERIOD****Asset-1**

Asset-1 (2014-19) Capital Expenditure	Admitted Capital Cost as on COD	Admitted Additional Capitalisation during tariff period 2014-19	Admitted Capital Cost as on 31.3.2019	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations		
					2016-17	2017-18	2018-19
Building & Other Civil Works	197.77	220.13	417.90	3.34%	7.15	10.83	13.96
Transmission Line	43,538.63	5,862.46	49,401.09	5.28%	2,401.26	2,538.87	2,591.22
Sub-Station Equipments	2,816.13	3,825.05	6,641.18	5.28%	206.68	298.42	341.41
PLCC	101.14	14.09	115.23	6.33%	6.65	7.10	7.29
<b>Total</b>	<b>46,653.66</b>	<b>9,921.74</b>	<b>56,575.40</b>	<b>Total</b>	<b>2621.74</b>	<b>2855.21</b>	<b>2953.88</b>
<b>Average Gross Block (₹ in lakh)</b>					<b>49711.90</b>	<b>54172.77</b>	<b>56075.40</b>
<b>Weighted Average Rate of Depreciation (WAROD)</b>					<b>5.2739%</b>	<b>5.2706%</b>	<b>5.2677%</b>

