### CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

### Petition No. 313/TT/2014

#### Coram:

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

Date of Order : 15.12.2017

#### In the matter of:

Truing up of the tariff of 2011-14 period of 400 kV JPL Tamnar-PGCIL Raipur D/C Line-258.40 km and 2 nos. 315 MVA, 400/220 kV Transformer alongwith 4 nos. of 400 kV bays and 2 nos. of 220 kV bays at Tamnar Sub-station under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 and determination of tariff for the 2014-19 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014.

#### And in the matter of:

Jindal Power Limited (JPL), Tamnar 496107, District Raigarh, Chhattisgarh.

.....Petitioner

#### Vs

- Jindal Power Limited, OP Jindal STPP PO:Tamnar, Gjarghoda Tehsil, District Raigarh Chhatisgarh -496107.
- 2. Lanco Power Limited, Plot No. 397, Phase-III, Udyog Vihar, Gurgaon Haryana -122016.
- 3. ACB (India) Ltd, CHAKABURA, Korba, Chhattisgarh.



- Chhattisgarh State Power Distribution Company Ltd. P.O. Sundernagar , Dangani Raipur- 492013.
- 5. GUVNL, Sardar Patel Vidyut Bhavan, Race Course Vadodara- 390007.
- Maharashtra State Electricity Distribution Company Ltd. Prakashgad, 5th floor, Bandra East Mumbai- 400051.
- MP Power Trading Company Limited, Shakti Bhavan Vidyut Nagar, Rampur, Jabalpur- 482008.
- Goa Electricity Department, Government of Goa, 3<sup>rd</sup>Floor, Vidyut Bhavan, Panjim- 403001.
- Electricity Department, Union Territory of Daman & Diu Sachivalaya, Moti Daman, Daman -396210.
- Electricity Department, UT of Dadra Nagar and Haveli, Secretariat, Electricity Department 66kv Amli Road, Silvassa- 396230.
- 11. Power Grid Corporation of India Limited, Bhadravati HVDC, Sumthana Village, Bhadravathi Tehsil, Chandrapur District, Maharashtra- 442902.
- 12. Power Grid Corporation of India Limited, Vindhyachal HVDC, PO Vindhyanagar, Post Box No. 12, Singrauli District, Madhya Pradesh-486885.
- Power Grid Corporation of India Limited, Western Region-1 Headquarters, PO: Uppalwadi, Sampritinagar, Nagpur-400026.



- 14. Torrent Power Grid Limited, Torrent House, Off Ashram Road, Ahmedabad Gujarat-380009.
- Western Region Transmission (Maharashtra) Pvt. Ltd, 12th floor, Building No. 10-B, DLF Cyber City, Gurgaon, Haryana-122002.
- WRTL (GUJ REL), Western Region Transmission (Maharashtra) Pvt.Ltd., 12<sup>th</sup> floor, Building No. 10-B, DLF Cyber City, Gurgaon, Haryana-122002.
- 17. BALCO, General Manager (Finance), Bharat Aluminium Co. Ltd , Captive Power Plant -II , BALCO Nagar, Korba, Chhatisgarh-495684.
- 18. JSPL DCPP, Kharsia Road, Raigarh, Chhattisgarh-496001.
- ESSAR Power MP Limited, Thana Road, New Chunkumari Stadium, Waidhan, Distt.-Singrauli, Madhya Pradesh-486886.
- 20. ESSAR Power Transmission Company Ltd, Senior Manager, ESSAR Power Transmission Company Ltd., A-5, Sector-3, Gautam Buddha Nagar, Noida, Uttar Pradesh-201301.
- 21. KSK Mahanadi Power Company Ltd., 8-2-293/82/A/431/A, Road No 22, Jubilee Hills, Hyderabad-500033.
- 22. EMCO, Project Head Plot No B-I, Mohabala MIDC Growth Centre, Post Tehsil – Warora, Distt- Chandrapur, Maharashtra.
- Vandana Vidyut Company Ltd., Director, Vandana Bhavan, M. G. Road, Raipur,Chhattisgarh.



- 24. Korba West Power Co. Ltd., Village ChhoteBhandar,
  P.O. Bade Bhandar, Tehsil: Pussore, Distt.Raigarh-496 100. Chhattisgarh.
- DB Power,
   Village Baradarha, Post Kanwali,
   Distt Janjgir, Champa,
   Chhattisgarh 495695.
- 26. JaypeeNigrie STPP, Jaiprakash Power Ventures Limited, Sector-128, Noida, Uttar Pradesh – 201304.
- 27. Essar Steel India Pvt. Ltd, 27th KM, Surat Hazira Road, Suart, Gujarat -394270.
- Adani Power Limited, Shikhar, Nr. Adani House, Mithakhali Six Roads, Navarangapura, Ahmedabad - 380 009.

.....Respondents

- For Petitioner : Shri Matrugupta Mishra, Advocate, JPL Shri Hemant Singh, Advocate, JPL Shri Sahil Kaul, Advocate, JPL Shri Siddharth Barik, JPL
- For Respondents : Shri Abhishek Mishra, Advocate, EP JL Ms. Shruti Verma, Advocate, EP JL Shri Zorawar Singh, Advocate, EP JL

### <u>ORDER</u>

The present petition has been filed by Jindal Power Limited ("the petitioner")

for truing up of the transmission tariff for the period 2011-14 under Central

Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations,

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2009 (hereinafter referred to as "the 2009 Tariff Regulations") based on actual capital expenditure of 400 kV JPL Tamnar-PGCIL Raipur D/C line-258.40 km and 2 nos. 315 MVA, 400/220 kV Transformer alongwith 4 nos. of 400 kV bays and 2 nos. of 220 kV bays at Tamnar Sub-station (hereinafter referred to as "transmission assets") and for approval of transmission charges of the transmission assets for the financial years 2014-19 under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as "the 2014 Tariff Regulations"). The transmission charges for the period 9.5.2011 to 31.3.2014 were allowed vide order dated 18.12.2015 in Petition No. 135/TT/2012.

- 2. Brief facts of the case are as follows:-
  - (a) The petitioner had set up a Thermal Power Plant at Tamnar, District Raigarh, Chhattisgarh having capacity of 1000 (4 x 250) MW. As a part of the generation project, the petitioner had established a dedicated transmission line of 258.40 km in length for connecting the generating station to the inter-State transmission system (ISTS) for onward transmission of power. The generating units of the petitioner's plant are also connected with the various units of another group company i.e. Jindal Steel and Power Ltd (JSPL). JSPL had also set up a captive plant of 358 MW and was in the process of commissioning 450 MW plant. JSPL intended to sell its surplus power through use of the dedicated transmission line of JPL.

- (b) The petitioner approached the Commission for grant of inter-State transmission license for use of the aforesaid dedicated line as ISTS which was granted by the Commission vide order dated 9.5.2011 in Petition No. 105/2010. The transmission assets covered under the licence are as under:-
  - (i) 400 kV JPL Tamnar Raipur D/C line (258.40 km)
  - (ii) 2 Nos. 315 MVA, 400/220 kV transformer along with 4 Nos. of 400 kV bays, and
  - (iii) 2 Nos. of 220 kV bays at Tamnar Sub-station.
- (c) After issuance of licence, these assets are considered to be part of the ISTS system with effect from 9.5.2011 ("effective date"). As the licence for bays at Raipur end and Bus sectionalizer bays and part of 400/220 kV sub-station equipments was not sought, the Commission declined to allow tariff for these bays and the tariff was granted for only those transmission assets which were included in the transmission licence.
- (d) The petitioner filed Petition No. 135/TT/2012 for approval of annual transmission charges for the instant assets for the period from 9.5.2011 to 31.3.2014. Annual Transmission Charges for the instant assets were allowed, vide order dated 18.12.2015 and the details are as follows:-

			(₹ in lakh)
Particulars	2011-12 (pro-rata)	2012-13	2013-14
Depreciation	1138.72	1271.05	1271.05
Interest on Loan	0.00	0.00	0.00
Return on equity	0.00	0.00	0.00



Interest on Working Capital	44.13	50.58	52.02
O & M Expenses	446.01	525.54	555.49
Total	1628.86	1847.17	1878.56

(e) The details of Interest on Working Capital allowed vide order dated 18.12.2015 in Petition No. 135/TT/2012 is as under:-

			(₹ in lakh)
Particulars	2011-12	2012-13	2013-14
Maintenance Spares	74.68	78.83	83.32
O & M expenses	41.49	43.80	46.29
Receivables	303.02	307.86	313.09
Total	419.19	430.49	442.70
Interest	44.13	50.58	52.02
Rate of Interest	11.75%	11.75%	11.75%

- (f) The petitioner has filed the instant petition prior to the grant of tariff in Petition No. 135/TT/2012.
- (g) The petitioner filed Review Petition No. 6/RP/2016 for review of the order dated 18.12.2015 in Petition No. 135/TT/2012 regarding disallowance of Return on Equity and servicing of normative debt. The Review Petition was disposed on 8.2.2017 disallowing the claim of the petitioner for Interest on Loan. RoE was not allowed as the details regarding equity infused into the transmission business were not available on record and directed the petitioner to submit the information in Petition No. 313/TT/2014 for truing up of the tariff allowed in Petition No. 135/TT/2012 and the petitioner vide affidavit dated 11.8.2017 submitted the information.

3. No comments or suggestions have been received from the general public in response to the notices published by the petitioner under Section 64 of the

Electricity Act, 2003 ("the Act"). Essar Power Jharkhand Limited, vide affidavit dated 7.11.2016 and Essar Power Transmission Company Limited, Respondent No. 20 vide affidavit 7.11.2016 filed their replies to the petition and submitted that they are neither a necessary nor a proper party to the present proceedings as they are not using any of the assets of the petitioner and hence they be deleted from the array of respondents. Maharashtra State Electricity Distribution Company Limited (MSEDCL), Respondent No.7 has filed its reply vide affidavit dated 19.8.2015. M.P. Power Management Company Limited (MPPMCL) has filed reply vide affidavit dated 7.7.2017. No rejoinder has been filed by the petitioner to the replies of MSEDCL and MPPMCL. The issues raised by MSEDCL and MPPMCL and the clarifications given thereto by the petitioner are dealt in the respective para of this order.

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

	(₹ in lakh)		
Particulars	2011-12	2012-13	2013-14
Depreciation	1514.95	1690.46	1690.46
Interest on loan	0.00	0.00	0.00
Return on equity	1116.76	1242.74	1242.74
Interest on Working Capital	79.62	103.80	96.46
O & M Expenses	683.50	858.83	711.56
Total	3394.84	3895.83	3741.22

5. The petitioner has claimed the following transmission charges:-

6. The petitioner has claimed the following Interest on Working Capital:-



			(₹ in lakh)
Particulars	2011-12	2012-13	2013-14
O & M Expenses	56.96	71.57	59.30
Maintenance Spares	102.53	128.82	106.73
Receivables	565.81	649.31	623.54
Total	725.59	849.70	789.56
Interest	79.62	103.80	96.46
Rate of interest	12.25%	12.25%	12.25%

### Truing-up of Annual Fixed Charges of 2009-14 tariff period

7. The tariff of 2009-14 has been trued up as discussed below.

### Capital Cost

8. Regulation 6 of the 2009 Tariff Regulations provides as under:-

#### "6. Truing up of Capital Expenditure and Tariff.

(1) The Commission shall carry out truing up exercise along with the tariff petition filed for the next tariff period, with respect to the capital expenditure including additional capital expenditure incurred up to 31.3.2014, as admitted by the Commission after prudence check at the time of truing up.

Provided that the generating company or the transmission licensee, as the case may be, may in its discretion make an application before the Commission one more time prior to 2013- 14 for revision of tariff.

(2) The generating company or the transmission licensee, as the case may be, shall make an application, as per Appendix I to these regulations, for carrying out truing up exercise in respect of the generating station a unit or block thereof or the transmission system or the transmission lines or sub-stations thereof by 31.10.2014;

(3) The generating company or the transmission licensee, as the case may be, shall submit for the purpose of truing up, details of capital expenditure and additional capital expenditure incurred for the period from 1.4.2009 to 31.3.2014, duly audited and certified by the auditors;

(4) Where after the truing up, the tariff recovered exceeds the tariff approved by the Commission under these regulations, the generating company or the transmission licensee, as the case may be, shall refund to the beneficiaries or the transmission customers, as the case may be, the excess amount so recovered along with simple interest at the rates specified in the proviso to this regulation.

(5) Where after the truing up, the tariff recovered is less than the tariff approved by the Commission under these regulations, the generating company or the

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transmission licensee, as the case may be, shall recover from the beneficiaries or the transmission customers, as the case may be, the under-recovered amount along with simple interest at the rates specified in the proviso to this regulation.

(6) The amount under-recovered or over-recovered, along with simple interest at the rates specified in the proviso to this regulation, shall be recovered or refunded by the generating company or the transmission licensee, as the case may be, in six equal monthly installments starting within three months from Page 3 of 6 the date of the tariff order issued by the Commission after the truing up exercise.

Provided that the rate of interest, for clauses (4), (5) and (6) of this regulation, for calculation of simple interest shall be considered as under:

(i) SBI short-term Prime Lending Rate as on 01.04.2009 for the year 2009-10.

(ii) SBI Base Rate as on 01.07.2010 plus 350 basis points for the year 2010-11.

(iii) Monthly average SBI Base Rate from 01.07.2010 to 31.3.2011 plus 350 basis points for the year 2011-12.

(iv) Monthly average SBI Base Rate during previous year plus 350 basis points for the year 2012-13 & 2013-14."

9. The petitioner vide affidavit dated 31.8.2017 has submitted the fixed assets of ₹26926 lakh in the Audited Balance Sheet as on effective date (i.e. date of licence on 9.5.2011) by reducing the accumulated depreciation of ₹5261 lakh (i.e. depreciation from date of commissioning till date of obtaining the transmission license) from the gross fixed assets of ₹32187 lakh.

10. MSEDCL has submitted that the petitioner's project is an integrated project which includes generating station and transmission lines. Common cost indicated by the petitioner in 'Basis of apportionment of capital costs' has been allocated to transmission project on the basis of the unit cost and no further details have been provided for the same.

11. The gross block and cumulative depreciation claimed by the petitioner in the instant petition i.e. ₹32186.47 lakh and ₹5261 lakh respectively is the same as claimed in Petition No. 135/TT/2012. The capital cost of ₹3930.83 lakh for bays at Raipur end and Bus sectionalizer bays and part of 400/220 kV substation equipment was disallowed in order dated 18.12.2015 in Petition No. 135/TT/2012 as it was not part of the transmission license. Accordingly, the cumulative depreciation of ₹4027.22 lakh of allowed assets as admitted in Petition No. 135/TT/2012 has been considered in the instant petition for the purpose of truing up.

12. In view of above, the capital cost considered in Petition No. 135/TT/2012 and in Review Petition No. 6/RP/2016 as on effective date of tariff computation remain the same, the details whereof are given as under:-

	<b>(₹</b> in lakh)
Particulars	Amount
Gross Block as on effective date	32186.47
Less: Gross Block disallowed in Petition No.	3930.83
135/TT/2012 in respect of bays and bus	
sectionalizer	
Gross Block allowed as on effective date	28255.64
Less: Cumulative depreciation pertaining to	4027.22
allowable gross block up to effective date	
Capital cost considered for tariff as on	24228.42
effective date	

### Additional Capital Expenditure

13. MPPMCL has submitted that the petitioner's claim of ₹508.78 lakh and ₹1506.97 lakh towards Energy Restoration System (ERS) and Bay at Raipur respectively as additional capital expenditure in 2008-09 may not be allowed as the petitioner has not mentioned the regulation under which the claim has been

made. The petitioner has not filed any rejoinder to the reply of MPPMCL. These claims pertain to the period prior to the date of licence of 9.5.2011. The petitioner has already included the cost of ERS in the gross capital cost as on 9.5.2011 and the same is admitted by the Commission in its order dated 18.12.2015 in Petition No. 135/TT/2012. Further, Regulation 9(2)(v) of the 2009 Tariff Regulations also recognizes the expenditure towards ERS. Accordingly, it is allowed. Therefore, there is no need to re-open the admitted capital cost as on 9.5.2011 on this count. As stated in para 11, the cost of bays at Raipur have already been disallowed in order dated 18.12.2015 in Petition No.135/TT/2012. Further, the petitioner has not claimed any additional capital expenditure from the COD/effective date, i.e. 9.5.2011 to 31.3.2014 during 2009-14 tariff period.

### Debt:Equity Ratio

14. Regulation 12(1) of the 2009 Tariff Regulations provides as follows:-

### "12. Debt-Equity Ratio

(1) For a project declared under commercial operation on or after 1.4.2009, if the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan:

Provided that where equity actually deployed is less than 30% of the capital cost, the actual equity shall be considered for determination of tariff:

Provided further that the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment.

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



15. Debt-equity ratio of 100:0 was considered in order dated 18.12.2015 as the petitioner indicated nil share capital in the balance sheet of licensed transmission business and the entire fund was indicated as inter-company balance. As a result of this, it was concluded that the petitioner did not earmark and infuse any share capital against the licensed transmission business and the entire funding was thus treated as debt for the purpose of transmission tariff. However, the petitioner was given liberty to submit segregated accounts, with equity allocated separately for transmission business. Further, Commission vide order dated 8.2.2017 in Review Petition No. 6/RP/2016 in Petition No. 135/TT/2012 also directed the petitioner to submit the audited balance sheet of transmission and generation business along with Director's Report and consolidated Balance Sheet published and filed with the Registrar of Companies alongwith Auditors comments from the actual date of commercial operation onwards including the date of licence at the time of truing up.

16. Accordingly, the petitioner vide affidavit dated 11.8.2017 submitted segregated Audited Balance Sheets between generation and transmission businesses starting from the year 2008-09 (i.e. the year of commissioning) 2009-10, 2010-11, 2011-12, 2012-13 and 2013-14 along with directors' report for the respective years. Subsequently, the petitioner vide affidavit dated 31.8.2017 has submitted the allocated Audited Balance Sheets between generation and transmission businesses as on the date of grant of transmission licence (i.e. 9.5.2011).

17. The flow of debt and equity from the year of commissioning of the assets i.e.2008-09 for segregated transmission business as submitted by the petitioner is summarised as under:-

			(₹ in lal	<h)< th=""></h)<>
Debt-Equity Ratio	2008-09	2009-10	2010-11	9.5.2011
Capital cost claimed for the asset	32186.47	32186.47	32186.47	32186.47
Long term debt	0.00	25749.58	0.00	0.00
Equity	0.00	6436.89	6436.89	6436.89
Inter Divisional Balance	32186.47	-	-	-

18. MSEDCL has submitted that the debt-equity ratio used by the petitioner for financing the integrated project (1000 MW generating station alongwith the licensed transmission business) was 80:20 as indicated by the petitioner. MSEDCL has submitted that in line with the 2009 Tariff Regulations and the submission of the petitioner, Return on Equity (RoE) should be allowed at 20% of the project cost.

19. We have considered the submission of the petitioner and the respondents. It is observed that, as per the aforesaid segregated Audited Balance Sheets, the gross block as on 31.3.2009 is ₹32186.47 lakh and no additional capitalization has been made till the effective date. Therefore, it is inferred that as per the allocated Audited Balance Sheet for the transmission business for the year ending on 31.3.2009, the petitioner did not allocate any amount towards debt or equity but showed only ₹17.20 lakh (negative balance) as the balance in "Reserve & Surplus heads" in Profit and Loss Account. The segregated Balance Sheet as on 31.3.2009 shows ₹32186.47 lakh under the head "Inter Division Order in Petition No. 313/TT/2014

Balance" in liability side which is equal to the gross block of the transmission assets. From the allocated balance sheet of transmission business, it is seen that for the year 2009-10, the petitioner did not show any Inter Division Balance but allocated ₹6436.89 lakh as equity and ₹25749.58 lakh as secured loan. However, the Directors' report and the annual accounts given in Annual Reports are silent on allocation of accounts between generation business and transmission business. Hence we are of the view that the petitioner has not complied with the requirements as per the directives in order dated 18.12.2015 in Petition No. 135/TT/2012 and order dated 8.2.2017 in review Petition No. 06/RP/2016. Regulation 7(1)(a) of the 2009 Tariff Regulations provides as under:-

#### **"7. Capital Cost**

(1) Capital cost for a project shall include:

(a) the expenditure incurred or projected to be incurred, including interest during construction and financing charges, any gain or loss on account of foreign exchange risk variation during construction on the loan - (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, - up to the date of commercial operation of the project, as admitted by the Commission, after prudence check;"

As per the above regulation, if the equity is less than 30% of the funds deployed upto the commercial operation of the project as admitted by the Commission, then the amount of loan equal to the difference between actual equity deployed and 30% of the funds deployed shall earn interest during construction and the actual equity shall earn RoE. In the present case, the date of commercial operation has been accepted as 9.5.2011. In our order dated 18.12.2015, we had considered the debt equity ratio as 100:0 since the petitioner had not indicated any equity in the balance sheet for the licensed transmission business and the entire investment was considered as debt. Further, as on the date of commercial operation, the petitioner had repaid the entire loan. In other words, as on the date of commercial operation, there was neither any investment in equity nor any outstanding loan deployed for the instant transmission assets. Therefore, the petitioner cannot be granted either RoE for want of investment in equity nor interest on loan in terms of Regulation 7(1)(a) of the 2009 Tariff Regulations.

#### Return on Equity (ROE)

20. Clause (3), (4) and (5) of Regulation 15 of the 2009 Tariff Regulations

provides that:-

"(3) The rate of return on equity shall be computed by grossing up the base rate with the Minimum Alternate/Corporate Income Tax Rate for the year2008-09, as per the Income Tax Act, 1961, as applicable to the concerned generating company or the transmission licensee, as the case may be.

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

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

Where "t" is the applicable tax rate in accordance with clause (3) of this regulation.

(5) The generating company or the transmission licensee, as the case maybe, shall recover the shortfall or refund the excess Annual Fixed Charge 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:



Provided further that Annual Fixed Charge with respect to the tax rate applicable to the generating company or the transmission licensee, as the case may be, in line with the provisions of the relevant Finance Acts of the respective year during the tariff period shall be trued up in accordance with Regulation 6 of these regulations."

21. As discussed in the Debt-Equity ratio paragraph 19, the petitioner is not

entitled for Return on Equity.

#### Interest on Loan ("IOL")

22. Regulation 16 of the 2009 Tariff regulations provides that:-

"16. (1) The loans arrived at in the manner indicated in regulation 12 shall be considered as gross normative loan for calculation of interest on loan.

(2) The normative loan outstanding as on 1.4.2009 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2009 from the gross normative loan.

(3) The repayment for the year of the tariff period 2009-14 shall be deemed to be equal to the depreciation allowed for that year:

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

(5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio at the beginning of each year applicable to the project:

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

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

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

(7) The generating company or the transmission licensee, as the case may be, shall make every effort to re-finance the loan as long as it results in net savings

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on interest and in that event the costs associated with such re-financing shall be borne by the beneficiaries and the net savings shall be shared between the beneficiaries and the generating company or the transmission licensee, as the case may be, in the ratio of 2:1.

(8) The changes to the terms and conditions of the loans shall be reflected from the date of such re-financing.

(9) In case of dispute, any of the parties may make an application in accordance with the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999, as amended from time to time, including statutory reenactment thereof for settlement of the dispute:

Provided that the beneficiary or the transmission customers shall not withhold any payment on account of the interest claimed by the generating company or the transmission licensee during the pendency of any dispute arising out of refinancing of loan."

23. No Interest on Loan was allowed in order dated 18.12.2015 as the petitioner

had repaid the entire actual loan. The relevant part of the order is extracted

hereunder:-

"36. The petitioner has submitted that the entire actual loan for integrated project has been repaid prior to inception of the licensed transmission business. The petitioner vide affidavit dated 14.9.2012 has submitted the Auditor's certificate dated 13.9.2012 for the actual repayment of the loans as follows:-

Financial Year	Opening Balance	Proceeds from borrowings	Repayment of borrowings	Closing balance as on 31st March
2007-08	1112.12	1972.80	0.00	3084.92
2008-09	3084.92	128.90	81.07	3132.75
2009-10	3132.75	56.96	2124.45	1065.26
2010-11	1065,26	0.00	1065.26	0.00
2011-12	0.00	0.00	0.00	0.00

24. The Commission reaffirmed its aforesaid order in Review Petition No.

6/RP/2016. The relevant part of the order is extracted hereunder:-

"17. The review petitioner has contended that term "debt" includes not only the actual loan taken but also the normative loan. We are of the view that the entire loan was repaid in the instant case and no loan was outstanding on the date of issue of licence. Servicing of loan even after repayment would amount to additional servicing of loan. Accordingly, IOL was disallowed. Further, the petitioner has not submitted any fresh reason or justification to review our

decision in order dated 18.12.2015. We do not find any reason for reviewing our earlier decision and accordingly review on this account is not allowed."

25. No interest on loan is allowed as the entire secured loan amounting to ₹25749.58 lakh was repaid by the petitioner during financial year 2010-11 as per the segregated balance sheet for transmission business.

### **Depreciation**

26. Clause (4) of Regulation 17 of the 2009 Tariff Regulations provides as follows:-

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

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

27. Depreciation has been calculated annually based on Straight Line Method and at rates specified in the 2009 Tariff Regulations. The depreciation for the tariff period 9.5.2011 to 31.3.2014 has been trued up in accordance with Regulation 17 of the 2009 Tariff Regulations based on admitted capital expenditure as under:-

		(₹ in	lakh)
Depreciation	2011-12	2012-13	2013-14
Opening Gross Block	24228.42	24228.42	24228.42
Addition during 2009-14 due to	0.00	0.00	0.00
Additional Capitalisation			
Closing Gross Block	24228.42	24228.42	24228.42
Average Gross Block	24228.42	24228.42	24228.42
Rate of Depreciation	5.2461%	5.2461%	5.2461%
Depreciable Value	21798.38	21798.38	21798.38
Remaining Depreciable Value	21798.38	20659.66	19388.61
Depreciation	1138.72	1271.05	1271.05

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

28. O&M Expenses allowed vide order dated 18.12.2015 in Petition No.18.12.2015 has been considered for the purpose of tariff calculation.

29. Accordingly, the O & M Expenses claimed by the petitioner, allowed and trued up are the same, and they are as follows:-

			(₹ in lakh)
Particulars	2011-12	2012-13	2013-14
O & M Expenses	446.01	525.54	555.49

## Interest on Working Capital (IWC)

30. Sub-clause (c) of clause (1) of Regulation 18 of the 2009 Tariff Regulations provides the components of the working capital for the transmission system and clause (3) of Regulation 18 of the 2009 Tariff Regulations provides for the rate of IWC.

31. The IWC trued up is as under:-

			(₹ in lakh)
Particulars	2011-12	2012-13	2013-14
Maintenance Spares	74.68	78.83	83.32
O & M expenses	41.49	43.80	46.29
Receivables	303.02	307.86	313.09
Total	419.19	430.49	442.71
Interest	44.13	50.58	52.02
Rate of Interest	11.75%	11.75%	11.75%

### I. Maintenance Expenses

Maintenance spares have been worked out based on 15% of Operation and Maintenance expenses.

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### II. O & M Expenses:

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

### III. Receivables:

The receivables have been worked out on the basis of 2 months' of annual transmission charges as worked out above.

### IV. Rate of interest on working capital:

As per Central Electricity Regulatory Commission (Terms and Conditions of Tariff) 2009, rate of interest on working capital has been computed by considering interest rate @ 11.75% (base rate as on 1.4.2011 i.e. 8.25% and 350 basis points) for assets.

### Annual Transmission Charges

32. In view of the above, the annual fixed charges after truing up for the 2009-14 tariff period is as under:-

			(₹ in lakh
Particulars	2011-12	2012-13	2013-14
Depreciation	1138.72	1271.05	1271.05
Interest on Loan	0.00	0.00	0.00
Return on equity	0.00	0.00	0.00
Interest on Working	44.13	50.58	52.02
Capital			
O & M Expenses	446.01	525.54	555.49
Total	1628.86	1847.17	1878.56



# **DETERMINATION OF ANNUAL TRANSMISSION CHARGES FOR 2014-19**

33. The petitioner in the instant petition has claimed tariff for 2014-19 period on capital cost of the assets commissioned till 31.3.2014. The details of Annual Transmission Charges claimed by the petitioner for the period of 2014-19 period are as follows:-

					(₹ in lakh)
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	1690.46	1690.80	1690.80	1690.80	1690.80
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Return on equity	1262.38	1263.01	1263.64	1263.64	1263.64
Interest on Working Capital	102.71	103.89	105.10	106.33	107.60
O & M Expenses	628.91	649.91	671.43	693.71	716.73
Total	3684.46	3707.61	3730.97	3754.48	3778.77

### Capital Cost

34. Clause (1) & (3) of Regulation 9 of the 2014 Tariff Regulations specify 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."

- "(3) The Capital cost of an existing project shall include the following:
- (a) the capital cost admitted by the Commission prior to 1.4.2014 duly trued up by excluding liability, if any, as on 1.4.2014;
- (b) additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with Regulation 14; and

(c) expenditure on account of renovation and modernisation as admitted by this Commission in accordance with Regulation 15."

35. The admitted capital cost of ₹24228.42 lakh as on 31.3.2014 as trued up in

above paragraphs is considered as the capital cost as on 1.4.2014 for the

purpose of determination of tariff for the 2014-19 tariff period.

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### Projected Additional Capital Expenditure

36. Sub-clause (i) of Clause 1 and sub-clause (ix) of Clause 3 of Regulation 14

of the 2014 Tariff Regulations provides as follows:-

"(1) The capital expenditure in respect of the new project or an existing project incurred or projected to be incurred, on the following counts within the original scope of work, after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check:

(i) Undischarged liabilities recognized to be payable at a future date;"

"(3) The capital expenditure, in respect of existing generating station or the transmission system including communication system, incurred or projected to be incurred on the following counts after the cut-off date, may be admitted by the Commission, subject to prudence check:

(ix) In case of transmission system, any additional expenditure on items such as relays, control and instrumentation, computer system, power line carrier communication, DC batteries, replacement due to obsolesce of technology, replacement of switchyard equipment due to increase of fault level, tower strengthening, communication equipment, emergency restoration system, insulators cleaning infrastructure, replacement of porcelain insulator with polymer insulators, replacement of damaged equipment not covered by insurance and any other expenditure which has become necessary for successful and efficient operation of transmission system;"

37. The petitioner vide form 7 has claimed additional capital expenditure of ₹639.81 lakh for "bus reactor in SWYD" during the financial year 2015-16 under Regulation 14 (3) (ix) of the 2014 Tariff Regulations. The petitioner has submitted that the expenditure made towards additional capitalization is necessary for successful and efficient operation of transmission system for voltage controlling device which controls the high voltage fluctuation. At the time of COD this was not installed as it was presumed that small fluctuation can be controlled manually. However, due to high voltage fluctuation in the grid it was necessary to install the bus reactor to overcome the high voltage fluctuation.

38. In our view, if the addition of bus reactor is owing to the grid requirement, then such a requirement of bus reactor needs to be examined by supporting technical study and should be discussed at the concerned RPC for the consent of the beneficiaries. Since no such consent has been furnished, the additional capitalization on this account is not allowed towards transmission system. However, the petitioner is granted liberty to approach the Commission at the time of truing up petition, if the requirement of bus reactor is recommended by Standing Committee and the concerned RPC as a requirement of the grid.

39. Based on the above, capital cost as on 31.3.2019 is considered at ₹24228.42 lakh, as no additional capital has been allowed.

#### Debt Equity Ratio

40. Clause 3 of Regulation 19 of the 2014 Tariff Regulations specifies as under:-

"(3) In case of the generating station and the transmission system declared under commercial operation prior to 1.4.2014, debt-equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2014 shall be considered."

41. As discussed in Debt Equity Ratio, return on equity and interest on loan paragraphs as a part of 2009-14 true-up tariff, the petitioner is not entitled for Return on Equity and interest on loan.

#### **Depreciation**

42. Clause (2), (5) and (6) of Regulation 27 of the 2014 Tariff Regulations provide as follows:-

"27. Depreciation:

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(2) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission. In case of multiple units of a generating station or multiple elements of transmission system, weighted average life for the generating station of the transmission system shall be applied. Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis"

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

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

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

43. The Commission in its order dated 18.12.2015 in Petition No. 135/TT/2012

vide para 9 observed as under:-

"The transmission assets were part of the generating station prior to 9.5.2011 and were used by the petitioner for evacuation of power from the generating station and were serviced through the revenue stream of generation tariff. The tariff of the generating station including transmission assets was not regulated by the Commission. The petitioner has submitted the balance sheets from 2008-09 to 2010-11 to show that the revenue recovered from the generation business included the cost of transmission assets has been serviced and used by the petitioner for their own purpose prior to 9.5.2011, we are of the view that there is no requirement now to determine tariff for transmission assets prior to 9.5.2011. The tariff of the transmission assets will be determined from the date it was granted licence and the said date is taken as the effective date for determination of tariff."

44. The actual COD of the instant assets was 16.8.2008. For determination of

tariff effective date is 9.5.2011. In order to determine the useful life of the assets,

it is just and proper that useful life of the assets is reckoned from the date of its

actual COD i.e. 16.8.2008. This approach shall be helpful for spreading over the

depreciation on completion of 12 years from the date of actual COD of the assets. Accordingly, the useful life on effective date has been worked by adjusting the lapsed life from 16.8.2008 to 8.5.2011 for the purpose of depreciation.

45. Cumulative depreciation as on 1.4.2014 is ₹3680.82. The lapsed useful life as on 1.4.2014 is worked out as 5 years. Reckoning the period of 12 years from the effective date of commercial operation, transmission assets complete useful life beyond the tariff period 2014-19. Therefore, depreciation for the entire tariff period 2014-19 is worked out based on Straight Line Method and at rates specified in Appendix–II to 2014 Tariff Regulations.

46. We have considered the submission made by the petitioner with reference to depreciation. Depreciation is allowed as provided under Regulation 27 of the 2014 Tariff Regulations. The details of the depreciation allowed are given hereunder:-

(₹ in lakh)

				(5 11 1)	anii)
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross Block	24228.42	24228.42	24228.42	24228.42	24228.42
Addition during 2014-19 due to	0.00	0.00	0.00	0.00	0.00
Projected Add-Cap					
Gross Block	24228.42	24228.42	24228.42	24228.42	24228.42
Average Gross Block	24228.42	24228.42	24228.42	24228.42	24228.42
Rate of Depreciation	5.2461%	5.2461%	5.2461%	5.2461%	5.2461%
Depreciable Value	21798.38	21798.38	21798.38	21798.38	21798.38
Remaining Depreciable Value	18117.56	16846.51	15575.46	14304.41	13033.36
Depreciation	1271.05	1271.05	1271.05	1271.05	1271.05



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

47. The petitioner's entitlement to O&M Expenses has been worked out for combined assets as per sub-clause (a) of clause (3) of Regulation 29 of the 2014 Tariff Regulations and considered as O&M Expenses of project as a whole for the purpose of computation of tariff. The details of O&M Expenses allowed are as follows:-

						(₹ in lakh)	
Particulars	Unit	2014-15	2015-16	2016-17	2017-118	2018-19	
Transmission Lin	e ( 400 kV DCD	S Tamnar-Ra	ipur Circuit-	1 & 2)			
Line length	km	258.4	258.4	258.4	258.4	258.4	
Normative O&M	Per km	0.707	0.731	0.755	0.780	0.806	
Subtotal (A)	₹ in lakh	182.69	188.89	195.09	201.55	208.27	
Normative O&M	charges for sub	stations:					
400 KV	Lakh/Bay	60.30	62.30	64.37	66.51	68.71	
220 KV	Lakh/Bay	42.21	43.61	45.06	46.55	48.1	
Number of bays (	including bays a	at Raipur Kum	hari Sub-st	ation)	L		
400 kV	4	4	4	4	4	4	
200 kV	2	2	2	2	2	2	
O&M Charges for	O&M Charges for licensed bays						
400 kV	₹ in lakh	241.20	249.20	257.48	266.04	274.84	
220 kV	₹ in lakh	84.42	87.22	90.12	93.10	96.20	
Subtotal (B)		325.62	336.42	347.6	359.14	371.04	
Total O&M Charges (A + B)	₹ in lakh	508.31	525.31	542.69	560.69	579.31	

# Interest on Working Capital ("IWC")

48. Clause 1 (c) of Regulation 28 and Clause 5 of Regulation 3 of the 2014

Tariff Regulations specify as follows:-

(1) The working capital shall cover:

(c) Hydro generating station including pumped storage hydro electric generating station and transmission system including communication system:

(i) Receivables equivalent to two months of fixed cost;

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(ii) Maintenance spares @ 15% of operation and maintenance expenses specified in regulation 29; and

(iii) Operation and maintenance expenses for one month"

(3) Rate of interest on working capital shall be on normative basis and shall be considered as the bank rate as on 1.4.2014 or as on 1st April of the year during the tariff period 2014-15 to 2018-19 in which the generating station or a unit thereof or the transmission system including communication system or element thereof, as the case may be, is declared under commercial operation, whichever is later.

"(5) 'Bank Rate' means the base rate of interest as specified by the State Bank of India from time to time or any replacement thereof for the time being in effect plus 350 basis points;"

				(₹	' in lakh)
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	94.34	97.49	100.71	104.06	107.51
O & M expenses	52.41	54.16	55.95	57.81	59.73
Receivables	614.08	617.94	621.83	625.75	629.79
Total	760.83	769.59	778.49	787.62	797.03
Interest	102.71	103.89	105.10	106.33	107.60
Rate of Interest	13.50%	13.50%	13.50%	13.50%	13.50%

49. The petitioner has claimed the following Interest on Working Capital:-

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

### (i) Maintenance spares:

Maintenance spares @ 15 % of O&M Expenses specified in Regulation

28 of the 2014 Tariff Regulations.

# (ii) O & M Expenses:

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

### (iii) Receivables:

The receivables have been worked out on the basis of 2 months' of annual transmission charges as worked out above.

# (iv) Rate of interest on working capital:

As per Clause 28 (3) of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014, SBI Base Rate (10.00%) as on 1.4.2014 plus 350 Bps i.e. 13.50 % have been considered as the rate of interest on working capital.

51. Accordingly, the IWC allowed is as follows:-

				(	₹ in lakh)
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	76.25	78.80	81.40	84.10	86.90
O & M expenses	42.36	43.78	45.22	46.72	48.28
Receivables	306.12	309.11	312.16	315.33	318.60
Total	424.72	431.68	438.79	446.16	453.78
Interest on working capital	57.34	58.28	59.24	60.23	61.26
Rate of Interest	13.50%	13.50%	13.50%	13.50%	13.50%

### Annual Transmission Charges

- 52. The details of Annual Transmission Charges allowed for the assets for the
- 2014-19 tariff period is summarised below:-



					(₹ in lakh)
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	1271.05	1271.05	1271.05	1271.05	1271.05
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Return on Equity	0.00	0.00	0.00	0.00	0.00
Interest on Working Capital	57.34	58.28	59.24	60.23	61.26
O & M Expenses	508.31	525.31	542.69	560.69	579.31
Total	1836.70	1854.64	1872.98	1891.97	1911.62

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

### Licence Fee and RLDC Fees and Charges

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.

### **Sharing of Transmission Charges**

55. The transmission charges shall be recovered on monthly basis in accordance with Regulation 43 of Central Electricity Regulatory Commission (Terms and Condition of Tariff) Regulations, 2014 and shall be shared by the

beneficiaries and long term transmission customers in CERC (Sharing of Inter State Transmission Charges and Losses) Regulations, 2010 as amended from time to time.

56. This order disposes of Petition No. 313/TT/2014.

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

