

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition No. 198/TT/2014**

**Coram:**

**Shri Gireesh B. Pradhan, Chairman**

**Shri A.K. Singhal, Member**

**Shri A.S. Bakshi, Member**

**Dr. M. K. Iyer, Member**

**Date of Hearing: 24.11.2015**

**Date of Order : 07.12.2015**

**In the Matter of**

Approval under Regulation-86 of CERC (Conduct of Business) Regulations'1999, CERC (Terms and Conditions of Tariff) Regulations, 2009 and CERC (Terms and Conditions of Tariff) Regulations' 2014 for determination of (i) Truing up Transmission tariff for 2009-14 tariff block and (ii) Transmission tariff for 2014-19 tariff block for LILO of Purnia - Dalkola 132kV S/C line and extension at Purnia sub-station in Eastern Region

And in the Matter of

Power Grid Corporation of India Ltd,  
Registered office: B-9, Qutab Institutional Area,  
Katwaria Sarai, New Delhi. 110 016.  
Corporate Centre : 'SAUDAMINI', Plot No-2,  
Sector-29, Gurgaon-122 001 ( Haryana).

**.....Petitioner**

Versus

1. BIHAR STATE ELECTRICITY BOARD VIDYUT BHAWAN,  
BAILEY ROAD,  
PATNA – 800 001
  
- 2 WEST BENGAL STATE ELECTRICITY  
DISTRIBUTION COMPANY BIDYUT BHAWAN,  
BIDHAN NAGAR BLOCK DJ,  
SECTOR-II, SALT LAKE CITY,  
CALCUTTA - 700 091



3. GRID CORPORATION OF ORISSA LTD.  
SHAHID NAGAR,  
BHUBANESWAR - 751 007
4. DAMODAR VALLEY CORPORATION  
DVC TOWER, MANIKTALA  
CIVIC CENTRE, VIP ROAD,  
CALCUTTA - 700 054
5. POWER DEPARTMENT  
GOVT. OF SIKKIM,  
GANGTOK - 737 101
6. JHARKHAND STATE ELECTRICITY  
BOARD IN FRONT OF MAIN  
SECRETARIAT DORANDA,  
RANCHI - 834002

.....Respondents

The following were present:

For Petitioner : Sh. M.M.Mondal, PGCIL

For Respondents : None

### **ORDER**

The petition has been preferred by Power Grid Corporation of India Ltd, a transmission licensee, for revision of tariff under Regulation 6 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter referred to as "the 2009 Tariff Regulations") based on truing up of expenditure for the period 1.4.2009 to 31.3.2014 and for determination of tariff under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as "the 2014 Tariff Regulations") for the period from 1.4.2014 to 31.3.2019 in respect of LILO of Purnia - Dalkola 132kV S/C line and extension at Purnia sub-station in Eastern Region (hereinafter referred to as "transmission system").



2. The respondents are distribution licensees, who are procuring transmission service from the petitioner, mainly beneficiaries of Eastern Region.

3. The petitioner has built the transmission system in Eastern Region and the same has been put under commercial operation w.e.f. dated 1.11.2003. The petitioner had approached the Commission vide Petition No. 127/2010 for determination of tariff for 2009-14 tariff period. The Commission, on 13.4.2011 had approved the tariff based on the admitted capital cost of ₹572.84 lakh for the instant asset as on 31.3.2009 as given:

Particulars	(₹ in Lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	30.41	30.41	30.41	30.41	30.41
Interest on Loan	18.96	16.88	14.80	12.72	10.64
Return on Equity	20.24	20.24	20.24	20.24	20.24
Interest on Working Capital	7.23	7.51	7.82	8.15	8.49
O & M Expenses	115.46	122.07	129.04	136.43	144.23
<b>Total</b>	<b>192.29</b>	<b>197.11</b>	<b>202.31</b>	<b>207.94</b>	<b>214.01</b>

4. As per Regulation 6 of the 2009 Tariff Regulations, 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. Further, as per Regulation 15 of the 2009 Tariff Regulations, the petitioner is required to adjust the yearly impact of MAT rate in the truing up petition for 2009-14 tariff period. The petitioner has submitted that in case interest on loan was calculated on basis of prevailing rates for the determination of tariff, any change in the rate of interest subsequently during the tariff period will be considered at the time of truing up. In this context, the petitioner has relied upon the Commission's order dated 8.6.2011 in Petition No. 238/2010.

5. The petitioner has made following submissions in regard to revision of tariff in accordance with Regulation 6 of the 2009 Tariff Regulations for 2009-14:

- a) The additional capital expenditure during the 2009-14 tariff period is NIL and hence, the tariff has been claimed based on the admitted capital cost of ₹ 572.84 lakh for the instant asset by the Commission in order dated 13.4.2011 in Petition No 127/2010;
- b) The variation in the tax rate during the 2009-14 tariff period applicable to the petitioner as per the Finance Act of the relevant year for the purpose of grossing up of ROE has been furnished as follows:

Year	MAT Rate (in %)	Grossed up ROE (Base rate/(1-t) (in %))
2009-10	16.995	18.674
2010-11	19.931	19.358
2011-12	20.008	19.377
2012-13	20.008	19.377
2013-14	20.961	19.610

- c) The petitioner has claimed the interest on loan based on actual interest rates for each year during the 2009-14 period and also submitted relevant documents vide affidavit dated 26.6.2014.

6. Based on aforesaid, the petitioner has claimed the revision of tariff for 2009-14 tariff period as under:

( ₹ in lakh)

Particulars	2009-10	2010 – 11	2011 -12	2012 – 13	2013 - 14
Revised AFC based on truing up	191.88	195.52	201.10	207.92	215.47

7. The petitioner has further claimed the transmission tariff for the period 2014-19 in accordance with the 2014 Tariff Regulations as follows:

(₹ in Lakh)

<b>Period</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
<b>Annual Fixed Cost</b>	<b>202.82</b>	<b>205.46</b>	<b>188.91</b>	<b>193.15</b>	<b>197.60</b>

8. The petitioner has made following submissions in regard to determination of tariff for 2014-19 :

- a) The depreciation has been claimed in accordance with Regulation 27 of the 2014 Tariff Regulations;
- b) The petitioner has prayed for grossing up of ROE at MAT rate of 20.961% prevailing in 2013-14 which shall be trued up with actual tax rate in accordance with clause 25 (3) of the 2014 Tariff Regulations;
- c) The petitioner has prayed for reimbursement of service tax if it is subjected to such tax in future;
- d) The petitioner has considered interest on loan on the basis of rate prevailing as on 1.4.2014 and prayed that the change in Interest Rate due to floating rate of interest applicable, if any, during 2014-19 period will be adjusted;
- e) The wage revision of the employees of the petitioner company is due during 2014-19 and actual impact of wage hike will be effective from a future date. The scheme of wage revision applicable to CPSUs being binding on the

petitioner, the petitioner sought liberty to approach the Commission for suitable revision in the norms for O&M expenditure for claiming the impact of wage hike, if any, during 2014-19.

- f) The petitioner has prayed for recovery of deferred tax liability before 1.4.2009 from the beneficiaries or the long term customers / DICs as and when the same gets materialized.
- g) The petitioner has prayed for recovery of the application fee, filing fee, expenses incurred on publication of Notices in News papers and License fee from the respondents in terms of Regulation 52 Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014. The 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 as amended from time to time have also been prayed to be recoverable from the DICs as provided under clause 52(2) (a).

9. The petitioner has served the petition to the respondents and notice of this application has been published in the news paper in accordance with the CERC (Procedure for making of application for determination of tariff, Publication of the application and other related matters) Regulations, 2004. Further, submissions were made vide affidavit dated 31.7.2015 and 27.10.2015 . No submissions have been made by the Respondents. No comments/objections have been received from the public in response to the notice in newspaper. The hearing in this matter was held on 24.11.2015.

## **TRUE UP ANNUAL FIXED CHARGES FOR 2009-14 PERIOD**

10. We have considered the submissions of the petitioner in respect of truing up of annual fixed charged for 2009-14 tariff period. The revision of tariff for 2009-14 period has been determined as discussed below:

- a) The capital cost of ₹ 572.84 lakh for the instant Asset admitted by the Commission as on 31.3.2009 has been considered as opening capital cost as on 1.4.2009 for determination of tariff in accordance with Regulation 7 of the 2009 Tariff Regulations;
- b) The petitioner has not claimed any additional capital expenditure for 2009-14 period;
- c) The Regulation 15 of the 2009 Tariff Regulations provides for the grossing up of ROE with the actual tax rate for the purpose of return on equity. The petitioner has submitted the MAT rate applicable during the various years. Return on equity has been worked out by considering year wise MAT rate submitted by the petitioner in accordance with Regulation 15 of the 2009 Tariff Regulations;
- d) Regulation 16 of the 2009 Tariff Regulations provide the methodology for working out weighted average rate of interest on loan. The Commission in its earlier order dated 8.6.2011 in Petition No. 238/2010 has held that in case of floating rate of interest, any change in the rates of interest during the tariff period will be considered at the time of true up. Accordingly, the interest on loan has been worked out and details of weighted average rate of interest are placed at Annexure-1.

- e) Depreciation, Interest on Working Capital and Operation & Maintenance Expenses has been considered in accordance with the 2009 Regulations.

11. Accordingly, the annual fixed charges for the transmission system under the petition has been worked out and allowed as under:

( ₹ in lakh)					
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
<b>Gross Block</b>					
Opening Gross Block	572.84	572.84	572.84	572.84	572.84
Additional Capitalisation	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	572.84	572.84	572.84	572.84	572.84
Average Gross Block	572.84	572.84	572.84	572.84	572.84
<b>Depreciation</b>					
Rate of Depreciation	5.3084%	5.3084%	5.3084%	5.3084%	5.3084%
Depreciable Value	515.56	515.56	515.56	515.56	515.56
Elapsed Life (Beginning of the year)	5	6	7	8	9
Weighted Balance Useful life of the combine assets	21	20	19	18	17
Remaining Depreciable Value	365.09	334.68	304.27	273.86	243.45
Depreciation	30.41	30.41	30.41	30.41	30.41
<b>Interest on Loan</b>					
Gross Normative Loan	457.04	457.04	457.04	457.04	457.04
Cumulative Repayment upto Previous Year	164.71	195.12	225.53	255.94	286.34
Net Loan-Opening	292.33	261.92	231.51	201.10	170.70
Additions	0.00	0.00	0.00	0.00	0.00
Repayment during the year	30.41	30.41	30.41	30.41	30.41
Net Loan-Closing	261.92	231.51	201.10	170.70	140.29
Average Loan	277.13	246.72	216.31	185.90	155.49
Weighted Average Rate of Interest on Loan	6.1966%	5.3244%	5.2806%	5.6500%	6.1760%
Interest	17.17	13.14	11.42	10.50	9.60
<b>Return on Equity</b>					
Opening Equity	115.80	115.80	115.80	115.80	115.80
Additions	0.00	0.00	0.00	0.00	0.00
Closing Equity	115.80	115.80	115.80	115.80	115.80
Average Equity	115.80	115.80	115.80	115.80	115.80
Return on Equity (Base Rate)	15.50%	15.50%	15.50%	15.50%	15.50%
MAT rate for the respective year (%)	16.995	19.931	20.008	20.008	20.961
Rate of Return on Equity	18.674%	19.358%	19.377%	19.377%	19.610%
Return on Equity	21.62	22.42	22.44	22.44	22.71





<b>Interest on Working Capital</b>					
Maintenance Spares	17.32	18.31	19.36	20.46	21.63
O & M expenses	9.62	10.17	10.75	11.37	12.02
Receivables	31.98	32.59	33.52	34.65	35.91
Total	58.92	61.07	63.63	66.49	69.57
Interest	<b>7.22</b>	<b>7.48</b>	<b>7.79</b>	<b>8.14</b>	<b>8.52</b>
<b>Annual Transmission Charges</b>					
Depreciation	30.41	30.41	30.41	30.41	30.41
Interest on Loan	17.17	13.14	11.42	10.50	9.60
Return on Equity	21.62	22.42	22.44	22.44	22.71
Interest on Working Capital	7.22	7.48	7.79	8.14	8.52
O & M Expenses	115.46	122.07	129.04	136.43	144.23
<b>Total</b>	<b>191.88</b>	<b>195.51</b>	<b>201.10</b>	<b>207.93</b>	<b>215.47</b>

### **ANNUAL FIXED CHARGES FOR 2014-19**

12. We have considered the submissions of the petitioner in respect of tariff for 2014-19 tariff period. The tariff for 2014-19 period has been determined as discussed below:

- a) The capital cost of ₹ 572.84 lakh for the instant Asset admitted by the Commission as on 31.3.2014 has been considered as opening capital cost as on 1.4.2014 for determination of tariff in accordance with Regulation 9 of the 2014 Tariff Regulations;
- b) The petitioner has not claimed any projected additional capital expenditure during 2014-19 period;
- c) The Regulation 24 read with Regulation 25 of the 2014 Tariff Regulations provides the grossing up of return on equity with the effective tax rate for the purpose of return on equity. It further provides that in case the generating company or transmission licensee paying Minimum Alternative Tax (MAT), the MAT rate including surcharge and cess will be considered for the grossing up of return on equity. The petitioner has submitted that MAT rate is applicable to

the petitioner's company. Accordingly, the MAT rate applicable during the 2013-14 has been considered for the purpose of return on equity which shall be trued up with actual tax rate in accordance with clause 25 (3) of the 2014 Tariff Regulations;

- d) The weighted average interest on loan has been considered on the basis of rate prevailing as on 1.4.2014. The petitioner has prayed that the change in Interest rate due to floating rate of interest applicable, if any, during 2014-19 period will be adjusted. Accordingly, the floating rate of interest, if any, shall be considered at the time of true up or next revision of tariff. By considering above, the interest on loan has been worked out in accordance with Regulation 26 of the 2014 Regulations and details of weighted average rate of interest are placed at Annexure-2.
- e) As in the present petition, depreciation till 2015-16 was provided by straight line method. For years 2016-17 to 2018-19, depreciation has been calculated based on the remaining depreciable value to be recovered in the balance useful life.
- f) Interest on Working Capital and Operation & Maintenance Expenses have been considered in accordance with the 2014 Regulations.

13. Accordingly, the annual fixed charges for the transmission asset under the petition has been worked out and allowed as under:

(₹in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
<b>Gross Block</b>					
Opening Gross Block	572.84	572.84	572.84	572.84	572.84
Additional Capitalisation	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	572.84	572.84	572.84	572.84	572.84
Average Gross Block	572.84	572.84	572.84	572.84	572.84



<b>Depreciation</b>					
Rate of Depreciation	5.3084%	5.3084%	1.897%	1.897%	1.897%
Depreciable Value	515.56	515.56	515.56	515.56	515.56
Elapsed Life (Beginning of the year)	10	11	12	13	14
Weighted Balance Useful life of the combine assets	16	15	14	13	12
Remaining Depreciable Value	213.04	182.63	152.23	141.35	130.48
Depreciation	30.41	30.41	10.87	10.87	10.87
<b>Interest on Loan</b>					
Gross Normative Loan	457.04	457.04	457.04	457.04	457.04
Cumulative Repayment upto Previous Year	316.75	347.16	377.57	388.44	399.32
Net Loan-Opening	140.29	109.88	79.47	68.60	57.72
Additions during the year	0.00	0.00	0.00	0.00	0.00
Repayment during the year	30.41	30.41	10.87	10.87	10.87
Net Loan-Closing	109.88	79.47	68.60	57.72	46.85
Average Loan	125.08	94.67	74.03	63.16	52.29
Weighted Average Rate of Interest on Loan	6.4700%	6.4700%	6.4700%	6.4700%	6.4700%
Interest	8.09	6.13	4.79	4.09	3.38
<b>Return on Equity</b>					
Opening Equity	115.80	115.80	115.80	115.80	115.80
Additions	0.00	0.00	0.00	0.00	0.00
Closing Equity	115.80	115.80	115.80	115.80	115.80
Average Equity	115.80	115.80	115.80	115.80	115.80
Return on Equity (Base Rate )	15.50%	15.50%	15.50%	15.50%	15.50%
MAT rate for FY 2014-15 (%)	20.961	20.961	20.961	20.961	20.961
Rate of Return on Equity	19.610%	19.610%	19.610%	19.610%	19.610%
Return on Equity	22.71	22.71	22.71	22.71	22.71
<b>Interest on Working Capital</b>					
Maintenance Spares	19.93	20.59	21.27	21.98	22.71
O & M expenses	11.07	11.44	11.82	12.21	12.62
Receivables	33.80	34.24	31.48	32.19	32.93
Total	64.80	66.27	64.58	66.38	68.26
Interest	<b>8.75</b>	<b>8.95</b>	<b>8.72</b>	<b>8.96</b>	<b>9.22</b>
<b>Annual Transmission Charges</b>					
Depreciation	30.41	30.41	10.87	10.87	10.87
Interest on Loan	8.09	6.13	4.79	4.09	3.38
Return on Equity	22.71	22.71	22.71	22.71	22.71
Interest on Working Capital	8.75	8.95	8.72	8.96	9.22
O & M Expenses	132.86	137.27	141.82	146.52	151.41
<b>Total</b>	<b>202.82</b>	<b>205.46</b>	<b>188.91</b>	<b>193.15</b>	<b>197.59</b>



14. The petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses. 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 Regulation 52 (1) of the 2014 Tariff Regulations.

15. The petitioner has prayed for reimbursement of service tax if it is subjected to such tax in future. In our view, the petitioner's prayer is premature.

16. The petitioner shall be entitled for reimbursement of licence fee in accordance with Regulation 42A (1) (b) of the 2009 Tariff Regulations for 2009-14 period and in accordance with Regulation 52 (2) (b) of the 2014 Tariff Regulations. The petitioner shall also be entitled for recovery of RLDC fee & charges in accordance with 42 A (1) (a) of 2009 Tariff Regulations for 2009-14 period and Regulations 52 (2) (a) of the Tariff 2014 Tariff Regulations for 2014-19 period.

17. The petitioner has submitted that O&M Expenses for the year 2014-19 had been arrived at on the basis of normalized actual O&M Expenses during the period 2008-13. The petitioner has further submitted that the wage revision of the employees of the petitioner company is due during 2014-19 and actual impact of wage hike which will be effective from a future date has also not been factored in fixation of the normative O&M rate specified for the tariff block 2014-19. The petitioner has also prayed that it will approach the Commission for suitable revision in the norms of O&M expenses for claiming the impact of such increase. We have

considered the submission of the petitioner. We would like to clarify that any application filed by the petitioner in this regard will be dealt with in accordance with the appropriate provisions of the 2014 Tariff Regulations.

### **Sharing of Transmission Charges**

18. The billing, collection and disbursement of the transmission charges approved shall be governed by the provisions of Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010, as amended from time to time as provided in Regulation 43 of the 2014 Tariff Regulations.

19. This order disposes of Petition No.198/TT/2014.

sd/-

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

**Member**

sd/-

**(A.S. Bakshi)**

**Member**

sd/-

**(A.K. Singhal)**

**Member**

sd/-

**(Gireesh B. Pradhan)**

**Chairperson**

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN					
(₹ in Lacs)					
Details of Loan	2009-10	2010-11	2011-12	2012-13	2013-14
<b>1 ADB - I</b>					
Gross loan opening	456.39	456.39	456.39	456.39	456.39
Cumulative Repayment upto DOCO/previous year	164.07	201.72	243.23	288.99	339.44
Net Loan-Opening	292.32	254.67	213.16	167.40	116.95
Additions during the year	0.00	0.00	0.00	0.00	0.00
Repayment during the year	37.65	41.51	45.76	50.45	55.62
Net Loan-Closing	254.67	213.16	167.40	116.95	61.32
Average Loan	273.49	233.91	190.28	142.17	89.13
Rate of Interest	6.1966%	5.3244%	5.2806%	5.6500%	6.1760%
Interest	16.95	12.45	10.05	8.03	5.50
Rep Schedule	Half Yearly instalment from 01.06.2000				
<b>Total Loan</b>					
Gross loan opening	456.39	456.39	456.39	456.39	456.39
Cumulative Repayment upto DOCO/previous year	164.07	201.72	243.23	288.99	339.44
Net Loan-Opening	292.32	254.67	213.16	167.40	116.95
Additions during the year	0.00	0.00	0.00	0.00	0.00
Repayment during the year	37.65	41.51	45.76	50.45	55.62
Net Loan-Closing	254.67	213.16	167.40	116.95	61.32
Average Loan	273.49	233.91	190.28	142.17	89.13
Rate of Interest	6.1966%	5.3244%	5.2806%	5.6500%	6.1760%
Interest	16.95	12.45	10.05	8.03	5.50

<b>CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN</b>						
						<b>(₹ in Lacs)</b>
	<b>Details of Loan</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
<b>1</b>	<b>ADB - I</b>					
	Gross loan opening	456.39	456.39	456.39	456.39	456.39
	Cumulative Repayment upto DOCO/previous year	395.07	456.39	456.39	456.39	456.39
	Net Loan-Opening	61.32	0.00	0.00	0.00	0.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	61.33	0.00	0.00	0.00	0.00
	Net Loan-Closing	0.00	0.00	0.00	0.00	0.00
	Average Loan	30.66	0.00	0.00	0.00	0.00
	Rate of Interest	6.4700%	6.4700%	6.4700%	6.4700%	6.4700%
	Interest	1.98	0.00	0.00	0.00	0.00
	Rep Schedule	Half Yearly installment from 01.06.2000				
	Total Loan					
	Gross loan opening	456.39	456.39	456.39	456.39	456.39
	Cumulative Repayment upto DOCO/previous year	395.07	456.39	456.39	456.39	456.39
	Net Loan-Opening	61.32	0.00	0.00	0.00	0.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	61.33	0.00	0.00	0.00	0.00
	Net Loan-Closing	0.00	0.00	0.00	0.00	0.00
	Average Loan	30.66	0.00	0.00	0.00	0.00
	Rate of Interest	6.4700%	6.4700%	6.4700%	6.4700%	6.4700%
	Interest	1.98	0.00	0.00	0.00	0.00