

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition No. 7/GT/2016**

**Coram:**

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

**Date of Order: 24<sup>th</sup> March, 2017**

**In the matter of**

Revision of tariff of Udupi Thermal Power Station (1200 MW) for the period from 11.11.2010 to 31.3.2014 after truing up exercise-Truing-up of tariff determined by order dated 10.7.2015 in Petition No.160/GT2012

**And**

**In the matter of**

Udupi Power Corporation Limited  
2nd Floor, "Le Parc Richmonde"  
51, Richmond Road  
Bengaluru-560025

**...Petitioner**

Vs

1. Power Company of Karnataka Ltd,  
Corporate Office, Kaveri Bhavan,  
Bengaluru – 560 009

2. Bangalore Electricity Supply Company Ltd  
K.R. Circle,  
Bangalore-506001

3. Mangalore Electricity Supply Company Ltd,  
Paradigm Plaza, AB Shetty Circle,  
Mangalore-575001

4. Gulbarga Electricity Supply Corporation Ltd  
Station Road, Gulbarga,  
Karnataka

5. Hubli Electricity Supply Company Ltd  
Navanagar, PB Road, Hubli,  
Karnataka

6. Chamundeshwari Electricity Supply Corporation Ltd  
927, L J Avenue, GF, New Kantharaj Urs Road,  
Saraswatipuram, Mysore-570009

7. Punjab State Power Corporation Limited  
The Mall, Patiala-147 001

**...Respondents**



**Parties present:**

Shri Sanjay Sen, Senior Advocate, UPCL  
Shri Sakya Singha Chaudhari, Advocate, UPCL  
Shri Avijeet Lala, Advocate, UPCL  
Ms. Shruti Dass, UPCL  
Shri Sanjay Jain, Senior Advocate, PCKL  
Shri D. L. Chidananda, Advocate, PCKL  
Shri U. Bharatheesha Rao, PCKL  
Shri B.M. Chandrashekhar, PCKL

**ORDER**

This petition has been filed by the petitioner, Udupi Power Corporation Limited for revision of tariff of Udupi Thermal Power Station (1200 MW) (the generating station) for the period from 11.11.2010 to 31.3.2014 (Unit-I) and from 1.4.2012 to 31.3.2014 for Unit-II, based on trueing-up exercise of the actual capital cost incurred in terms of Regulation 6(1) of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter referred to as "the 2009 Tariff Regulations").

2. The petitioner, formerly known as 'Nagarjuna Power Corporation Ltd' is a public Ltd company incorporated under the Companies Act, 1956 and was renamed as 'Udupi Power Corporation Ltd' on 8.2.2008. UPCL is a generating company as defined under Section 2(28) of the Electricity Act, 2003 (the Act). The project has been developed as a Mega Power project inline with the policy guidelines issued by the Ministry of Power, Government of India and is a first thermal power plant designed for 100% imported coal. The date of commercial operation of Unit-I is 11.11.2010 and Unit-II is 19.8.2012.

**Background**

3. The Commission vide order dated 20.2.2014 in Petition No.160/GT/2012 had approved the tariff for the period from 11.11.2010 to 31.3.2014 for Unit-I and from 19.8.2012 to 31.3.2014 for Unit-II of the generating station. Aggrieved by the said order, some of the parties, including the petitioner, filed appeals before the Appellate Tribunal for Electricity (the Tribunal) on various issues. During the pendency of the appeals, the petitioner filed Petition No. 518/GT/2014 for revision of tariff of the generating station based on the admitted capital cost as on 19.8.2012 and the actual capital



expenditure incurred during the period from 11.11.2010 to 31.3.2014, after truing-up exercise in terms of the proviso to Regulation 6(1) of the 2009 Tariff Regulations.

4. While so, the Tribunal by common judgment dated 15.5.2015 disposed of the appeals filed by the parties with direction to Commission to re-determine the tariff of the generating station based on its findings on certain issues. In compliance of the directions of the Tribunal, the Commission by order dated 10.7.2015 re-determined the tariff of the generating station for the said period as under.

	(₹ in lakh)				
	2010-11	2011-12	2012-13		2013-14
	11.11.2010 to 31.3.2011		1.4.2012 to 18.8.2012	19.8.2012 to 31.3.2013	
Return on Equity	11414.34	11425.54	11425.54	24683.66	25190.33
Interest on Loan	22160.06	21542.92	20843.70	50522.94	48321.09
Depreciation	12826.19	12826.71	12826.61	26873.04	27324.46
Interest on Working Capital	5238.93	5260.06	5258.44	14506.26	14537.29
O&M Expenses	7422.00	7848.00	8292.00	16584.00	17544.00
Cost of secondary fuel oil	1345.58	1349.26	1345.58	3916.43	3916.43
<b>Total</b>	<b>60407.10</b>	<b>60252.50</b>	<b>59991.87</b>	<b>137086.33</b>	<b>136833.61</b>

5. Thereafter, the petitioner filed this petition (Petition No.7/GT/2016) for revision of tariff of the generating station for the period from 11.11.2010 to 31.3.2014 after truing up exercise of the capital cost, in terms of Regulation 6(1) of 2009 Tariff Regulations. Considering the fact that this petition was filed by the petitioner taking into consideration the impact of the judgment of Tribunal and the order of the Commission dated 10.7.2015 Petition No. 518/GT/2014, the same was dismissed as *infructuous* by Commission's order dated 14.3.2016. The relevant portion of the order is extracted as under:

*"5.....Considering the fact that the submissions made by the petitioner in the present petition stand superseded by the tariff petition (Petition No.7/GT/2016) filed by the petitioner on 14.1.2016, the instant petition filed on 4.12.2014 does not survive for consideration. Accordingly, we find no reason to keep the present petition pending. The prayer of the learned counsel for the petitioner is therefore allowed and the instant petition is disposed of as infructuous. Petition No. 7/GT/2016 shall be listed for hearing in due course for which parties shall be separately intimated."*

6. Clause (1) of 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."*

7. Accordingly, this petition has been filed by the petitioner for revision of tariff of the generating station based on capital cost of ₹280595.66 lakh as on COD of Unit-I and ₹551607.56 lakh as on COD of Unit-II. The capital cost and the annual fixed charges claimed by the petitioner in the petition are as under:

### Capital Cost

	2010-11	2011-12	2012-13		2013-14
	11.11.2010 to 31.3.2011		1.4.2012 to 18.8.2012	19.8.2012 to 31.3.2013	
Opening capital cost	280595.66	280595.66	280595.66	551607.56	551607.56
Add: Additional capital expenditure	0.00	0.00	0.00	0.00	0.00
<b>Closing capital cost</b>	<b>280595.66</b>	<b>280595.66</b>	<b>280595.66</b>	<b>551607.56</b>	<b>551607.56</b>
<b>Average capital cost</b>	<b>280595.66</b>	<b>280595.66</b>	<b>280595.66</b>	<b>551607.56</b>	<b>551607.56</b>

### Annual Fixed Charges

	2010-11	2011-12	2012-13		2013-14
	11.11.2010 to 31.3.2011		1.4.2012 to 18.8.2012	19.8.2012 to 31.3.2013	
Return on Equity	16295	16311	16311	30258	30623
Interest on Loan	23876	23950	23929	50653	48019
Depreciation	14508	14508	14508	28529	28529
Interest on Working Capital	4966	4999	5011	15608	15615
O&M Expenses	7422	7848.00	8292	16584	17544
Cost of secondary fuel oil	1418	1422	1418	5345	5345
<b>Total</b>	<b>68485</b>	<b>69037.63</b>	<b>69468.52</b>	<b>146976.80</b>	<b>145674.99</b>

8. The petitioner has filed the additional information in terms of the directions of the Commission and has served copies on the respondents. The respondent No.1, PCKL has filed its reply and the petitioner has filed its rejoinder to the said reply. Based on the submissions of the parties and documents available on record, we proceed to revise the tariff of the generating station after prudence check, as stated in the subsequent paragraphs.

9. It is observed that there is difference in the opening capital cost claimed by the petitioner as against those admitted by the Commission in order dated 10.7.2015 in Petition No.160/GT/2012.



This is on account of the fact that while the Commission had allowed the opening capital cost of ₹248078.72 lakh and ₹517044.76 lakh as on COD of Unit-I and Unit-II respectively on cash basis after deduction of un-discharged liabilities, the petitioner, in this petition, has considered the opening capital cost of ₹272210.72 lakh as on COD of Unit-I and ₹534475.76 lakh as on COD of Unit-II/generating station on accrual basis. In addition, the petitioner has also included the additional cost in respect of Infirm power, Spares and IDC disallowed by the Commission in the order dated 10.7.2015.

#### Capital Cost as on COD of Unit-I (11.11.2010)

10. The petitioner has claimed capital cost of ₹280595.66 lakh as on COD of Unit-I and the break-up details are as under:

	(₹ in lakh)
Capital cost (on cash basis) approved as on COD of Unit-I in order dated 10.7.2015	248078.72
Add: Un-discharged liabilities deducted from capital cost as on COD of Unit-I vide order dated 10.7.2015	24132.00
<b>Total</b>	<b>272210.72</b>
Add: Infirm power outstanding (yet to be received) as on COD of Unit-I	5998.00
Add: Additional spares reduced in order dated 10.7.2015	49.00
Add: Impact on IDC due to above adjustments (un-discharged liabilities, infirm power & spares)	2338.00
<b>Capital cost claimed as on 11.11.2010</b>	<b>280595.66</b>

#### Capital Cost as on COD of Unit-II (19.8.2012)

11. The petitioner has claimed capital cost of ₹551607.56 lakh as on COD of Unit-II and the break-up details are as under:

	(₹ in lakh)
Capital cost (on cash basis) approved as on COD of Unit-I vide order dated 10.7.2015	517044.76
Add: Un-discharged liabilities deducted from capital cost as on COD of Unit-II vide order dated 10.7.2015	17431.00
<b>Total</b>	<b>534475.76</b>
Add: Infirm power outstanding (yet to be received) as on COD of Unit-I	12792.00
Add: Additional spares reduced by order dated 10.7.2015	89.00
Add: Impact on IDC due to above adjustments (i.e un-discharged liabilities, infirm power & spares)	4251.00
<b>Capital cost claimed as on 19.8.2012</b>	<b>551607.56</b>

#### Un-discharged liabilities

12. Out of un-discharged liabilities of ₹24132.00 lakh deducted from the admitted capital cost of ₹272210.72 lakh as on COD of Unit-I, un-discharged liabilities of ₹14483.00 lakh pertains to



assets/works disallowed for the purpose of tariff. Out of un-discharged liabilities amounting to ₹17431.00 lakh deducted from allowed capital cost of ₹534475.76 lakh as on COD of Unit-II, un-discharged liabilities amounting to ₹105.20 lakh pertains to assets/works disallowed for the purpose of tariff. Accordingly, un-discharged liabilities deducted from the admitted capital cost of ₹272210.72 lakh as on COD of Unit-I is ₹9649.00 lakh and the un-discharged liabilities deducted from the capital cost of ₹534475.76 lakh as on COD of Unit-II works out to ₹6911.00 lakh.

### **Initial Spares**

13. Regulation (8) of 2009-14 Tariff Regulations allows capitalization of initial spares up to 2.5% of the capital cost in respect of coal-based/lignite-fired thermal generating stations. The cost towards initial spares allowed in order dated 20.02.2014 is ₹8158 lakh (7430+728) which was reduced to ₹8069 lakh in order dated 10.7.15. The petitioner in this petition has submitted that the Commission should have applied the ceiling limit of 2.5 % in terms of the regulations rather than relying on the method followed in orders dated 20.02.2014 and 10.7.2015. It has stated that an amount of ₹8158 lakh should be allowed as initial spares since the same is within the ceiling limit of 2.5% as specified under the regulations, instead of ₹8069 lakh.

14. The Commission by order dated 10.7.2015 had revised value of initial spares to the extent of 2.5% of the revised BOP cost with the following observation:

*“10. In terms of para 59 of the judgment, the Tribunal has observed that the initial spares which was restricted to 2.5% of increase in BoP cost needs to be adjusted in view of deduction in BoP cost. The revised BoP cost after deduction of Rs157.29 crore towards the items disallowed and deduction of initial spares of Rs 7.28 crore allowed by the Commission in order dated 20.2.2014 is worked out as Rs 255.65 crore (Rs 420.22-157.29-7.28 crore). Accordingly, the revised value of initial spares comprising 2.5 % of the revised BoP cost of Rs 255.65 crore works out to Rs 6.39 crore.”*

15. It is evident from the above that the Commission while revising the tariff of the generating station had adjusted the cost of initial spares considering the deduction in BOP cost, in compliance with the directions contained in the judgment of the Tribunal dated 15.5.2015. Accordingly, there is no justification in the claim of the petitioner for ₹89 lakh (81.58-80.69) as initial spares in the opening capital cost as on COD of Unit-II/generating station. Accordingly, the same has been disallowed.



## **Infirm Power**

16. The petitioner in this petition has requested for capitalization of unrecovered amount of energy charges towards infirm power as on respective COD of the units. In justification of the same, the petitioner has submitted that there is an under recovery of ₹127.92 crore and the same is eligible to be considered for upward adjustment in the capital cost in accordance with Regulation 11 of the 2009 Tariff Regulations. It has also submitted that invoices were raised on Karnataka Escoms at the applicable UI rates, but the Karnataka ESCOMs have made partial payments towards infirm power, which resulted in a situation that even the fuel cost incurred in generating infirm power has not been fully recovered. Accordingly, it has submitted that based on principle adopted by the Commission for determination of capital cost on cash basis, it is proposed to capitalize this amount. The petitioner has further submitted that in absence of any specific direction from the Commission in order dated 20.2.2014 in Petition No. 160/GT/2012, the respondents have withheld the amount of ₹127.92 crore against payment of infirm power energy charges.

17. The respondent, PCKL vide affidavit dated 16.5.2016 has submitted that the petitioner in their submission dated 8.5.2013 had proposed to deduct an amount of ₹35.14 crore from the capital cost towards excess revenue earned over and above fuel cost towards sale of infirm power based on prevailing market price. It has also submitted that the Commission in orders dated 20.2.2014 and 10.07.2015 had not reduced the amount of ₹35.14 crore from the capital cost as submitted by the petitioner. The respondent has further submitted that it had paid an amount of ₹104.07 crore towards infirm power generated by the petitioner from June,2010 to 11.11.2010 for Unit-I and from March, 2011 to August, 2012 for Unit-II. While pointing out that the energy pumped to the grid in respect of Unit-I is 492.20 MU and that of Unit-II is 381.20 MU, the respondent has submitted that the petitioner had not obtained any prior approval from the Commission for injecting infirm power beyond the scheduled COD, since, in respect of Unit-II, the total duration of infirm power pumped to the grid is beyond six months from the date of 1<sup>st</sup> synchronization. In response, the petitioner in its rejoinder affidavit dated 15.6.2016 has reiterated that the respondents have not reimbursed the actual fuel cost and thus there is an under-recovery of ₹127.92 crore. It has also submitted that all details related to infirm power had been submitted before the Commission.



18. We have examined the matter. Regulation 11 of the 2009 Tariff Regulations provides as under:

*“Supply of infirm power shall be accounted as UI and paid for from the regional or State UI pool account at applicable frequency-linked UI rate:*

*Provided that any revenue earned by the generating company from sale of infirm power after accounting for the fuel expenses shall be applied for reduction in capital cost.”*

19. In terms of the above regulation, the revenue earned (and not revenue realized) from sale of infirm power after accounting for fuel expenses shall be applied for reduction in capital cost. Accordingly, the plea of the petitioner to capitalize the unrecovered towards infirm power in the capital cost is not accepted. As regards withholding of payment of ₹127.92 crore by the respondent, Karnataka discoms towards infirm power, we direct the respondents to pay the same directly to the petitioner since, the supply of infirm power are to be accounted as UI in terms of the above regulations.

20. Based on the above discussions, the capital cost as on COD of Unit-I works out to ₹262561.72 lakh and the capital cost as on COD of Unit-II works out to ₹527564.76 lakh and has been considered for the purpose of tariff of the generating station.

### **Additional Capital Expenditure**

21. The Commission vide order dated 10.7.2015 in Petition No.160/GT/2012 had allowed additional capital expenditure of ₹3632.00 lakh from the COD of Unit-II (19.8.2012) till 31.3.2013 and ₹13800.00 lakh for 2013-14 in respect of this generating station. The petitioner has however not claimed any actual additional capital expenditure for the period from 19.8.2012 to 31.3.2013 and for 2013-14. It is observed from the submission of the petitioner that it has discharged un-discharged liabilities of ₹17431.00 lakh during the period from 19.8.2012 to 31.3.2013, out of which discharges of ₹6911.00 lakh pertains to allowed assets. Accordingly, an amount of ₹6911.00 lakh has been allowed as additional capital expenditure for the period 19.8.2012 to 31.3.2013.

22. Accordingly, the capital cost allowed for the generating station for the period from 11.11.2010 to 31.3.2014 is as under:



(₹In lakh)

	2010-11	2011-12	2012-13		2013-14
	11.11.2010 to 31.3.2011		1.4.2012 to 18.8.2012	19.8.2012 to 31.3.2013	
Opening Capital Cost	262561.72	262561.72	262561.72	527564.76	534475.76
Additional capital expenditure allowed	0.00	0.00	0.00	6911.00	0.00
<b>Closing capital cost</b>	<b>262561.72</b>	<b>262561.72</b>	<b>262561.72</b>	<b>534475.76</b>	<b>534475.76</b>
<b>Average capital cost</b>	<b>262561.72</b>	<b>262561.72</b>	<b>262561.72</b>	<b>531020.26</b>	<b>534475.76</b>

### Debt-Equity Ratio

23. The petitioner has claimed debt-equity ratio of 70:30 and 71.69:28.31 as against the debt-equity ratio of 76.23:23.77 and 75.47:24.53 considered in order dated 10.7.2015 as on the COD of Unit-I & Unit-II, respectively. The debt-equity ratio as considered in order dated 10.07.2015 has been retained. Further, the debt-equity ratio as on 31.3.2013 works out to 71.06:28.94 which has been adopted for purpose of admitted additional capital expenditure (for the period 19.8.2012 to 31.3.2013).

### Return on Equity

24. The petitioner has claimed return on equity by grossing-up base rate of 15.50% with MAT rate for respective years. However, it is observed from the books of accounts, that the petitioner has not paid any tax (Corporate/MAT) for the years 2010-11 and 2011-12. The petitioner vide affidavit dated 18.4.2016 has however clarified that it has not paid any tax (Corporate/MAT) paid for the years 2010-11 and 2011-12. In view of this, return on equity has been computed by grossing-up base rate of 15.50% with 'nil' rate of tax for the period from 11.11.2010 to 31.3.2012 and with MAT rate applicable to the petitioner for the period from 1.4.2012 to 31.3.2014 in terms of Regulation 15 of the 2009 Tariff Regulations. Accordingly, the return on equity has been worked out as under:

(₹In lakh)

	2010-11	2011-12	2012-13		2013-14
	11.11.2010 to 31.3.2011		1.4.2012 to 18.8.2012	19.8.2012 to 31.3.2013	
Normative Equity - Opening	62406.83	62406.83	62406.83	129422.36	131422.22
Add: Addition to equity on account of additional capital expenditure	0.00	0.00	0.00	1999.86	0.00
Normative Equity - Closing	62406.83	62406.83	62406.83	131422.22	131422.22
Average Equity	62406.83	62406.83	62406.83	130422.29	131422.22



Rate of Return on Equity	15.500%	15.500%	19.377%	19.377%	19.610%
<b>Return on Equity</b>	<b>9673.06</b>	<b>9673.06</b>	<b>12092.57</b>	<b>25271.93</b>	<b>25771.90</b>

### Interest on loan

25. In terms of Regulation 16 of the 2009 Tariff Regulations, Interest on loan has been worked out as under:

- i) The gross normative loan corresponding to approved debt-equity ratio as on respective CODs works out as ₹200154.89 lakh and ₹398142.40 lakh.
- ii) Net loan opening as on 16.9.2011 i.e. as on COD of Unit-I is same as gross loan. Accordingly, the cumulative repayment of loan up to previous year/period is 'nil'.
- iii) Depreciation allowed has been considered as repayments for respective periods.
- iv) Average net loan is calculated as average of opening and closing.
- v) Weighted average rate of interest has been calculated considering that the details of actual loan are on annual rest basis. The actual draws submitted in the petition have been considered.

26. Necessary calculation for interest on loan is as under:

	2010-11	2011-12	2012-13		2013-14
	11.11.2010 to 31.3.2011		1.4.2012 to 18.8.2012	19.8.2012 to 31.3.2013	
Gross Opening Loan	200154.89	200154.89	200154.89	398142.40	403053.54
Cumulative Repayment of Loan	0.00	5228.53	18804.07	24028.12	40947.40
Net Loan Opening	200154.89	194926.36	181350.82	374114.28	362106.14
Addition of loan due to additional capital expenditure	0.00	0.00	0.00	4911.14	0.00
Repayment of loan (Normative)	5228.53	13575.54	5224.05	16919.28	27681.78
Net Loan Closing	194926.36	181350.82	176126.77	362106.14	334424.36
Average Loan	197540.63	188138.59	178738.80	368110.21	348265.25
Weighted Average Rate of Interest on Loan	12.3231%	13.3417%	13.6829%	13.8898%	13.6603%
<b>Interest on Loan</b>	<b>24343.21</b>	<b>25100.85</b>	<b>24456.65</b>	<b>51129.90</b>	<b>47574.07</b>

### Depreciation

27. The petitioner has claimed depreciation considering the Weighted Average Rate of Depreciation (WAROD) of 5.170% for the period from 11.11.2010 to 31.3.2011, 5.1703% for the year 2011-12, 5.1703% for the period from 1.4.2012 to 18.8.2012 and 5.1719% for the period from 19.8.2012 to 31.3.2014. Subsequently, the petitioner vide affidavit dated 22.4.2016 has furnished the revised Form-11 showing the calculation of WAROD. However, the asset-wise breakup in the revised Form-11 is at variance with the details in Form-11 submitted in Petition No. 160/GT/2012.



Accordingly, depreciation has been calculated considering WAROD as allowed in order dated 10.7.2015. The necessary calculations in support of depreciation are as under:

	2010-11	2011-12	2012-13		(₹ in lakh) 2013-14
	11.11.2010 to 31.3.2011		1.4.2012 to 18.8.2012	19.8.2012 to 31.3.2013	
Average capital cost	262561.72	262561.72	262561.72	531020.26	534475.76
Rate of depreciation	5.1702%	5.1704%	5.1704%	5.1792%	5.1792%
<b>Depreciation for the period</b>	<b>5228.53</b>	<b>13575.54</b>	<b>5224.05</b>	<b>16919.28</b>	<b>27681.78</b>
<b>Depreciation (annualised)</b>	<b>13574.99</b>	<b>13575.54</b>	<b>13575.44</b>	<b>27502.81</b>	<b>27681.78</b>
Cumulative Depreciation at the end	5228.53	18804.07	24028.12	40947.40	68629.18

### O & M Expenses

28. The O&M expenses considered in order dated 10.7.2015 has been considered as under:

2010-11	2011-12	2012-13		2013-14
		11.11.2010 to 31.3.2011	1.4.2012 to 18.8.2012	
7422.00	7848.00	8292.00	16584.00	17544.00

### Normative Annual Plant Availability Factor (NAPAF)

29. NAPAF of 85% as considered in order dated 10.7.2015 has been considered.

### Interest on Working Capital

### Fuel Components in Working Capital

30. The fuel component in the working capital as considered in order dated 10.7.2015 is allowed as under:

	2010-11	2011-12	2012-13		(₹ in lakh) 2013-14
	11.11.2010 to 31.3.2011		1.4.2012 to 18.8.2012	19.8.2012 to 31.3.2013	
Cost of coal for 2 months	17565.80	17613.93	17565.80	39527.21	39527.21
Cost of Secondary fuel oil for 2 months	224.26	224.88	224.26	652.74	652.74
Cost of Lime for 2 months	50.02	50.16	50.02	100.04	100.04

### Maintenance Spares

31. Maintenance spares as considered in order dated 10.7.2015 has been considered as under:

2010-11	2011-12	2012-13		2013-14
		11.11.2010 to 31.3.2011	1.4.2012 to 18.8.2012	
1484.40	1569.60	1658.40	3316.80	3508.80



## Receivables

32. Receivables have been worked out on the basis of two months of fixed and energy charges as under:

	(₹ in lakh)				
	2010-11	2011-12	2012-13		2013-14
	11.11.2010 to 31.3.2011		1.4.2012 to 18.8.2012	19.8.2012 to 31.3.2013	
Variable Charges-2 months	17615.82	17664.09	17615.82	39627.26	39627.26
Fixed Charges - 2 months	10270.00	10475.74	10852.43	23158.89	22838.31
<b>Total</b>	<b>27885.83</b>	<b>28139.83</b>	<b>28468.26</b>	<b>62786.15</b>	<b>62465.57</b>

## O&M expenses for 1 month

33. O & M expenses for 1 month as considered in order dated 10.7.2015 is considered as under:

	(₹ in lakh)				
	2010-11	2011-12	2012-13		2013-14
	11.11.2010 to 31.3.2011		1.4.2012 to 18.8.2012	19.8.2012 to 31.3.2013	
	618.50	654.00	691.00	1382.00	1462.00

34. Accordingly, SBI PLR has been considered for the purpose of calculating interest on working capital. Necessary computations in support of calculation of interest on working capital are as under:

	(₹ in lakh)				
	2010-11	2011-12	2012-13		2013-14
	11.11.2010 to 31.3.2011		1.4.2012 to 18.8.2012	19.8.2012 to 31.3.2013	
Cost of coal for 2 months	17565.80	17613.93	17565.80	39527.21	39527.21
Cost of lime for 2 months	50.02	50.16	50.02	100.04	100.04
Cost of secondary fuel oil for 2 months	224.26	224.88	224.26	652.74	652.74
O&M Expenses	618.50	654.00	691.00	1382.00	1462.00
Maintenance spares	1484.40	1569.60	1658.40	3316.80	3508.80
Receivables	27885.83	28139.83	28468.26	62786.15	62465.57
<b>Total working capital</b>	<b>47828.81</b>	<b>48252.40</b>	<b>48657.74</b>	<b>107764.94</b>	<b>107716.37</b>
Rate of Interest	11.000%	11.000%	11.000%	13.500%	13.500%
<b>Interest on working capital</b>	<b>5261.17</b>	<b>5307.76</b>	<b>5352.35</b>	<b>14548.27</b>	<b>14541.71</b>

## Annual Fixed Charges for 2009-14

35. In view of above, the annual fixed charges approved for the period 2009-14 is as under:



(₹ in lakh)

	2010-11	2011-12	2012-13		2013-14
	2010-11 11.11.2010 to 31.3.2011		1.4.2012 to 18.8.2012	2012-13 19.8.2012 to 31.3.2013	
Depreciation	13574.99	13575.54	13575.44	27502.81	27681.78
Interest on Loan	24343.21	25100.85	24456.65	51129.90	47574.07
Return on Equity	9673.06	9673.06	12092.57	25271.93	25771.90
Interest on working capital	5261.17	5307.76	5352.35	14548.27	14541.71
O&M Expenses	7422.00	7848.00	8292.00	16584.00	17544.00
Cost of secondary fuel oil	1345.58	1349.26	1345.58	3916.43	3916.43
<b>Total</b>	<b>61620.01</b>	<b>62854.47</b>	<b>65114.59</b>	<b>138953.34</b>	<b>137029.89</b>

**Note:**(1) All figures are on annualized basis.

(2) All the figures under each head have been rounded. The figure in total column in each year is also rounded. Because of rounding of each figure the total may not be arithmetic sum of individual items in columns.

36. The difference in the annual fixed charges determined by order dated 10.7.2015 and those determined by this order shall be adjusted in accordance with Regulation 6(6) of the 2009 Tariff Regulations.

37. Petition No. 7/GT/2016 is disposed of in terms of the above.

**-Sd/-**  
**(Dr. M.K.Iyer)**  
**Member**

**-Sd/-**  
**(A. S. Bakshi)**  
**Member**

**-Sd/-**  
**(A. K. Singhal)**  
**Member**

**-Sd/-**  
**(Gireesh B. Pradhan)**  
**Chairperson**

