

**CENTRAL ELECTRICITY REGULATORY COMMISSION**

**NEW DELHI**

**Petition No. 17/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 Hearing : 20.10.2015**

**Date of Order : 31.05.2016**

**In the matter of:**

Determination of fees and charges for fibre optic communication system in lieu of existing Unified Load Despatch and Communication (ULDC) Microwave links in North Eastern Region for tariff block 2009-14 under sub-section 4 of Section 28 & 79(1)(d) of the Electricity Act, 2003 and Regulation-86.

**And in the matter of:**

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

**.....Petitioner**

**Vs**

1. North-Eastern Electric Power Corporation Limited,  
(NEEPCO limited),  
15, NBCC Tower, Bhikaji Cama Place,  
New Delhi
2. National Hydro Power Corporation Limited,  
NHPC Office Complex, Lodhi Road,  
New Delhi
3. Assam State Electricity Board,  
Bijulee Bhawan, Paltan Bazar,  
Guwahati-781 001, Assam
4. Meghalaya Energy Corporation Limited,  
(Formerly Meghalaya State Electricity Board)  
Short Round Road, Shillong-793 001



5. Government of Arunachal Pradesh,  
Itanagar, Arunachal Pradesh
6. Power & Electricity Department,  
Government of Mizoram,  
Mizoram, Aizwal
7. Electricity Department,  
Government of Manipur,  
Keishampat, Imphal
8. Department of Power,  
Government of Nagaland,  
Kohima, Nagaland
9. Tripura State Electricity Corporation Limited,  
Bidyut Bhawan, North Banamalipur,  
Agartala, Tripura-700 001
10. DONER Advisor (Power)  
Government of India,  
North Eastern Council Secretariat,  
Shillong, Meghalaya

....Respondents

**For petitioner** : Shri S.S Raju, PGCIL  
Shri M.M. Mondal, PGCIL  
Shri S.K. Venkatesan, PGCIL  
Shri Rakesh Prasad, PGCIL

**For respondents** : none

### **ORDER**

The petition has been filed by Power Grid Corporation of India Limited (PGCIL) under sub-section (4) of Section 28 and Section 79(1)(d) of Electricity Act, 2003 for determination of annual fees and charges for fibre optic communication system in lieu of existing Unified Load Despatch and Communication (ULDC) Microwave links in North Eastern Region for the 2009-14 period.

2. The details of the asset covered in the instant petition are as follows:-



Details of the Asset	COD		Time over-run
	Scheduled	Actual	
117.172 km (37.874 km+79.298 km) of Fibre Optic Communication system	1.9.2013	1.4.2013	None

Note: 37.874 km pertains to Central Sector and 79.298 km pertains to State Sector

3. The Investment Approval for the Fibre Optic Communication System in lieu of existing ULDC Microwave links was accorded by Board of Directors of the petitioner company vide letter Reference No. C/CP/Fibre Optic in NER dated 15.2.2011 at an estimated cost of ₹3413 lakh, including IDC of ₹200 lakh (based on 3rd Quarter, 2010 price level). The scheduled completion time of the project was 30 months from the date of investment approval i.e. 14.8.2013 say 1.9.2013. However, priority links of fibre optic were to be implemented as per DOT requirement to release microwave links and best efforts were to be made to complete the project in 24 months.

4. The broad scope of work covered under the project is as follows:-

- “(i) Installation of OPGW fibre optic cable on the existing EHV transmission line of POWERGRID and constituents, the estimated length of such cable is approximately 1160 kms.
- (ii) The terminal equipment for communication based upon Synchronous Digital Hierarchy (SDH) technology shall be installed in the substations of constituents and POWERGRID. The project would also involve installation of primary multiplexers at the new wide band nodes. To monitor the Network, Network Management System (NMS) would also be required.”

### **Brief Background**

5. As per the directives of Government of India vide order dated 4.7.2008, Power System Operation Corporation Ltd. (POSOCO), a wholly owned subsidiary of Power Grid Corporation of India Ltd. was created and POSOCO is responsible for system operation of National Load Despatch Centre (NLDC) and Regional Load



Despatch Centres (RLDCs). Pursuant to Satnam Singh Committee's report, the assets pertaining to system operations have been transferred to POSOCO for which separate tariff orders had been issued by the Commission.

6. Government of India had also constituted a Task Force to look into the financial aspects for augmentation and up-gradation of the State Load Despatch Centres and issues related to emoluments for the personnel engaged in the system operation. The Task Force made certain recommendations with regard to the ownership of the assets. The petitioner constituted committees at the regional level, subsequent to the Task Force's report, to identify the assets to be transferred to POSOCO. The recommendations of the committees for asset transfer were as under:-

**(A) Assets to be transferred to POSOCO:**

- (i) EMS/SCADA system (computer system, hardware and software)
- (ii) Auxiliary power supply system comprising of uninterrupted power supply, diesel generating set etc.
- (iii) Building and civil works.

**(B) Assets which will remain with petitioner:**

**I. Central Portion:**

- (i) Fibre Optic Cables (overhead and underground)
- (ii) Fibre Optic Communication Equipment
- (iii) Digital Microwave Communication System (Tower, Antenna, Equipment etc.)
- (iv) PABX
- (v) Power Line Carrier Communication System;
- (vi) Auxiliary power supply system.

**II. State Portion: Entire state portion which consists of the following equipment will remain with the petitioner:**

- (i) EMS/SCADA system
- (ii) Fibre Optic System
- (iii) Digital Microwave Communication System (Tower, Antenna, Equipment etc.)
- (iv) PABX
- (v) Power Line Carrier Communication System
- (vi) Auxiliary power supply system (part)



7. Thereafter the petitioner filed a Miscellaneous Petition No. 68/2010 under sub-section (4) of Section 28 of Electricity Act 2003 and Regulations 44 "Power to Relax" of the CERC (Terms and Conditions of Tariff) Regulations 2009 for fixation of tariff norms for recovery of cost for the assets ("Communication system" and "Sub-Load Dispatch Centre system") to be retained/to be installed by the petitioner after formation of POSOCO for the period 2009-14 block.

8. The Commission in Petition No. 68/2010 vide order dated 8.12.2011, had observed as under:-

“9.....Since the communication system and SLDC system form part of the assets of the CTU, there is a requirement to specify regulations for determination of tariff of these assets. We direct the staff of the Commission to undertake the exercise separately and include these assets of CTU in the tariff regulations applicable for the next tariff period i.e.2014-19. As regards the tariff of these assets for the period 2009-14, we are not inclined to determine the tariff of these assets by exercising our power to relaxation under Regulation 44 of the 2009 regulations since there is no provision for determination of tariff for the assets covered under the communication system and ULDC system. We are of the view that the tariff of these assets shall be determined under our general power of determination of tariff for inter-State transmission system under section 79(1)(d) of the Act.....”

“.....It clearly emerges from the above judgment that the Central Commission can specify the terms and conditions of tariff even in the absence of the regulations. Since no regulation was specified for determination of tariff of the communication system and the ULDC system, the Commission determined the tariff of these assets during the period 2004-09 on levelised basis by adopting some of the parameters of 2004 tariff regulations. We have decided to continue with the levelised tariff for the existing assets in the absence of any provision in 2009 regulations regarding determination of tariff of communication system and ULDC system of the petitioner. For the new assets, the tariff will be decided as per the regulations for communication systems to be framed. Accordingly we direct the staff of the Commission to take necessary action to prepare draft regulations for determination of tariff for the communication system and ULDC system of the petitioner.”

“21. We have considered the submission of the petitioner and the respondents. We are of the view that replacement of microwave links with fibre optic links should be implemented as agreed by the beneficiaries to ensure safe and reliable operation of the power system. Moreover, the petitioner has submitted that surrender of the microwave frequencies would save substantial cost and the fibre optic system would be beneficial in the long run as the fibre optic communication network is required for implementation of new technologies like Wide Area Measurement System (WAMS), Special Protection Schemes (SPS) etc. in view of fast development and complexity of the power system in the country. As regards the regulatory approval, we are of the view that since the project has been agreed to be implemented by the constituents of each of the regions,



regulatory approval is not considered necessary. The petitioner is granted liberty to approach the Commission for determination of tariff for the fibre optic network being installed in lieu of microwave links for each of the region separately. As regards the submission of UPPTCL, it is clarified that if the state portion is not being implemented by it separately as proposed earlier, the same shall be implemented by the petitioner and UPPTCL would be required to share the tariff in proportion to the assets being utilised by it. It is however made clear that the timeline for replacement of the digital microwave by optical fibre should be strictly complied with.”

9. As held in our order dated 8.12.2011 in Petition No.68/2010, we would like to continue with the levelised tariff for the existing assets in the absence of any provision in the 2009 Tariff Regulations regarding determination of tariff of communication system and ULDC system of the petitioner. Accordingly, the annual fees and charges of the optic fibre need to be determined as per the principles approved by the Commission vide order dated 8.12.2011 in Petition No 68/2010.

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

11. The annual fees and charges claimed by the petitioner based on the actual date of commercial operation are as hereunder:-

(₹ in lakh)

Particulars	Central Portion	State Portion
	2013-14	2013-14
Annual Capital Recovery Charges-Total	7.32	14.72
Interest on working capital	12.97	0.36
O & M Expenses	55.25	-
<b>Total</b>	<b>75.54</b>	<b>15.08</b>

### **Capital cost**

12. The petitioner vide affidavit dated 19.5.2015 has submitted Auditors' Certificates dated 5.5.2015, the details of actual expenditure incurred as on the date of commercial operation (COD) and additional capital expenditure incurred for the



period from COD to 31.3.2014 corresponding to the instant asset. Accordingly, the gross value of asset as on COD, submitted by the petitioner has been considered for the purpose of Annual Fee & Charges for 2009-14 period as under:-

Particulars	COD: 1.4.2013 (₹ in lakh)	
	Central portion	State portion
Expenditure upto COD	53.35	107.31
Additional capitalisation during 2013-14	21.95	5.34
<b>Sub-total</b>	<b>75.30</b>	<b>112.65</b>
<b>Total</b>	<b>187.95</b>	

13. As per the investment approval dated 25.3.2010, the instant asset was to be commissioned within 30 months from the date of investment approval by 14.8.2013 say 1.9.2013. The instant asset has been commissioned on 1.4.2013. Thus, there is no time over-run in case of instant asset in the instant petition.

#### **Treatment of IDC and IEDC**

14. The petitioner has made a claim of ₹1.48 lakh and ₹2.97 lakh towards IDC in case of instant asset for central portion and state portion respectively. However, detailed working of IDC calculation as well as details of IDC paid after COD are not available. In the absence of the required information, IDC on cash basis has been considered based on the loans deployed as per details submitted by the petitioner vide affidavit dated 19.5.2015, assuming that the petitioner has not made any default in the payment of interest. Thus, IDC upto COD has been considered as NIL against the claim of the petitioner for ₹1.48 lakh and ₹2.97 lakh for central portion and state portion respectively. The amount of IDC accrued as on COD and to be discharged after COD has not been considered in the capital cost due to non-



availability of adequate information. The petitioner is directed to submit the details of working corresponding to IDC and actual cash expenditure in Form-14A at the time of truing-up.

15. Similarly, the petitioner has claimed amount of ₹11.81 lakh and ₹23.76 lakh for central portion and state portion respectively as on COD on account of Incidental Expenditure during Construction (IEDC). The claim is restricted to 10.75% on Hard Cost as indicated in the Abstract Cost Estimate submitted by the petitioner. The details of amount of IEDC claimed, allowed and disallowed for the instant asset are as below:-

Particulars	(₹ in lakh)	
	117.172 km optic Fibre (COD: 1.4.2013)	
	Central Portion	State Portion
Hard cost claimed as on COD	40.06	80.58
IEDC claimed	11.81	23.76
IEDC considered (10.75% of Hard cost or claimed whichever is lower)	4.31	8.66
<b>IEDC Disallowed</b>	<b>7.50</b>	<b>15.10</b>

16. Undischarged liabilities will be allowed after the same are discharged. However, as the required information with regard to the IDC/IEDC actually discharged is not available, we are not inclined to allow the amount of IDC/IEDC as claimed by the petitioner. The petitioner is directed to submit the amount of IDC/IEDC paid specific to the transmission asset considered in this petition upto date of commercial operation and balance IDC discharged after date of commercial operation. IDC/IEDC allowed will be reviewed at the time of truing up on submission of adequate and proper information by the petitioner.





17. The capital cost considered for the purpose of annual fee and charges, after adjusting the disallowed amount of IDC and IEDC, is as under:-

(₹ in lakh)

Particulars	117.172 km optic Fibre (COD: 1.4.2013)	
	Central Portion	State Portion
Expenditure up to COD (claimed)-(A)	53.35	107.31
IDC disallowed due to Undischarged Liability-(B)	1.48	2.97
IEDC disallowed due to excess of allowable limit-(C)	7.50	15.10
<b>Capital Cost as on COD (allowed)[A-(B+C)]</b>	<b>44.37</b>	<b>89.24</b>

**Projected additional capital expenditure**

18. The petitioner vide affidavit dated 19.5.2015 submitted Auditors' Certificate dated 5.5.2015 in support of claim for additional capital expenditure of ₹21.95 lakh, ₹5.34 lakh for central portion and state portion respectively for 2013-14 in case of instant asset. The additional capital expenditure claimed is for balance and retention payment and is considered for the purpose of tariff. However, the petitioner's claim for add-cap beyond 31.3.2014 shall be considered in the tariff period 2014-19. Therefore, we allow the additional capital expenditure as claimed by the petitioner for 2013-14 only in the instant petition. The details of additional capital expenditure allowed are as follows:-

(₹ in lakh)

Particulars	117.172 km optic Fibre (COD: 1.4.2013)	
	Central Portion	State Portion
Additional capitalization during 2013-14	21.95	5.34
<b>Total</b>	<b>27.29</b>	

19. Thus, the details of capital cost considered as on COD and 31.3.2014 after adjustment for disallowed IDC/IEDC and consideration of additional capital



expenditure for the purpose of fee and charges in the instant petition are as given under:-

(₹ in lakh)

Particulars	117.172 km optic Fibre (COD: 1.4.2013)	
	Central Portion	State Portion
Capital Cost as on COD (allowed)	44.37	89.24
Additional capital expenditure	21.95	5.34
<b>Capital cost as on 31.3.2014</b>	<b>66.32</b>	<b>94.58</b>

### Debt-equity ratio

20. The capital cost on the date of commercial operation and additional capital expenditure allowed have been considered in the normative debt-equity ratio of 70:30. Details of debt-equity as on date of commercial operation and 31.3.2014 considered on normative basis are as under:-

(₹ in lakh)

Particulars	As on COD				As on 31.3.2014			
	Central portion		State portion		Central portion		State portion	
	Amount	%	Amount	%	Amount	%	Amount	%
Loan/Debt	31.06	70.00	62.47	70.00	46.42	70.00	66.21	70.00
Equity	13.31	30.00	26.77	30.00	19.89	30.00	28.37	30.00
<b>Total</b>	<b>44.37</b>	<b>100.00</b>	<b>89.24</b>	<b>100.00</b>	<b>66.32</b>	<b>100.00</b>	<b>94.58</b>	<b>100.00</b>

### Rates for Recovery of Loan and Equity

21. The Capital Recovery Factor for Loan and Equity in respect of instant asset has been calculated by applying weighted average rate of interest and Return on Equity using a recovery factor for loan and equity for 15 years (i.e. 180 months) and weighted average interest on loan works out to be 9.0668% in the case of instant asset. The Capital Recovery Factor for equity has been considered on post-tax return on equity of 15.50%. The details of loan are attached at Annexure-2 of the order. Thus, the rates considered on annual basis, have been converted to monthly rates and are as follows:-



**CRF as on COD to be considered for  
Fee & Charges for 2013-14**

Particulars	117.172 km optic Fibre (COD: 1.4.2013)	
	Central Portion	State Portion
Loan	0.010182	0.010182
Equity	0.014340	0.014340
<b>Total</b>	<b>0.024522</b>	<b>0.024522</b>

22. Thus, the amount of monthly capital recovery charges as on COD both for Central and State portions for instant asset have been considered by calculating the capital recovery charges for loan and equity using respective Capital Recovery Factors and are as below:-

(₹ in lakh)

Particulars	117.172 km optic Fibre (COD: 1.4.2013)	
	Central Portion	State Portion
Loan	0.32	0.64
Equity	0.19	0.38
<b>Total</b>	<b>0.51</b>	<b>1.02</b>

23. The Commission is of the view that there is a need to review the Capital Recovery Factor methodology applied while determining fee and charges for Communication system. Accordingly, Commission directs the staff to examine the issue and submit to the Commission for appropriate directions.

24. The petitioner has prayed to recover the shortfall or refund the excess Annual Fixed Charges, on account of return on equity due to change in applicable Minimum Alternate Tax/Corporate Income Tax rate as per the Income Tax Act,



1961 of the respective financial year directly without making any application before the Commission.

25. The Commission in its order dated 18.3.2011 in Petition No. 28/2010 approved the fees and charges for the period upto 31.3.2009 by considering CRF corresponding to equity on the basis of return on equity at the rate of 14% per annum (post-tax) in accordance with the terms and conditions for determination of tariff applicable during 2004-09. Whereas, during 2009-14, consequent to creation of POSOCO, fees and charges of the assets transferred to POSOCO were allowed as per RLDC Regulations 2009, the assets retained with the CTU are neither covered under the RLDC Regulations nor under the 2009 Tariff Regulations. The tariff regulations applicable for the period 2009-14 provide for recovery of RoE (pre-tax), calculated by grossing up the base rate (normally @ 15.5% per annum) with the Corporate Tax/MAT rate for the year 2008-09 and is to be trued up subsequently with reference to the actual tax rate applicable under the provisions of the relevant Finance Act each year during the tariff period. As already mentioned earlier in this order, PGCIL filed a miscellaneous Petition No. 68/2010 for fixation of tariff norms for recovery of cost of assets (“Communication System” and “Sub-Load Despatch Centre System”) to be retained or to be installed by the petitioner after formation of POSOCO for the tariff period 2009-14. It was decided, vide order dated 8.12.2011 in Petition No. 68/2010, to continue with the levelised tariff for the existing assets in the absence of any provision in the 2009 Tariff Regulations regarding determination of tariff of communication system and ULDC system of the petitioner. In our opinion, the concept of grossing up linked with the tariff determination for ordinary assets cannot *per se* be applied for calculating fees and charges in



accordance with the Capital Recovery Factor (CRF) concept. By considering the grossed-up value of RoE, CRF gets distorted because of factoring of tax component. Therefore, in departure from the provisions for recovery of RoE specified under the tariff regulations presently applicable, post-tax RoE of 15.50% per annum, converted to monthly rates has been considered. As RoE has been considered post-tax, the petitioner shall be entitled to recover income-tax from the respondents in proportion of the fees and charges shared by them in accordance with this order.

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

26. The petitioner has submitted the claim of the O&M Expenses @ 7.5% of the capital cost for 2013-14 subject to actual expenditure at the time of truing-up. This seems to be as per the norms which had been arrived at on the basis of normalized actual O&M Expenses during the period 2003-04 to 2007-08 and by escalating it by 5.72% per annum for arriving at norms for the tariff period 2009-14. However, the petitioner has claimed ₹55.20 lakh for central portion and NIL for state portion.

27. The approved apportioned cost based on investment approval works out as ₹344.75 lakh at 3<sup>rd</sup> quart 2010 price level, which works out to 16.01% of the total approved apportioned cost. The petitioner vide affidavit dated 19.5.2015 has submitted the details of O&M Expenses, which include expenditure incurred on employee cost, repairs & maintenance, travelling expenses and other expenses. The O&M expenses have been stated to be apportioned between ULDC and Fibre optic but the basis of apportionment has not been submitted. In view of this, O&M expenses have been restricted to 7.5% of the approved apportioned cost, which works out to ₹25.85 lakh. Accordingly, O&M Expenses of ₹25.85 lakh have been



allowed for central portion and no O&M Expenses for state portion are allowed in case of the instant asset. The petitioner is directed to submit apportionment criteria at the time of truing-up for a prudence check and revision, if any.

**Interest on working capital**

28. SBI Base Rate as on 1.4.2013 i.e. 9.70% Plus 350 bps (13.20%) has been considered as the rate of interest on working capital for the instant asset. The interest on working capital for the instant asset covered in the petition has been worked out accordingly.

29. Necessary computations in support of interest on working capital (annualized) are given under:-

(₹ in lakh)

Particulars	Central Portion	State Portion
	2013-14	2013-14
Maintenance Spares	3.88	-
O & M Expenses	2.15	-
Receivables	5.58	2.09
<b>Total</b>	<b>11.61</b>	<b>2.09</b>
Rate of Interest	13.20%	13.20%
<b>Interest</b>	<b>1.53</b>	<b>0.28</b>

**Annual Fees and charges**

30. The detailed calculations of fees and charges being worked out on annualized basis for the instant asset are attached at Annexure-1 of this order and are as under:-

(₹ in lakh)

Period	Central Portion	State Portion
2013-14	33.47	12.52

31. However, it is noted that this communication system is in lieu of the erstwhile Microwave Links, which were allowed accelerated depreciation and accordingly fee



and charges were determined pro-rata upto June, 2013 vide order dated 22.2.2014 in Petition No. 61/TT//2014. This was consequent to the submission vide affidavit dated 30.1.2013 of the petitioner in Petition No. 61/TT/2014 that the target date for completion of Fibre optic was June, 2013. Thus, fee and charges worked out vide para-30 need to be allowed pro-rata for the balance period of nine months only i.e. w.e.f. 1.7.2013. Accordingly, fee and charges in the instant petition allowed are as under:-

(₹ in lakh)		
Period	Central Portion	State Portion
	2013-14 (pro-rata)	2013-14 (pro-rata)
2013-14	25.10	9.40

### **Filing fee**

32. The petitioner has sought reimbursement of filing fee paid by it. The petitioner has clarified that reimbursement of expenditure has been claimed in terms of Regulation 42 of the 2009 Tariff Regulations. The petitioner shall recover the filing fee in connection with the present petition, directly from the beneficiaries on *pro-rata* basis.

### **Service tax**

33. The petitioner has made a prayer to be allowed to bill and recover the service tax on transmission charges separately from the respondents, if it is subjected to such service tax in future. The petitioner has clarified that if notifications regarding granting of exemption to transmission service are withdrawn at a later date, the beneficiaries shall have to share the service tax paid by the petitioner. We consider petitioner's prayer pre-mature and accordingly this prayer is rejected.



### **Sharing of Annual Fees and Charges**

34. The fees and charges for Fiber Optic Communication system shall be shared on similar lines as system operation charges by the users in the ratio of 45:45:10 as per Regulation 22 (1) of Fees and charges of Regional Load Despatch Centre and other related matters Regulations, 2009 as under:-

Distribution licensees and buyers : 45% of system operation charges;

Generating stations and sellers : 45% of system operation charges;

Inter-state Transmission licensees: 10% of system operation charges"

35. The fee & charges for State Sector shall be recovered from respective States. Further, as specified under Regulation 5 of Central Electricity Regulatory Commission (sharing of revenue derived from utilization of transmission assets for other business) Regulations, 2007, the revenue earned by the petitioner from utilisation of these assets for other business shall be adjusted on monthly basis in the bills of the respective month in the proportion given in para 33 above.

36. This order disposes of Petition No. 17/TT/2014.

sd/-  
**(M.K. Iyer)**  
**Member**

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

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

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





(₹ in lakh)

Particulars	Central Portion- Charges (2009-14)		State Portion-Charges (2009-14)	
	On Capital expenditure upto COD (1.4.2013)	2013-14	On Capital expenditure upto COD (1.4.2013)	2013-14
Gross Capital Cost	44.37	21.95	89.24	5.34
Gross Notional Loan	31.06	15.37	62.47	3.74
Gross Equity	13.31	6.59	26.77	1.60
	44.37	21.95	89.24	5.34
Years	15.00000	14.00000	15.00000	14.00000
Months	180.00	168.00	180.00	168.00
Weighted Average Rare of Interest p.a.	9.0668%	9.0668%	9.0668%	9.0668%
Weighted Average Rare of Interest p.m.	0.7556%	0.7556%	0.7556%	0.7556%
Monthly Recovery Factors-Loan	0.010182	0.010528	0.010182	0.010528
Monthly Capital Recovery Charge-Loan	0.32	0.16	0.64	0.04
<b>Annual Capital Recovery Charge-Loan</b>	<b>3.79</b>	<b>1.94</b>	<b>7.63</b>	<b>0.47</b>
Rate of Return on Equity p.a. (As per Regulation 2009)	15.50%	15.50%	15.50%	15.50%
Rate of Return on Equity p.m.	1.29%	1.29%	1.29%	1.29%
Monthly Recovery Factors-Equity	0.014340	0.014608	0.014340	0.014608
Monthly Capital Recovery Charge-Equity	0.19	0.10	0.38	0.02
<b>Annual Capital Recovery Charge-Equity</b>	<b>2.29</b>	<b>1.15</b>	<b>4.61</b>	<b>0.28</b>
Monthly Capital Recovery Charge-Total	0.51	0.26	1.02	<b>0.06</b>
<b>Annual Capital Recovery Charge-Total</b>	<b>6.09</b>	<b>3.10</b>	<b>12.24</b>	<b>0.75</b>
<b>Total Fee &amp; Charges (Annualized):</b>				
<b>Particulars</b>		<b>2013-14</b>		<b>2013-14</b>
Annual Capital Recovery Charge-Loan		3.79		7.63
Annual Capital Recovery Charge-Equity		2.29		4.61
<b>Annual Capital Recovery Charge-Total</b>		<b>6.09</b>		<b>12.24</b>
<b>O&amp;M Expenses</b>		<b>25.85</b>		<b>0.00</b>
<b>Interest on Working Capital</b>		<b>1.53</b>		<b>0.28</b>
<b>Total Fee &amp; Charges (Annualized)</b>		<b>33.47</b>		<b>12.52</b>
<b>Interest on Working Capital (Annualized)</b>				
<b>Particulars</b>		<b>2013-14</b>		<b>2013-14</b>
Maintenance Spares		3.88		0.00
O&M Expenses (1 Month)		2.15		0.00



Receivables		5.58		2.09
<b>Total</b>		<b>11.61</b>		<b>2.09</b>
Rate of Interest on Working Capital (SBI Base rate as on 1.4.2013 plus 350 points)		13.20%		13.20%
<b>Total Interest on Working Capital (Annualized)</b>		<b>1.53</b>		<b>0.28</b>
<b>Allowable Fee &amp; Charges (2009-14)</b>				
<b>Particulars</b>		<b>2013-14</b>		<b>2013-14</b>
Annual Capital Recovery Charge-Loan		3.79		7.63
Annual Capital Recovery Charge-Equity		2.29		4.61
<b>Annual Capital Recovery Charge-Total</b>		<b>6.09</b>		<b>12.24</b>
<b>O&amp;M Expenses</b>		<b>25.85</b>		<b>0.00</b>
<b>Interest on Working Capital</b>		<b>1.53</b>		<b>0.28</b>
<b>Total Allowable Fee &amp; Charges (2009-14)</b>		<b>33.47</b>		<b>12.52</b>
<b>Note: Additional Capitalisation after date of commercial operation shall be considered in the next period (As per prevailing practice in respect of ULDC petitions).</b>				
<b>Fee &amp; Charges (1.4.2013 to 30.6.2013)</b>				
<b>Particulars</b>		<b>2013-14</b>		<b>2013-14</b>
Annual Capital Recovery Charge-Loan		0.95		1.91
Annual Capital Recovery Charge-Equity		0.57		1.15
<b>Annual Capital Recovery Charge-Total</b>		<b>1.52</b>		<b>3.06</b>
<b>O&amp;M Expenses</b>		<b>6.46</b>		<b>0.00</b>
<b>Interest on Working Capital</b>		<b>0.38</b>		<b>0.07</b>
<b>Total Allowable Fee &amp; Charges (2009-14)</b>		<b>8.37</b>		<b>3.13</b>
<b>Fee &amp; Charges as per order dated 22.2.2014 (1.4.2013 to 30.6.2013)</b>				
<b>Particulars</b>		<b>2013-14</b>		<b>2013-14</b>
Annual Capital Recovery Charge-Loan		4.42		10.68
Annual Capital Recovery Charge-Equity		0.00		0.00
<b>Annual Capital Recovery Charge-Total</b>		<b>4.42</b>		<b>10.68</b>
<b>O&amp;M Expenses</b>		<b>0.00</b>		<b>0.00</b>
<b>Interest on Working Capital</b>		<b>0.09</b>		<b>0.22</b>
<b>Total Allowable Fee &amp; Charges (2009-14)</b>		<b>4.51</b>		<b>10.90</b>



**Annexure-2****(₹ in lakh)**

<b>Wt. Average Rate of Interest on COD (for 2009-14) as submitted by the petitioner (Affidavit dated 19.5.2015)</b>				
<b>Loan</b>	<b>Amount of Loan as on COD</b>	<b>Rate of interest as on COD</b>	<b>Interest</b>	<b>Weighted Average Rate of Interest</b>
Bond XL	60.00	9.30%	5.58	
Bond XLII	52.46	8.80%	4.62	
<b>Total Loan</b>	<b>112.46</b>		<b>10.20</b>	<b>9.0668%</b>

