### CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

#### Petition No. 23/TT/2015

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

Date of Order : 14.09.2016

#### In the matter of:

Miscellaneous petition for approval under sub-section 4 of Section 28 of the Electricity Act, 2003 for determination of (i) Truing up of fees and charges for the 2009-14 tariff block and (ii) fees and charges for the period 2014-19 block for Communication Scheme under National Load Despatch Centre (NLDC) (PGCIL portion i.e. communication system portion under NLDC retained by PGCIL after formation of POSOCO).

#### And in the matter of:

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

.....Petitioner

#### Vs

- NTPC Limited, NTPC Bhawan, Core-7, Scope Complex, 7, Institutional Area, Lodhi Road, New Delhi-110 003
- 2. National Hydro Power Corporation Limited, NHPC Office Complex, Lodhi Road, New Delhi
- Satluj Jal Vidyut Nigam Limited,
   Power Project, Jhakri, Rampur, District Shimla,
   Himachal Pradesh-172 201
- 4. THDC India Limited, Bhagirath Puram, Tehri, Uttrakhand-249 001
- Nuclear Power Corporation of India Limited, Nabhkiya Bhawan, Anu-Shakti Nagar, Mumbai-400 094



- 6. ADHPL, Bhilwara Towers, A-12, Sector-1, Noida-201 301
- 7. Aravali Power Company Private Limited, Indira Gandhi Super Thermal Power Project, PO: Jharli, District Jhajjar, Haryana
- 8. Jaypee Karchan Hydro Corporation Limited, Sector-128, Noida-201 304
- Everest Power Private Limited, 1<sup>st</sup> Floor, Hall-1, NBCC Tower, Bhikaji Cama Place, New Delhi-110 066
- Shree Cement Limited,
   PO Box No. 33, Bangur Nagar,
   Beawar-305 901, District: Ajmer (Rajasthan)
- 11. Chandigarh (Electricity Department), UT Chandigarh, Sector-9 D, Chandigarh-160 019
- Delhi Transco Limited, SLDC Building (Behind Jakir Husain College), Tagore Hostel Lane, Minto Road, New Delhi-110 002
- Haryana Vidyut Prasaran Nigam Limited, Room No.-213, Shakti Bhawan, Sector-6, Panchkula-134 109, Haryana
- 14. Himachal Pradesh State Electricity Board, Totu, Shimla-171 011, Himachal Pradesh
- 15. Power Development Department, Government of J & K, Narwal Bala, Gladni-180 004, Jammu
- 16. PSTCL, SLDC Building, 220 kV Sub-station Ablowal, Patiala-147 001, Punjab
- 17. RVPN, Vidyut Bhawan, Jyoti Nagar, Vidyut Marg, Jaipur-302 015, Rajasthan
- U.P. Power Corporation Limited, Electricity Import-Export & Payment Circle, 11<sup>th</sup> Floor, Shakti Bhawan Extension, 14-Ashok Marg, Lucknow-226 001, U.P



- Northern Central Railway, Nawabyusuf Road, Allahabad
- 20. Uttranchal Power Corporation Limited, Kanwali Road, Urja Bhawan, Dehradun-248 001, Uttrakhand
- 21. Powerlinks Transmission Limited, 10<sup>th</sup> Floor, DLF Tower-A, District Centre, Jasola, New Delhi-110 044
- Orissa Hydro Power Corporation Limited, Burla Power House, Dist. Sambalpur, Burla-768 017
- 23. Mejia Thermal Power Station DVC, P.O. MTPS, Dist Bankura-722 183
- 24. West Bengal State Electricity Distribution Co. Limited, Bidyut Bhawan, 8<sup>th</sup> Floor (A Block), Block DJ, Salt Lake City, Kolkata-700 091
- 25. Bihar State Electricity Board, Vidyut Bhawan, Bailey Road, Patna-800 001
- 26. Gird Corporation of Orissa Limited, Vidyut Bhawan, Janpath, Bhubaneshwar-751 007
- 27. Power Department, Govt. of Sikkim, Gangtok-727 102
- 28. Jharkhand State Electricity Board, Engineering Building, HEC Township, Dhurwa, Ranchi-834 004
- 29. Damodar Valley Corporation DVC Tower, VIP Road, Calcutta-700 054
- North-Eastern Electric Power Corporation Limited, (NEEPCO limited),
   NBCC Tower, Bhikaji Cama Place, New Delhi



- 31. Department of Power, Government of Arunachal Pradesh, Itanagar-791 111, Arunachal Pradesh
- 32. Assam Power Distribution Company Limited, Bijulee Bhawan, Paltan Bazar, Guwahati-781 001, Assam
- 33. Manipur State Electricity Board, Department of Power, Government of Manipur, Imphal-795 001, Manipur
- 34. Meghalaya Electricity Corporation Limited, (MeECL), Lumjingshai, Short Round Road, Shillong-793 001, Meghalaya
- 35. Mizoram State Electricity Board, Power & Electricity Department, Government of Mizoram, Khatla, Aizwal-796 001, Mizoram,
- 36. Nagaland State Electricity Board,
  Department of Power,
  Government of Nagaland,
  Kohima-791 001, Nagaland
- 37. Tripura State Electricity Corporation Limited, Bidyut Bhawan, North Banamalipur, Agartala-799001, Tripura
- 38. Neyvelli Lignite Corporation Limited, P.O. Neyvelli-607 801, Cuddalore District, Tamil Nadu
- 39. LANCO-Kondapalli Power Private Limited, Plot No. 4, Software Units Layout, Hitech City, Madhapur, Hyderabad-500 081
- 40. Andhra Pradesh Power Co-ordination Committee, APTRANSCO, Vidyut Soudha, Hyderabad-500 082
- 41. Power Company of Karnataka Limited, Room No; 503, KPTCL Building, Kaveri Bhavan, Bangalore-560 009, Karnataka State
- 42. Kerala State Electricity Board, Vydyuthi Bhavanam, Pattom, Thiruvananthapuram-695 004



#### 43. TANGEDCO, 7<sup>th</sup> Floor, Eastern Wing, 144, Anna Salai, Chennai-600 002

#### 44. Electricity Department, Government of Puducherry, Poducherry-605 001

#### 45. Electricity Department, Government of Goa, Curti-Ponda-Goa-403 401

Narmada Control authority,
 Narmada Sadan, Sector-B, Scheme no. 74,
 Vijaynagar, Indore,
 Madhya Pradesh-452 010

# 47. Jindal Power Limited,O.P. Jindal STPS,P.O. Tamnar, Tehsil-Gjarghoda,District Raigarh, Chattisgarh-496 107

48. Chhattisgarh State Power Trading Company Limited, P.O. Sunder Nagar, Dangania, Raipur-492 013

## 49. LANCO Amarkantak Power Private Limited, Plot No. 397, Phase-III, Udyog Vihar, Gurgaon-122 016, Haryana

Gujarat Urja Vikas Nigam Limited,
 Sardar Patel Vidyut Bhawan,
 Race Course Road, Vadodara-390 007

51. Maharashtra State Electricity Distribution Company Limited, Prakashgad, Bandra (East), Mumbai-400 051

52. Madhya Pradesh Power Trading Company Limited, Shakti Bhawan, Vidyut Nagar, Rampur, Jabalpur-482 008

#### 53. Electricity Department, Government of Goa, Vidyut Bhavan, 3<sup>rd</sup> Floor, Panaji, Goa

54. Electricity Department, U.T. of Daman and Diu, Moti Daman



55. Electricity Department, U.T. of Dadra Nagar Haveli, Silvassa-396 230

56. Western Region Transmission (Maharashtra) Private Limited, Krishna Chambers, 2<sup>nd</sup> Floor, Near Laxminarayan Theatre, Satara Road, Pune-411 041, Maharashtra

57. Western Region Transmission (Gujarat) Private Limited, H Block, 1<sup>st</sup> Floor, Dhirubhai Ambani Knowledge City, Navi Mumbai-400 710, Maharashtra

......Respondents

For petitioner : Shri S.S Raju, PGCIL

Shri Jasbir Singh, PGCIL
Ms. Sangeeta Edwards, PGCIL
Shri M.M. Mondal, PGCIL
Shri S.K. Venkatesan, PGCIL

Shri Rakesh Prasad, PGCIL Shri Anshul Garg, PGCIL Shri K.K. Jain, PGCIL

For respondents : Ms. Sheela Mishra, RVPN

Shri Arvind Agrawal, RVPN

Shri S.S. Bhoi, OHPC

#### ORDER

The petition has been filed by Power Grid Corporation of India Limited (PGCIL) under sub-section (4) of Section 28 of Electricity Act, 2003 for truing up of annual fees and charges for the 2009-14 period based on actual expenditure for the period 1.4.2009 to 31.3.2014 and for determination of fees and charges for the period from 1.4.2014 to 31.3.2019 for Communication Scheme under National Load Despatch Centre (NLDC) (PGCIL portion i.e. communication system portion under NLDC retained by PGCIL after formation of POSOCO).

- 2. This order has been issued after considering the petitioners' affidavit dated 19.5.2016 and 21.7.2016.
- 3. The fees and charges for the 2009-14 tariff period for the instant asset was allowed vide order dated 27.1.2014 in Petition No. 74/TT/2012. The instant petition covers the Communication system under NLDC retained by the petitioner.
- 4. 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"). The petitioner has served the petition on the respondents. Odisha Hydro Power Corporation Limited (OHPC), Respondent No. 22, has filed reply vide letter dated 8.3.2016. OHPCL has submitted that its Burla Power House is not a user of ERLDC system as it has been deleted from the list of ERLDC. This has been confirmed by POSOCO vide its letter reference ERLDC/Commercial/F&C/2012/636-654 dated 1.5.2012 and it should not be made a respondent by the petitioner. The petitioner has not filed a rejoinder to the reply of the respondent.
- 5. The hearing in the matter was held on 22.3.2016. Having heard the representatives of the parties and perused the material on record, we proceed to dispose of the petition.

#### **Brief Background**

6. 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.

- 7. 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.
- 8. 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.
- 9. The Commission in Petition No. 68/2010 vide order dated 8.12.2011, had observed as follows:-
  - "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."
- 10. The administrative approval and expenditure sanction for establishment for NLDC was accorded by Ministry of Power (MoP), vide letter dated 24.5.2005 at an estimated cost of ₹4496 lakh, including IDC of ₹177 lakh at 4<sup>th</sup> quarter, 2004 price level. As per original project approval letter dated 24.5.2005, the NLDC scheme was scheduled to be commissioned within 36 months from the date of approval, i.e. by 1st June, 2008. However, the NLDC scheme was declared under commercial operational on 1.4.2009, with a delay of ten months, which has been condoned vide order dated 27.1.2014 in Petition No. 74/TT/2012.

- 11. The final scope of work under NLDC scheme is as follows:-
  - (i) Establishment of control centre at New Delhi with backup at ERLDC Kolkata.
  - (ii) Interface equipment like routers and hub for data acquisition from RLDCs at RLDCs and NLDC/Backup NLDC.
  - (iii) Communication Systems for data, voice and fax between RLDCs, NLDCs and Backup NLDC through dedicated wideband networks on fibre optics.
  - (iv) Auxiliary power supply system.
  - (v) Other infrastructural facilities such as air-conditioning, fire-fighting, DG set construction/renovation of buildings, etc.
- 12. In the absence of any provision in the 2009 Tariff Regulations regarding determination of tariff of Communication system and SLDC system of the petitioner and to continue with the levelised tariff for the instant asset, the annual fees and charges of the National Load Despatch and Communication (NLDC) system retained by PGCIL were approved vide order dated 27.1.2014 in Petition No. 74/TT/2012, as per the principles approved by the Commission vide order dated 8.12.2011 in Petition No 68/2010.
- 13. The instant asset was put under commercial portion w.e.f. 1.4.2009 and the net capital cost as on 1.4.2009 of the instant asset was approved vide order dated 27.1.2014 in Petition No. 74/TT/2012. The details are as follows:-

Particulars Central Remarks
Portion Expenditure upto 31.3.2009 466.66 For communication system

14. The details of annual fees and charges for 2009-14 as approved, vide order dated 27.1.2014 in Petition No. 74/TT/2012 for Central Portion are as hereinafter:-

(₹ in lakh)

Particulars	Central Portion				
	2009-10	2010-11	2011-12	2012-13	2013-14
Annual Capital Recovery Charge-Loan	37.51	37.51	37.51	37.51	37.51
Annual Capital Recovery Charge-Equity	24.09	24.09	24.09	24.09	24.09
Annual Capital Recovery Charge-Total	61.60	61.60	61.60	61.60	61.60
O&M Expenses	-	-	-	25.00	180.00
Interest on Working Capital	1.28	1.28	1.28	2.53	10.29
Total Fee & Charges	62.88	62.88	62.88	89.13	251.89

#### Truing-up of Fees and Charges for 2009-14 Tariff Period

#### Capital cost

- 15. The net capital cost as approved vide order dated 27.1.2014 in Petition No. 74/TT/2012 has been considered as on 1.4.2009 for the purpose of truing up of fees and charges for the instant asset as discussed at para-13. The petitioner has claimed additional capital expenditure of ₹76.97 lakh, ₹44.36 lakh and ₹1.86 lakh during 2011-12, 2012-13 and 2013-14 respectively.
- 16. Thus, against the total admitted cost of ₹466.66 lakh as on COD, the total expenditure incurred is ₹589.85 lakh including with add-cap during 2011-12, 2012-13 and 2013-14 for communication system. The add-cap claimed is on account of balance/retention payment. The petitioner vide Auditors' Certificate dated 15.12.2014 has submitted capital cost incurred upto 30.11.2014, the cost incurred for the period 1.4.2014 to 30.11.2014 i.e. ₹35.79 lakh has not been considered for the purpose of determination of fees and charges for the tariff period 2009-14. The same shall be considered while calculating tariff for 2014-19 period. Accordingly, the capital expenditure incurred towards NLDC as on 31.3.2014 is ₹589.85 lakh, which has been considered for the purpose of determination of fees and charges in the instant petition.

#### **Debt-Equity ratio**

17. The debt: equity ratio as on 1.4.2009, as approved vide order dated 27.1.2014 in Petition No. 74/TT/2012 has been considered for the purpose of truing up and it is as follows:-

(₹ in lakh)

Particulars	Amount	% age
Loan/Debt	326.66	70.00
Equity	140.00	30.00
Total	466.66	100.00

18. The debt: equity ratio determined as on 31.3.2014 is as under:-

(₹ in lakh)

Particulars	Central portion				
	Amount	% age			
Loan/Debt	332.58	67.93			
Equity	157.01	32.07			
Total	489.59	100.00			

#### Rates for Recovery of loan and equity

19. The Capital Recovery Factor for loan in respect of instant asset has been calculated by applying weighted average rate of interest on the basis of the impact due to change in floating rate of interest of loan and it works out to be 8.0209%, 6.2512%, 7.9136%, 7.6382% and 6.9249% for 2009-10, 2010-11, 2011-12, 2012-13 and 2013-14 respectively for instant asset. Thus, the rates considered on annual basis, have been converted to monthly rates. The details of weighted average rate of interest calculation are attached at Annexure-2 to this order. Thus, monthly recovery factors for loan for instant asset are as under:-

CRF for loan to be considered for Fees & Charges						
Particulars	2012-13	2013-14				
Central Portion	0.009569	0.008947	0.010283	0.010627	0.010845	

20. The Capital Recovery Factor for equity has been considered on the same basis as approved vide order dated 27.1.2014 in Petition No. 74/TT/2012 and on post-tax return on equity of 15.50%. Thus, monthly recovery factors for equity for instant asset are as follows:-

CRF for equity to be considered for Fees & Charges						
Particulars 2009-10 2010-11 2011-12 2012-13 2013-14						
Central Portion	0.014340	0.014608	0.014933	0.015332	0.015825	

21. In view of above, the amount of monthly capital recovery charges for loan and equity for Central portion for instant asset have been considered by using respective Capital Recovery Factors and are as under:-

(₹ in lakh)

Monthly capital recovery charges for loan						
Particulars   2009-10   2010-11   2011-12   2012-13   2013-1						
Central Portion	3.13	2.82	3.09	3.62	3.83	

(₹ in lakh)

Monthly capital recovery charges for equity						
Particulars 2009-10 2010-11 2011-12 2012-13 2013-14						
Central Portion	2.01	2.01	2.01	2.36	2.57	

22. Accordingly, the recovery of capital during 2009-14 has been worked out. The details are as follows:-

(₹ in lakh)

Particulars	Capital	Central Portion
Capital Cost Recovered during 2009-14	Loan	80.31
	Equity	19.95
	Total	100.26

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

23. The petitioner had not claimed O&M Expenses in Petition No. 74/TT/2012 earlier for 2009-10, 2010-11 and 2011-12 on the grounds that the equipment was under warranty. However, the petitioner had claimed O&M Expenses on projected

basis for 2012-13 and 2013-14, which were allowed vide order dated 27.1.2014 in Petition No. 74/TT/2012 and are as under:-

(₹ in lakh)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Claimed by petitioner in P. No. 74/TT/2012	-	-	-	25.00	180.00
Amount allowed vide order dated 27.1.2014	-	-	-	25.00	180.00

- 24. The petitioner has not submitted claim for O&M Expenses for 2009-10, 2010-11 and 2011-12. The petitioner has submitted its revised claim of ₹9.92 lakh and ₹8.42 lakh against O&M Expenses for 2012-13 and 2013-14 respectively on actual basis. The observation regarding allowance of O&M charges, vide order dated 8.12.2011 in Petition No. 68/2010 was as under:-
  - "27. We have examined the data submitted by the petitioner regarding actual O&M expenses during 2002-03 to 2009-10 for the communication system. It is observed that O&M charges for the year 2008-09 vary from 3.54% to 8.59% of the capital cost as on 31.03.2009 for different regions. We are of the view that the petitioner should be allowed O & M expenses on actual for the communication systems already in operation under ULDC schemes in different regions. However, for the new systems, the O&M norms would be decided at the time of framing of regulation for communication system."
- 25. Accordingly, the details of O&M Expenses claimed and allowed for the purpose of determination of fee and charges during 2009-14 in the instant petition are as follows:-

(₹ in lakh)

Particulars	2012-13	2013-14
Claimed by petitioner	9.92	8.42
Amount now allowed	9.92	8.42

#### **Lease Charges**

26. The petitioner has submitted its claim for lease charges for 2009-14, which are not allowable as O&M Expenses in line with the principles approved by the

Commission vide order dated 8.12.2011 in Petition No. 68/2010. The lease charges claimed by the petitioner for 2009-14 are as follows:-

(₹ in lakh) 2012-13 | 201 2010-11 S.No. **Particulars** Details Fixed up Recurring 2011-12 2013-14 during to 31.3.2009 2009-10 and onwards Lease charges claimed & approved in petition no Lease 74/TT/2014, charges dated 27.1.2014 58.55 1 during Revised Lease 2005-09charges as per **NLDC** Truing up & as per Auditor's certificate 58.55 Lease charges claimed & approved in petition no Lease 74/TT/2014, charges for dated 27.1.2014 115.56 44.99 44.99 44.99 44.99 44.99 2 Bandwidth Revised Lease for standby charges as per channel Truing up & as per Auditor's 115.56 44.99 44.99 44.99 44.99 44.99 certificate Lease charges claimed & approved in petition no 74/TT/2014, dated 27.1.2014 569.13 569.13 569.13 569.13 569.13 Lease 3 Revised Lease charges for charges as per dark fibre Truing up & as per Cost Accountants' certificate dated 15.12.2014 569.13 569.13 515.98 515.98 515.98 Total 174.11 614.12 614.12 560.97 560.97 560.97

27. The petitioner had claimed one time lease charges of ₹174.11 lakh (₹58.55 lakh+₹115.56 lakh) up to 31.3.2009 in Petition No. 74/TT/2012, as part of the capital cost of the instant asset, which were not allowed in the capital cost. The petitioner was allowed these lease charges as one time lease charges to be recovered directly from the beneficiaries. Further, the petitioner had claimed, an amount of ₹44.99 lakh per annum on account of lease charges for bandwidth for standby channel being a recurring expenditure. Accordingly, one time lease charges of

₹174.11 lakh and recurring expenditure of ₹44.99 lakh per annum were allowed vide order dated 27.1.2014 in Petition No. 74/TT/2012 for 2009-14 period and the following was observed:-

#### "Lease Charges

40. The lease charges claimed by the petitioner have been allowed in toto".

28. The petitioner has also referred to order dated 14.2.2011 in Petition No. 83/2010 in the matter of determination of NLDC charges (POSOCO portion) for the tariff period 2009-14 and has submitted that an amount of ₹569.13 lakh, on account of leasing of fibres was not allowed to be capitalised, as it did not add to the capital asset of the petitioner. However, it was ordered that the said amount would be directly reimbursed by the beneficiaries/users on pro-rata basis as these expenses were incurred in connection with the commissioning of NLDC project. The petitioner further submitted that as the communication system of NLDC has been retained by it, as per the recommendation of Satnam Singh Committee, the lease charges for fibres awarded to NLDC (POSOCO) may please be passed on to it now and allowed. The petitioner has submitted Chartered Accountants' certificate dated 15.12.2014 for actual expenditure for Dark Fibre lease charges and the same are allowed on actual basis in the instant petition to be recovered directly from the beneficiaries or the long term transmission customers/DICs, as the case maybe.

#### Interest on working capital

29. As discussed at para-25 above, the petitioner has claimed O&M Expenses, for 2012-13 and 2013-14 which have been allowed in case of Central Portion, and accordingly O&M Expenses for 1 month, Maintenance spares @15% of O&M Expenses, receivables for two months and SBI Base Rate as on 1.4.2009 i.e.

8.75% plus 350 bps (12.25%) have been considered as the rate of interest on working capital. However, no maintenance spares and no O&M expenses thereof have been considered for working out interest on working capital for 2009-10, 2010-11 and 2011-12 for Central Portion. The necessary computations in support of interest on working capital for Central Portion are as under:-

(₹ in lakh)

Particulars	Central Portion					
	2009-10	2010-11	2011-12	2012-13	2013-14	
Maintenance Spares	-	-	-	1.49	1.28	
O & M Expenses	-	-	-	0.83	0.70	
Receivables	10.48	9.85	10.41	13.95	14.55	
Total	10.48	9.85	10.41	16.26	16.52	
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%	
Interest	1.28	1.21	1.27	1.99	2.02	

#### **Annual Fees and charges-2009-14**

30. The detailed computation of the various components of the trued up annual fees and charges for the instant asset for the tariff period 2009-14 is summarised as follows:-

(₹ in lakh)

Central Portion-fees and charges								
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14			
Opening Gross Capital Cost	466.66	466.66	466.66	543.63	587.99			
Opening Gross Notional Loan	326.66	326.66	326.66	380.54	411.59			
Opening Gross Equity	140.00	140.00	140.00	163.09	176.40			
Recovered Gross Capital								
Cost (As on 1st April)	0.00	14.30	31.83	49.11	71.95			
Recovered Gross Notional								
Loan	0.00	11.73	26.27	40.06	58.09			
Recovered Gross Equity	0.00	2.57	5.56	9.06	13.85			
Opening Net Capital Cost	466.66	452.36	434.83	494.52	516.04			
Opening Net Notional Loan	326.66	314.93	300.39	340.49	353.50			
Opening Net Equity	140.00	137.43	134.43	154.03	162.54			
Recovered Capital Cost								
(During the Year)	14.30	17.53	17.28	22.83	28.31			
Recovered Notional Loan	11.73	14.54	13.79	18.04	22.22			
Recovered Equity	2.57	3.00	3.49	4.80	6.09			

Closing Net Capital Cost	452.36	434.83	417.55	471.68	487.73
Closing Net Notional Loan	314.93	300.39	286.61	322.45	331.28
Closing Net Equity	137.43	134.43	130.94	149.23	156.45
Additional Capital Cost	0.00	0.00	76.97	44.36	1.86
Additional Notional Loan	0.00	0.00	53.88	31.05	1.30
Additional Equity	0.00	0.00	23.09	13.31	0.56
Vacua (Canital ta ba					
Years (Capital to be recovered up to 31.3.2024)	15.00	14.00	13.00	12.00	11.00
Months	180.00	168.00	156.00	144.00	132.00
Weighted Average Rate of	100.00	100.00	130.00	144.00	132.00
Interest p.a.	8.0209%	6.2512%	7.9136%	7.6382%	6.9249%
Weighted Average Rate of	0.020070	0.20.270	71010070	11000270	0.02.070
Interest p.m.	0.6684%	0.5209%	0.6595%	0.6365%	0.5771%
Monthly Recovery Factors-					
Loan	0.009569	0.008947	0.010283	0.010627	0.010845
Monthly Capital Recovery					
Charge-Loan	3.13	2.82	3.09	3.62	3.83
Annual Capital Recovery	27 54	22 04	27.07	42.42	46.00
Charge-Loan	<b>37.51</b> 15.500%	<b>33.81</b> 15.500%	37.07	43.42	<b>46.00</b> 15.500%
Rate of Return on Equity p.a.  Rate of Return on Equity p.m.	1.292%	1.292%	15.500% 1.292%	15.500% 1.292%	1.292%
Monthly Recovery Factors-	1.292/0	1.232/0	1.232/0	1.292/0	1.232/0
Equity	0.014340	0.014608	0.014933	0.015332	0.015825
Monthly Capital Recovery	0.01.00	0.01.1000	0.01.1000	0.0.000	0.0.00
Charge-Equity	2.01	2.01	2.01	2.36	2.57
Annual Capital Recovery					
Charge-Equity	24.09	24.09	24.09	28.34	30.87
Monthly Capital Recovery		4.00			
Charge-Total Annual Capital Recovery	5.13	4.83	5.10	5.98	6.41
Charge-Total	61.60	57.90	61.16	71.76	76.87
O&M Expenses	01.00	37.30	01.10	71.70	10.01
(Annualized)	0.00	0.00	0.00	9.92	8.42
					-
A	llowable Fe	es & Char	ges		
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Annual Capital Recovery					
Charge-Loan	37.51	33.81	37.07	43.42	46.00
Annual Capital Recovery	04.00	04.00	04.00	00.04	00.07
Charge-Equity	24.09	24.09	24.09	28.34	30.87
Annual Capital Recovery Charge-Total	61.60	57.90	61.16	71.76	76.87
O&M Expenses	0.00	0.00	0.00	9.92	8.42
Interest on Working Capital	1.28	1.21	1.27	1.99	2.02
Total Fee & Charges	62.88	59.11	62.43	83.67	87.31
, 3 c c c c c c c c c c c c c c c c					

#### **Determination of Annual Fees and Charges for 2014-19**

As per the directions of the Commission in order dated 8.12.2011 in Petition 31. No.68/2010, the scope of the 2014 Tariff Regulations has been widened to include



the Communication system and SLDC system used for inter-State transmission of electricity. However, as per Clause (iii) of Regulation 6(1) of the 2014 Tariff Regulations, the tariff of the existing communication system forming part of the transmission system is to be determined as per the methodology followed prior to 1.4.2014. The said Regulation provides as follows:-

- "(iii) the tariff of the existing communication system forming part of transmission system shall be as per the methodology followed by the Commission prior to 1.4.2014.
- 32. The instant asset was put into commercial operation on 1.4.2009 and in view of above provision in the 2014 Tariff Regulations, the tariff of the Communication System and NLDC system of the petitioner, we continue to allow levelised tariff for the Communication System as per the principles approved by the Commission vide order dated 8.12.2011 in Petition No 68/2010. Accordingly, the annual fees and charges of Communication system are determined in this order.
- 33. The annual fees and charges claimed by the petitioner are as hereunder:-

(₹ in lakh)

Particulars	Central Portion					
	2014-15	2015-16	2016-17	2017-18	2018-19	
Annual Capital Recovery						
Charges-total	91.00	91.00	91.00	91.00	91.00	
O & M Expenses	34.04	23.54	23.54	23.54	23.54	
Interest on working capital	3.98	3.39	3.39	3.39	3.39	
Total	129.01	117.93	117.93	117.93	117.93	

#### Capital cost

34. The net capital cost as trued-up and allowed in this order for 2009-14 has been considered as on 1.4.2014 for the purpose of determination of fees and charges for the instant asset. The petitioner has claimed additional capital expenditure of ₹35.79 lakh during 2014-19 tariff period on account of balance and

retention payments, which has been allowed in this order. Accordingly, the capital cost considered for determining fees and charges for 2014-19 tariff period is as under:-

		(₹ in lakh)
Particulars Particulars	Capital	Central Portion
	Loan	326.66
Gross Capital Cost as on 1.4.2009	Equity	140.00
	Total	466.66
	Loan	86.23
Gross add-cap during 2009-14	Equity	36.96
	Total	123.19
	Loan	412.89
Gross Capital Cost as on 31.3.2014	Equity	176.96
	Total	589.85
Conital Coat Baseyard up to	Loan	80.31
Capital Cost Recovered up to 31.3.2014	Equity	19.95
31.3.2014	Total	100.26
	Loan	332.58
Net Capital Cost as on 31.3.2014	Equity	157.01
	Total	489.59

#### **Debt-equity ratio**

35. The debt:equity as determined as on 31.3.2014 as discussed at para-18 has been considered as on 1.4.2014 and it is as under:-

	(₹ in lakh)				
Particulars	Central portion				
	Amount	% age			
Loan/Debt	332.58	67.93			
Equity	157.01	32.07			
Total	489.59	100.00			

36. The debt:equity ratio determined as on 31.3.2019 for Communication system is as below:-

		(₹ in lakh)			
Particulars	Central portion				
	Amount	% age			
Loan/Debt	210.46	64.66			
Equity	115.01	35.34			
Total	325.47	100.00			

The difference in net capital cost is due to add-cap during 2014-19 and capital cost recovered during 2014-19 as explained below.

#### Rates for Recovery of loan and equity

37. The Capital Recovery Factor for loan in respect of instant asset has been calculated by applying weighted average rate of interest and it works out to be 6.9111% in case of the instant asset. The details are attached at Annexure-3 of the order. Thus, the rates considered on annual basis, have been converted to monthly rates and are as under:-

CRF for loan to be considered for Fees & Charges					
Particulars 2014-15 2015-16 2016-17 2017-18 2018-19					
Central Portion	0.011565	0.012461	0.013590	0.015049	0.017006

38. The Capital Recovery Factor for equity has been considered on the same basis as approved vide order dated 27.1.2014 in Petition No. 74/TT/2012 and on post-tax return on equity of 15.50%. Thus, the rates considered on annual basis, have been converted to monthly rates and are as below:-

CRF for equity to be considered for Fees & Charges					
Particulars 2014-15 2015-16 2016-17 2017-18 2018-19					
Central Portion	0.016441	0.017224	0.018236	0.019578	0.021417

39. In view of above, the amount of monthly capital recovery charges for loan and equity for instant asset on account of Central portion have been considered by using respective Capital Recovery Factors and are as under:-

(₹ in lakh)

Monthly capital recovery charges for loan					
Particulars   2014-15   2015-16   2016-17   2017-18   2018-19					
Central Portion	3.85	4.16	4.16	4.16	4.16

Monthly capital recovery charges for equity					
Particulars   2014-15   2015-16   2016-17   2017-18   2018-19					
Central Portion	2.58	2.77	2.77	2.77	2.77

40. Accordingly, the recovery of capital during 2014-19 has been worked out. The date of commercial operation of instant asset was 1.4.2009, hence, the instant asset shall complete 15 years as on 31.3.2024. Further, in line with order dated 8.12.2011 in Petition No. 68/TT/2010, the total capital cost in respect of Communication system shall be recovered upto 31.3.2024 i.e. during 2023-24. The details are as follows:-

		(₹ in lakh)
Particulars	Capital	Central Portion
Capital Cost Recovered during 2014-19	Loan	147.17
	Equity	52.74
	Total	199.91

- 41. The petitioner has submitted that RoE has been calculated at the rate of 19.610% after grossing up the RoE with MAT rate of 20.961%. The petitioner has further submitted that the grossed up RoE is subject to truing up based on the actual tax paid along with any additional tax or interest, duly adjusted for any refund of tax including the interest received from IT authorities, pertaining to the tariff period 2014-19 on actual gross income of any financial year. Any under-recovery or over-recovery of grossed up RoE after truing up shall be recovered or refunded to the beneficiaries on year to year basis.
- 42. The petitioner has further submitted that adjustment due to any additional tax demand including interest duly adjusted for any refund of the tax including interest received from IT authorities shall be recoverable/ adjustable after completion of income tax assessment of the financial year.
- 43. The Commission in its order dated 18.3.2011 in Petition No. 28/2010 approved the fee 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 (pretax), 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, the petitioner 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, as already mentioned, vide order dated 27.1.2014 in Petition No. 74/TT/2012 (at para 31) thereof.

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

44. The petitioner has claimed ₹34.04 lakh for 2014-15 and ₹23.54 lakh for 2015-16, 2016-17, 2017-18 and 2018-19 respectively. The petitioner has submitted that the claim of the O&M Expenses for Central portion is based on Auditors' Certificate dated 15.12.2014. We have considered the submissions of the petitioner with regard to O&M expenses. However, considering actual of ₹8.42 lakh for 2013-14, the O&M expenses for 2014-19 appear to be high. Therefore, the O&M expenses have been considered based on actual O&M of ₹8.42 lakh for 2013-14 alongwith escalation of 3.32% per annum. Accordingly, the O&M Expenses are allowed in this order, which shall be subject to review at the time of truing-up. The details of allowable O&M expenses are as under:-

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Claimed by petitioner	34.04	23.54	23.54	23.54	23.54
Amount allowed	8.69	8.97	9.26	9.56	9.87

#### Interest on working capital

- 45. The petitioner has claimed O&M Expenses in the case of Central Portion and accordingly O&M Expenses for 1 month, Maintenance spares @15% of O&M Expenses, receivables for two months and SBI Base Rate as on 1.4.2014 i.e. 10.00% Plus 350 bps (13.50%) have been considered as the rate of interest on working capital for the Central Portion.
- 46. The necessary computations of interest on working capital for Central Portion are as under:-



(₹ in lakh)

Particulars	Central Portion				
	2014-15	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	1.30	1.35	1.39	1.43	1.48
O & M Expenses	0.72	0.75	0.77	0.80	0.82
Receivables	14.68	15.75	15.80	15.85	15.90
Total	16.71	17.84	17.96	18.08	18.21
Rate of Interest	13.50%	13.50%	13.50%	13.50%	13.50%
Interest	2.26	2.41	2.42	2.44	2.46

#### **Annual Fees and charges**

47. The detailed calculations of fees and charges being allowed for the instant asset are attached at Annexure-1 of this order and are summarized hereinafter:-

(₹ in lakh)

Particulars	Central Portion					
	2014-15	2015-16	2016-17	2017-18	2018-19	
Annual capital recovery						
charge-Loan	46.16	49.90	49.90	49.90	49.90	
Annual capital recovery						
charge-Loan	30.98	33.20	33.20	33.20	33.20	
Annual capital recovery						
charge-Total	77.13	83.10	83.10	83.10	83.10	
O&M expenses	8.69	8.97	9.26	9.56	9.87	
Interest on working capital	2.26	2.41	2.42	2.44	2.46	
Total fee and charges	88.08	94.48	94.78	95.10	95.43	

48. The Commission in its order dated 16.5.2016 in Petition No. 427/TT/2014 directed the Staff of the Commission to examine the issue for review of the Capital Recovery factor methodology for determining the fees and charges for communication systems. After submission of the report by the Staff, the Commission will take a view and issue appropriate directions. Accordingly, the fees and charges for communication systems are allowed in this petition subject to the decision of the Commission with regard to the Capital Recovery Factor. Any consequential charges in the fees and charges will be issued through a separate

order. The above directions shall be applicable in case of all similar petitions regarding communication systems.

#### Filing fee and Publication Expenses

49. The petitioner has sought reimbursement of fee paid by it for filing the petition and any other expenditure in relation to the filing of petition. 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**

50. The petitioner has requested to allow it to bill and recover License fee, separately from the respondents. The petitioner shall be entitled for reimbursement of licence fee in accordance with Clause (2)(b) and (2)(a), respectively, of Regulation 52 of the 2014 Tariff Regulations.

#### Service tax

51. The petitioner has made a prayer to be allowed to bill and recover the service tax on transmission charges separately from the respondents, if at any time exemption from service tax is withdrawn from the negative list and any additional taxes are to be paid on account of demand from Government/Statutory authorities. The petitioner has further submitted that fee and charges are exclusive of incentive, late payment surcharge, FERV, any statutory taxes, levies, duties, cess, or any other kind of imposition and/or other surcharge etc. whatsoever imposed/charged by any Government and/or any other local bodies/authorities/regulatory authorities etc. and the same shall be charged separately to the respondents. We consider petitioner's prayer pre-mature and accordingly this prayer is rejected.

**Deferred Tax Liability** 

52. The petitioner has submitted that vide order dated 11.6.2014 in Review

Petition No. 03/RP/2014, in case of WRULDC, recovery of deferred tax liability upto

31.3.2009 has been allowed. Therefore the same may also be allowed in the instant

petition. However, the instant asset was commissioned on 1.4.2009. Hence, the

petitioner's prayer is infructuous.

**Sharing of Annual Fees and Charges for 2009-14** 

53. The Commission in the order dated 8.12.2011 in Petition No. 68/2010

directed as under:-

"40. In our view, all users of the communication system including the transmission licensee should share the tariff as the communication system would also be used to

transmit operational data of the assets of the users. We direct that the sharing of tariff of the communication system shall be on similar lines as the system operation

charges for the Regional Load Despatch Centres under RLDC Regulations."

Accordingly, the fees and charges shall be shared by all concerned in accordance

with para 40 of the order dated 8.12.2011 in Petition No. 68/2010, read with

Regulation 22 (1) of Fees and Charges of Regional Load Despatch Centre and

other related matters Regulations, 2009. Regulation 22 (1) is as under:-

"The system operation charges shall be collected from the users as per the norms

given below:

Generating stations and sellers

: 45% of system operation charges;

Distribution licensees and buyers

: 45% of system operation charges;

Inter-state Transmission licensees

: 10% of system operation charges"

54. The fees and charges paid by the generating companies and the inter-State

transmission licensees (including deemed inter-State transmission licensees) shall

be recovered by them from their beneficiaries in accordance with Regulation 42A of

the Tariff Regulations, 2009.

A.

#### **Sharing up of Fees and Charges for 20014-19**

- The fees and charges for the NLDC Scheme under the petitioner's at para 47 55. above shall be shared by the respondents as per Regulation 43 of the 2014 Tariff Regulations.
- This order disposes of Petition No. 23/TT/2015. 56.

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

#### Annexure-1

(₹ in lakh) Central Portion-Charges-2014-19					
				0047.40	0040 40
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross Capital Cost	589.85	625.64	625.64	625.64	625.64
Opening Gross Notional Loan	412.89	437.95	437.95	437.95	437.95
Opening Gross Equity	176.96	187.69	187.69	187.69	187.69
Recovered Gross Capital Cost (As					
on 1st April)	100.26	131.31	167.93	208.02	251.95
Recovered Gross Notional Loan	80.31	104.23	131.94	161.62	193.42
Recovered Gross Equity	19.95	27.08	36.00	46.40	58.53
Opn.Net Capital Cost	489.59	494.33	457.71	417.62	373.69
Opn. Net Notional Loan	332.58	333.71	306.01	276.33	244.53
Opn. Net Equity	157.01	160.61	151.70	141.29	129.16
December of Constant Cont (Duning)					
Recovered Capital Cost (During the Year)	31.05	36.62	40.08	43.93	48.22
Recovered Notional Loan	23.92	27.71	29.68	31.80	34.07
Recovered Equity	7.13	8.92	10.40	12.13	14.15
Cl. Nat Carital Coat	450.54	457.74	447.00	272.00	205 47
CI. Net Capital Cost	458.54	457.71	417.62	373.69	325.47
Cl. Net Notional Loan	308.66	306.01	276.33	244.53	210.46
CI. Net Equity	149.88	151.70	141.29	129.16	115.01
Additional Capital Cost	35.79	0.00	0.00	0.00	0.00
Additional Notional Loan	25.05	0.00	0.00	0.00	0.00
Additional Equity	10.74	0.00	0.00	0.00	0.00
Years (Capital to be recovered up to					
31.3.2024)	10.00	9.00	8.00	7.00	6.00
Months	120.00	108.00	96.00	84.00	72.00
Weighted Average Rate of Interest	120.00		30.00	000	. 2.00
p.a.	6.9111%	6.9111%	6.9111%	6.9111%	6.9111%
Weighted Average Rate of Interest					
p.m.	0.5759%	0.5759%	0.5759%	0.5759%	0.5759%
Monthly Recovery Factors-Loan	0.011565	0.012461	0.013590	0.015049	0.017006
Monthly Capital Recovery Charge-					
Loan	3.85	4.16	4.16	4.16	4.16
Annual Capital Recovery Charge-					
Loan	46.16	49.90	49.90	49.90	49.90
Rate of Return on Equity p.a.	15.500%	15.500%	15.500%	15.500%	15.500%
Rate of Return on Equity p.m.	1.292%	1.292%	1.292%	1.292%	1.292%
Monthly Recovery Factors-Equity	0.016441	0.017224	0.018236	0.019578	0.021417
Monthly Capital Recovery Charge-					
Equity	2.58	2.77	2.77	2.77	2.77
Annual Capital Recovery Charge- Equity	30.98	33.20	33.20	33.20	33.20
Monthly Capital Recovery Charge-	6.43	6.92	6.92	6.92	6.92



Total					
Annual Capital Recovery Charge-					
Total	77.13	83.10	83.10	83.10	83.10
O&M Expenses (Annualised)	8.69	8.97	9.26	9.56	9.87
	est on Worl	king Capital			
Particular	2014-15	2015-16	2016-17	2017-18	2018-19
Maintenance Spares (15% of O&M)	1.30	1.35	1.39	1.43	1.48
O&M Expenses (1 Month)	0.72	0.75	0.77	0.80	0.82
Receivables (2 months)	14.68	15.75	15.80	15.85	15.90
Total	16.71	17.84	17.96	18.08	18.21
Rate of Interest on Working Capital	13.50%	13.50%	13.50%	13.50%	13.50%
Total Interest on Working Capital					
(Annualized)	2.26	2.41	2.42	2.44	2.46
Allowable Fee	es & Charge	s-2014-19			
Particulars	2014-15	2015-16	2016-17	2017-18	
Annual Capital Recovery Charge-					
Loan	46.16	49.90	49.90	49.90	49.90
Annual Capital Recovery Charge-					
Equity	30.98	33.20	33.20	33.20	33.20
Annual Capital Recovery Charge-					
Total	77.13	83.10	83.10	83.10	83.10
O&M Expenses	8.69	8.97	9.26	9.56	9.87
Interest on Working Capital	2.26	2.41	2.42	2.44	2.46
Total Fee & Charges (Applicable)	88.08	94.48	94.78	95.10	95.43

#### Annexure-2

	(₹ in lakh)					
	Rate of Intere					
From the petitioners' Balance Sheet (As a whole)						
Year 2009-10						
Loan	As on	As on	Average	Weighted		
	31.3.2010	31.3.2009	Loan during	Average Rate		
			the year	of Interest		
Total Secured Loans	3134578.00	2528825.00	2831701.50			
Total Unsecured Loans	307101.00	317718.00	312409.50			
Total Loans	3441679.00	2846543.00	3144111.00			
(a) Average Loans during the year			3144111.00			
Interest on loan and Finance Charges	203852.00	300521.00	252186.50			
(b) Average Interest during the year			252186.50			
We	ighted Avera	ge Rate of Int	erest {(b)/(a)}	8.0209%		
Year		20	10-11			
Loan	As on	As on	Average	Weighted		
	31.3.2011	31.3.2010	Loan during	Average Rate		
			the year	of Interest		
Total Secured Loans	3632507.00	3134578.00	3383542.50			
Total Unsecured Loans	455770.00	307101.00	381435.50			
Total Loans	4088277.00	3441679.00	3764978.00			
(a) Average Loans during the year			3764978.00			
Interest on loan and Finance Charges	266861.00	203852.00	235356.50			
(b) Average Interest during the year			235356.50			
Weighted Average Ra	ate of Interest	t {(b)/(a)}		6.2512%		
Year			)11-12			
Loan	As on	As on	Average	Weighted		
	31.3.2012	31.3.2011	Loan during	Average Rate		
	31.3.2012	31.3.2011	Loan during the year	Average Rate of Interest		
Long Term Borrowing	<b>31.3.2012</b> 4911919.00	<b>31.3.2011</b> <b>3721584.00</b>	_			
Long Term Borrowing  Total Loans			the year			
<u> </u>	4911919.00	3721584.00	<b>the year</b> 4316751.50			
Total Loans	4911919.00	3721584.00	the year 4316751.50 4316751.50			
Total Loans  (a) Average Loans during the year  Interest on loan and Finance Charges  (b) Average Interest during the year	4911919.00 4911919.00 416831.00	3721584.00 3721584.00 266392.00	the year 4316751.50 4316751.50 4316751.50 341611.50			
Total Loans  (a) Average Loans during the year  Interest on loan and Finance Charges  (b) Average Interest during the year	4911919.00 4911919.00 416831.00	3721584.00 3721584.00 266392.00	the year 4316751.50 4316751.50 <b>4316751.50</b> 341611.50			
Total Loans  (a) Average Loans during the year  Interest on loan and Finance Charges  (b) Average Interest during the year	4911919.00 4911919.00 416831.00	3721584.00 3721584.00 266392.00 ge Rate of Int	the year 4316751.50 4316751.50 4316751.50 341611.50	of Interest		
Total Loans  (a) Average Loans during the year  Interest on loan and Finance Charges  (b) Average Interest during the year  We	4911919.00 4911919.00 416831.00	3721584.00 3721584.00 266392.00 ge Rate of Int	the year 4316751.50 4316751.50 4316751.50 341611.50 341611.50 erest {(b)/(a)}	of Interest		
Total Loans  (a) Average Loans during the year  Interest on loan and Finance Charges  (b) Average Interest during the year  We  Year	4911919.00 4911919.00 416831.00 ighted Avera	3721584.00 3721584.00 266392.00 ge Rate of Int	the year 4316751.50 4316751.50 4316751.50 341611.50 341611.50 erest {(b)/(a)}	of Interest 7.9136%		
Total Loans  (a) Average Loans during the year  Interest on loan and Finance Charges  (b) Average Interest during the year  We  Year	4911919.00 4911919.00 416831.00 ighted Avera	3721584.00 3721584.00 266392.00 ge Rate of Int 20 As on	the year 4316751.50 4316751.50 4316751.50 341611.50 341611.50 erest {(b)/(a)} 012-13 Average	7.9136% Weighted		
Total Loans  (a) Average Loans during the year  Interest on loan and Finance Charges  (b) Average Interest during the year  We  Year	4911919.00 4911919.00 416831.00 ighted Avera	3721584.00 3721584.00 266392.00 ge Rate of Int 20 As on	the year 4316751.50 4316751.50 4316751.50 341611.50 341611.50 erest {(b)/(a)} 012-13 Average Loan during	7.9136% Weighted Average Rate		
Total Loans  (a) Average Loans during the year Interest on loan and Finance Charges (b) Average Interest during the year  We  Year  Loan	4911919.00 4911919.00 416831.00 ighted Average As on 31.3.2013	3721584.00 3721584.00 266392.00 ge Rate of Int 20 As on 31.3.2012	the year  4316751.50  4316751.50  4316751.50  341611.50  341611.50 erest {(b)/(a)}  112-13  Average Loan during the year	7.9136% Weighted Average Rate		
Total Loans  (a) Average Loans during the year  Interest on loan and Finance Charges (b) Average Interest during the year  Wear  Loan  Long Term Borrowing	4911919.00 4911919.00 416831.00 ighted Avera As on 31.3.2013	3721584.00 3721584.00 266392.00 ge Rate of Int 20 As on 31.3.2012	the year 4316751.50 4316751.50 4316751.50 341611.50 341611.50 erest {(b)/(a)} 012-13 Average Loan during the year 5609773.00	7.9136% Weighted Average Rate		
Total Loans  (a) Average Loans during the year Interest on loan and Finance Charges (b) Average Interest during the year  We  Year  Loan  Long Term Borrowing  Total Loans	4911919.00 4911919.00 416831.00 ighted Avera As on 31.3.2013	3721584.00 3721584.00 266392.00 ge Rate of Int 20 As on 31.3.2012	the year 4316751.50 4316751.50 4316751.50 341611.50 341611.50 erest {(b)/(a)} 112-13 Average Loan during the year 5609773.00 5609773.00	7.9136% Weighted Average Rate		
Total Loans  (a) Average Loans during the year Interest on loan and Finance Charges (b) Average Interest during the year  Year Loan  Long Term Borrowing  Total Loans  (a) Average Loans during the year Interest on loan and Finance Charges (b) Average Interest during the year	4911919.00 4911919.00 416831.00 ighted Avera As on 31.3.2013 6307627.00 6307627.00	3721584.00 3721584.00 266392.00 ge Rate of Int 20 As on 31.3.2012 4911919.00 4911919.00 416831.00	the year 4316751.50 4316751.50 4316751.50 341611.50 341611.50 erest {(b)/(a)} 012-13 Average Loan during the year 5609773.00 5609773.00 428486.06 428486.06	7.9136% Weighted Average Rate		
Total Loans  (a) Average Loans during the year Interest on loan and Finance Charges (b) Average Interest during the year  Year Loan  Long Term Borrowing  Total Loans  (a) Average Loans during the year Interest on loan and Finance Charges (b) Average Interest during the year	4911919.00 4911919.00 416831.00 416831.00 As on 31.3.2013 6307627.00 6307627.00	3721584.00 3721584.00 266392.00 ge Rate of Int 20 As on 31.3.2012 4911919.00 4911919.00 416831.00	the year 4316751.50 4316751.50 4316751.50 341611.50 341611.50 erest {(b)/(a)} 012-13 Average Loan during the year 5609773.00 5609773.00 428486.06 428486.06	7.9136% Weighted Average Rate		
Total Loans  (a) Average Loans during the year Interest on loan and Finance Charges (b) Average Interest during the year  Year Loan  Long Term Borrowing  Total Loans  (a) Average Loans during the year Interest on loan and Finance Charges (b) Average Interest during the year	4911919.00 4911919.00 416831.00 ighted Avera As on 31.3.2013 6307627.00 6307627.00	3721584.00 3721584.00 266392.00 ge Rate of Int 20 As on 31.3.2012 4911919.00 4911919.00 416831.00 ge Rate of Int	the year 4316751.50 4316751.50 4316751.50 341611.50 341611.50 erest {(b)/(a)} 012-13 Average Loan during the year 5609773.00 5609773.00 428486.06 428486.06	7.9136%  Weighted Average Rate of Interest		
Total Loans  (a) Average Loans during the year  Interest on loan and Finance Charges (b) Average Interest during the year  Year  Loan  Long Term Borrowing  Total Loans  (a) Average Loans during the year  Interest on loan and Finance Charges (b) Average Interest during the year  We	4911919.00 4911919.00 416831.00 ighted Avera As on 31.3.2013 6307627.00 6307627.00	3721584.00 3721584.00 266392.00 ge Rate of Int 20 As on 31.3.2012 4911919.00 4911919.00 416831.00 ge Rate of Int	the year  4316751.50  4316751.50  4316751.50  341611.50  341611.50 erest {(b)/(a)}  12-13  Average Loan during the year  5609773.00  5609773.00  428486.06  428486.06 erest {(b)/(a)}	7.9136%  Weighted Average Rate of Interest		
Total Loans  (a) Average Loans during the year Interest on loan and Finance Charges (b) Average Interest during the year  Year Loan  Long Term Borrowing  Total Loans  (a) Average Loans during the year Interest on loan and Finance Charges (b) Average Interest during the year  We Year	4911919.00 4911919.00 416831.00 416831.00 ighted Average As on 31.3.2013 6307627.00 6307627.00 440141.11	3721584.00 3721584.00 266392.00 ge Rate of Int 20 As on 31.3.2012 4911919.00 4911919.00 416831.00 ge Rate of Int	the year  4316751.50  4316751.50  4316751.50  341611.50  341611.50 erest {(b)/(a)}  112-13  Average Loan during the year  5609773.00  5609773.00  428486.06  428486.06 erest {(b)/(a)}  113-14	7.9136%  Weighted Average Rate of Interest  7.6382%		
Total Loans  (a) Average Loans during the year Interest on loan and Finance Charges (b) Average Interest during the year  Year Loan  Long Term Borrowing  Total Loans  (a) Average Loans during the year Interest on loan and Finance Charges (b) Average Interest during the year  We Year	4911919.00 4911919.00 416831.00 ighted Avera As on 31.3.2013 6307627.00 6307627.00 440141.11 ighted Avera	3721584.00 3721584.00 266392.00 266392.00 ge Rate of Int 20 As on 31.3.2012 4911919.00 4911919.00 416831.00 ge Rate of Int 20 As on	the year  4316751.50  4316751.50  4316751.50  341611.50  341611.50 erest {(b)/(a)}  012-13  Average Loan during the year 5609773.00 5609773.00 428486.06 428486.06 erest {(b)/(a)} 013-14  Average	7.9136%  Weighted Average Rate of Interest  7.6382%  Weighted		
Total Loans  (a) Average Loans during the year Interest on loan and Finance Charges (b) Average Interest during the year  Year Loan  Long Term Borrowing  Total Loans  (a) Average Loans during the year Interest on loan and Finance Charges (b) Average Interest during the year  We Year	4911919.00 4911919.00 416831.00 ighted Avera As on 31.3.2013 6307627.00 6307627.00 440141.11 ighted Avera	3721584.00 3721584.00 266392.00 266392.00 ge Rate of Int 20 As on 31.3.2012 4911919.00 4911919.00 416831.00 ge Rate of Int 20 As on	the year  4316751.50  4316751.50  4316751.50  341611.50  341611.50 erest {(b)/(a)}  12-13  Average Loan during the year 5609773.00 5609773.00 428486.06 428486.06 erest {(b)/(a)}  13-14  Average Loan during	7.9136%  Weighted Average Rate of Interest  7.6382%  Weighted Average Rate		

(a) Average Loans during the year		6993324.50	
Interest on loan and Finance Charges	528422.00 440141.11	484281.56	
(b) Average Interest during the year		484281.56	
We	6.9249%		

#### Annexure-3

Wt. Average Rate of Interest (for 2014-19)					
From the petitioners' Balance Sheet (As a whole)					
Year	2014-15				
Loan	As on As on Average			Weighted	
	31.3.2015	31.3.2014	Loan during	Average Rate	
			the year	of Interest	
Long Term Borrowing	8937584.00	7679022.00	8308303.00		
Total Loans	8937584.00	7679022.00	8308303.00		
(a) Average Loans during the year 8308303.00					
Interest on loan and Finance	619970.00	528422.00	574196.00		
Charges					
(b) Average Interest during the ye					
Weighted Average Rate of Interest {(b)/(a)}				6.9111%	