

**Central Electricity Regulatory Commission
New Delhi**

Petition No. 61/TT/2012

Coram:

Shri V.S. Verma, Member

Shri M. Deena Dayalan, Member

Date of Hearing: 11.04.2013

Date of Order: 22.02.2014

In the matter of

Miscellaneous petition for approval under Sub-section (4) of Section 28 of Electricity Act, 2003 for determination of Fees and Charges for Unified Load Despatch & Communication Scheme (POWERGRID portion i.e. Communication system portion and SLDC system retained by the petitioner after formation of POSOCO) in North Eastern Region for the period 2009-14 block.

And in the matter of

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

...Petitioner

Vs

1. NEEPCO Limited,
15, NBCC Tower, Bhikaji Cama Place
New Delhi
2. National Hydro Power Corporation Ltd,
NHPC Office Complex,
Lodhi Road, New Delhi
3. Arunachal Pradesh SEB Dept. of Power
Govt. of Arunachal Pradesh
Itanagar-791 111.
4. APDCL Assam Power Distribution Company Ltd.
ASEB, Bijuli Bhavan, Aaltan Bazar
Guwahati-781 001.
5. Manipur SEB Dept. of Power
Govt. of Manipur



Imphal-795 001.

6. Meghalaya Electricity Corp. Ltd. (MeECL)
Lumjingshai, Short Round Road
Shillong-793 001.
7. Mizoram SEB Power and Electricity Dept.
Govt. of Mizoram
Khatla, Aizwal-796 001.
8. Nagaland SEB Dept. of Power
Govt. of Nagaland
Kohima-797 001.
9. Tripura State Electricity Corp. Ltd. (TSECL)
Bidyut Bhawan, North Banamalipur
Agartala-799 001.

.....Respondents

For petitioner : Shri S.S. Raju, Powergrid
Shri Upendra Pandey, Powergrid
Shri M.M. Mondal, Powergrid
Shri A.S. Kushwaha, Powergrid

For respondent(s) : Ms. Suchitra Maggon, NTPC
Shri A.K. Chaudhary, NTPC
Shri Rajesh Jain, NTPC
Shri A. Gonchoudhuri, TSECL
Ms. Dabjani Dey, NEEPCO
Shri Rohit Chhabra, NTPC,

ORDER

The petitioner has made the following prayers, namely–

- a) Approve the Fees and charges for the communication system and SLDC system covered under this petition;
- b) Approve the reimbursement of expenditure by the beneficiaries towards any other expenditure (if any) in relation to the filing of petition and petition filing fee;
- c) Allow the petitioner to bill and adjust impact on Interest on Loan due to change in Interest rate on account of floating rate of interest applicable during 2009-14 period, if any, from the respondent;
- d) Allow the petitioner to bill and recover Service Tax on Transmission Charges separately from the respondents, if at any time exemption from service tax is withdrawn and transmission is notified as taxable service;

- e) Allow the Petitioner to bill and recover License fee separately from the respondents;
- f) Allow to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly from the beneficiaries;
- g) Allow the Petitioner to bill and recover the Charges, to be shared for using the communication system by the transmission license as per CERC Order dated 08.12.2011 in petition no. 68/2010, from the long term customers (DIC Designated ISTS customer); and
- h) Allow the petitioner to recover the FERV on the foreign currency loan deployed directly without making application to the Hon'ble Commission from the beneficiaries on actual basis."

2. The petitioner, Power Grid Corporation of India Limited who was earlier operating the Regional Load Despatch Centres (RLDCs) devised a scheme called the Unified Load Despatch and Communication Scheme (the Scheme) for all the five Regions with the objective of strengthening the load despatch infrastructure and augmenting communication system for efficient discharge of load despatch functions. The Scheme covered investment in RLDCs at the Central level and the State Load Despatch Centres (SLDCs) in the beneficiary States in the Region.

3. The Commission, vide order dated 20.9.2005 in Petition No.30/2004, approved the fees and charges for the Scheme in the North Eastern Region for the period 2001-04 for the expenditure incurred as on the date of commercial operation. Subsequently, vide order dated 3.2.2009 in Petition No.147/2005, the revised fees and charges for the period 2004-09 for the expenditure incurred from 1.4.2004 to 31.3.2005 was approved. Later, vide order dated 17.3.2011 in Petition No.40/2010, revised the fees and charges for the period 2004-09 for the expenditure incurred from 1.4.2005 to 31.3.2009.

4. In keeping with the directive of Ministry of Power contained in the order dated 4.7.2008, Power System Operation Corporation Ltd (POSOCO), a wholly owned subsidiary of the petitioner, responsible for operation of National Load Despatch Centre and RLDCs has been established. The assets directly related to discharge of load despatch functions raised by the petitioner under the Scheme have been transferred to POSOCO. The petitioner has been left with the assets associated with the communication system under the Central portion of the Scheme and assets for SLDCs (the States' portion). This petition has been filed for determination of tariff for the period 2009-14 for the assets under the Scheme in North Eastern Region presently retained by the petitioner.

5. The Scheme in North Eastern Region, comprising microwave and non-microwave assets was declared under commercial operation on 1.8.2003.

6. The petitioner has claimed the following fees and charges:-

(₹ in lakh)

Microwave Assets					
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Central Portion					
Annual Capital Recovery Charges – Loan	21.15	21.15	21.15	5.29	0.00
Annual Capital Recovery Charges – Total	21.15	21.15	21.15	5.29	0.00
O&M	0.00	0.00	0.00	0.00	0.00
Interest on Working Capital	1.52	1.58	1.65	1.39	0.00
TOTAL ANNUAL CHARGES	22.67	22.73	22.80	6.68	0.00

States' Portion					
Annual Capital Recovery Charges – Loan	51.52	51.52	51.52	12.88	0.00
Annual Capital Recovery Charges – Total	51.52	51.52	51.52	12.88	0.00
O&M	0.00	0.00	0.00	0.00	0.00
Interest on Working Capital	1.07	1.07	1.07	1.15	0.00
TOTAL ANNUAL CHARGES	52.59	52.59	52.59	14.03	0.00

(₹ in lakh)

Non-Microwave Assets					
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Central Portion					
Annual Capital Recovery Charges – Loan	110.99	111.07	111.25	111.34	111.34
Annual Capital Recovery Charges – Total	110.99	111.07	111.25	111.34	111.34
O&M	315.65	308.16	325.79	344.42	364.12
Interest on Working Capital	24.47	24.98	26.31	27.73	29.22
TOTAL ANNUAL CHARGES	451.11	444.21	463.35	483.49	504.68
States' Portion					
Annual Capital Recovery Charges – Loan	79.24	79.24	79.24	79.24	79.24
Annual Capital Recovery Charges – Total	79.24	79.24	79.24	79.24	79.24
O&M	0.00	0.00	0.00	0.00	0.00
Interest on Working Capital	1.65	1.65	1.65	1.65	1.65
TOTAL ANNUAL CHARGES	80.89	80.89	80.89	80.89	80.89

7. The reply to the petition have been filed by NTPC, vide affidavit dated 1.2.2012.

8. Before we examine the petitioner's entitlement to fees and charges, it is considered appropriate to take notice of certain relevant events.

9. The petitioner had earlier filed Petition No 68/2010 wherein it raised certain issues in connection with the determination of fees and charges for the Central and the States' portions of the Scheme retained with the petitioner consequent to transfer of certain assets to POSOCO. The petition was disposed of by order dated 8.12.2011. Some of the issues raised and the Commission's decision thereon are noted hereunder.

10. The Commission has specified the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (the 2009 Tariff Regulations) applicable for the period 1.4.2009 to 31.3.2014. The 2009 Tariff Regulations do not specify the terms and conditions for determination of charges for the assets covered under the Scheme and owned by the petitioner. Therefore, the petitioner prayed for fixation of the norms for recovery of cost for the Central and the States' portions. In the absence of any regulations, the Commission decided to continue with the levelised tariff of the existing assets as followed while approving the fees and charges for the tariff period 2004-09. The relevant part of the order is extracted hereunder:-

"It clearly emerges from the above judgement 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."

11. Another issue raised by the petitioner was regarding admissibility of O&M expenses recoverable for the communication system. The Commission in the said order dated 8.12.2011 directed that the petitioner should be allowed actual O&M expenses for the communication system already in operation. However, for the new assets of the communication system, the Commission ordered, O&M norms would be decided while framing of regulations for the period 2014-19.

12. On the issue of the initial spares raised by the petitioner, the Commission directed the petitioner to furnish the actual expenses incurred on spares from 2002-03 onwards while filing the petition for approval of fees and charges. As regards the new assets it was observed that the initial spares would be decided at the time of framing of regulations for the communication system.

13. On the issue of life of the assets and the depreciation chargeable, the Commission directed that for the existing assets excluding Microwave links, the methodology adopted for the period 2004-09 would be continued to be followed till expiry of the period already mentioned in the orders. As regards Microwave links, the Commission noted that the accelerated depreciation would be considered keeping in view the reduced life of these assets as per decision of MoC/DoT.

14. On the last issue of sharing of the fees and charges, the Commission observed that all users of the communication system including the transmission licensees should share the fees and charges as the communication system would also be used to transmit operational data of the assets of the users. Accordingly, the Commission

directed that the sharing of fees and charges of the communication system shall be on similar lines as the system operation charges for the RLDCs.

15. The Commission had approved the recovery of loan and equity based on the weighted average rate of interest and Return on Equity (RoE) using the Recovery Factor for loan and equity for 15 years as under:-

$$\text{Recovery Factor} = \frac{i \times (1+i)^n}{(1+i)^n - 1}$$

Where n = period of recovery, and i = rate of recovery

16. Based on the above Recovery Factor, installments of fees and charges were computed on yearly basis but were ordered to be recovered on monthly basis. The same methodology was adopted for other regions too.

17. Haryana Vidyut Prasaran Nigam Ltd (HVPNL), a utility in Northern Region and party respondent in the petition pertaining to that Region pointed out that by computing installments on yearly basis and claiming fees and charges on monthly basis, the entire equity amount would be paid back to the petitioner in 167th month and entire loan would be paid back in 175th month, instead of 180th month, the useful life of the assets considered under the Scheme. HVPNL further pointed out that by continuing recovery up to 180th month at the Recovery Factor decided by the Commission, the petitioner would be recovering excess amount over the capital deployed. HVPNL filed an appeal (Appeal No 21/2010) before the Appellate Tribunal arguing that the charges be computed on monthly basis. The Appellate Tribunal in its judgment dated 11.11.2011 upheld the contention of HVPNL and concluded as under:-

“We would, therefore, direct the Central Commission to work out the monthly instalments by which the amount of loan and equity is fully recovered with the recovery factor decided by its impugned Order dated 11.4.2008. In other words excess amount recovered by the POWERGRID (R-2) would be adjusted in future instalments by reducing number of instalments appropriately. The recovery of loan and equity would stop thereafter.”

18. In view of the above direction of the Appellate Tribunal, excess amount recovered by the petitioner would be adjusted in future installments by reducing number of installments appropriately and recovery of loan and equity would stop thereafter. The principle decided by the Appellate Tribunal in the judgment dated 11.11.2011 for Northern Region is to be followed for the purpose of determining fees and charges for communication system and SLDC portions in all regions.

19. In compliance with the directions of the Appellate Tribunal, recovery of loan and equity has been re-calculated by adopting monthly recovery charge method as directed by the Appellate Tribunal. The monthly recovery charges, earlier considered on annualized basis, have been worked out for 2004-09. Further, in compliance with the directions of the Appellate Tribunal monthly recovery charges corresponding to both Central and State portions have been worked out for 2001-04, 2004-09 & 2009-14 periods and onwards. The excess capital recovered during 2001-04 and 2004-09 is given below:-

(₹ in lakh)

Period	Central Portion-Loan	State Portion-Loan
2001-04	1.74	1.22
2004-09	11.41	9.92

20. The excess amounts recovered by the petitioner shall be adjusted in future installments, beyond 2009-14 periods, by reducing the number of installments.

21. Now we proceed to examine the petitioner's proposal for approval of fees and charges based on the above principles.

22. The administrative approval and expenditure sanction for the ULDC scheme for NER was accorded by Government of India, vide letter dated 21.8.1997 at an estimated cost of ₹16793 lakh, including IDC of ₹2306 lakh (4th Qtr 1996 P/L). Later, Government of India, vide letter dated 31.3.2003, approved the RCE at a cost of ₹26381 lakh including IDC of ₹3460 lakh consisting of (i) POWERGRID's portion of ₹25036 lakh (including IDC of ₹3182 lakh) and (ii) SEB's portion of ₹1344 lakh (including IDC of ₹278 lakh) at 2nd Qtr 2002 P/L. The approval letter also indicates that the project would be funded through a grant to the extent of 90% of POWERGRID's portion and 100% of the SEB's portion of the RCE, including IDC.

23. While determining tariff for the period up to 31.3.2004, the Commission had allowed 90% of the capital expenditure as Grant-in-Aid (GIA) and remaining 10% as loan, vide order dated 20.9.2005 in Petition No. 30/2004 as the actual expenditure was less than the approved GIA. The revised cost estimates approved by the Ministry of Power, vide letter dated 31.3.2003, indicated that the project was proposed to be funded in the following manner:-

(₹ in lakh)

Srl. No.	Source	Amount
1	Grant for Powergrid's share	22162
2	Grant for Constituent's share	1344
3	Total Government of India grant	23506
4	Loan/internal resources of PowerGrid	2875
TOTAL		26381

24. Even after considering the additional capital expenditure for the period 2003-04, 2004-05 and 2005-09, the actual expenditure incurred was ₹19543.35 lakh which was less than the approved GIA (Powergrid's share) i.e. ₹22162 lakh. Hence, Commission had applied similar approach for funding of additional capital expenditure i.e. 90% GIA and 10% loan in order dated 3.2.2009 in Petition no 147/2005 and in order dated 17.3.2011 in Petition No 40/2010. Therefore, for the calculation of capital recovery, no equity was considered for the reasons stated above and capital recovery on loan portion was calculated by considering weighted average rate of interest on loan.

25. The petitioner has submitted, vide affidavit dated 17.2.2014, that Government of India sanctioned grant to the tune of ₹17524.50 lakh for the NERULDC project. It has been further submitted that this amount was considered by the petitioner while filing the petition for tariff block 2004-09 in Petition No. 40/2010. However, we would like to clarify that this aspect was not brought to the notice of the Commission by the petitioner when the revised fee and charges were allowed vide order dated 17.3.2011 in Petition No.40/2010 and accordingly approved grant of ₹22162 lakh was considered while allowing fee and charges for the period 2004-09 period. As the petitioner has drawn only ₹17524.50 lakh of the sanctioned GIA, the revised fee and charges allowed in Petition No.40/2010 for the period 2004-09 is also revised accordingly in this order as

detailed below. We would also like to further clarify that the directions of the Appellate Tribunal in its judgement dated 11.11.2011 in Appeal No.21/2010 is also considered while working out the fees and charges for the period 2004-09.

Capital cost

26. The Commission, vide order dated 17.3.2011 in Petition No 40/2010, has admitted the following capital cost as on 31.3.2009:-

(₹ in lakh)

Admitted capital cost as on 31.3.2009	Central Portion	State Portion	Total
Gross Deemed Loan (10%)	1173.41	787.05	1960.46
Grant in Aid (90%)	10524.71	7058.19	17582.90
Total	11698.12	7845.24	19543.35

27. The funding pattern considered for additional capital expenditure during 2007-08 and 2008-09 is being modified so as to limit the GIA up to ₹17524.5 lakh. Consequently, the capital cost as on 31.3.2009 admitted, vide order dated 17.3.2011 is now being considered as indicated below:-

(₹ in lakh)

Revised admitted capital cost as on 31.3.2009	Central Portion	State Portion	Total
Gross Deemed Loan	1213.29	805.56	2018.85
Grant in Aid	10484.82	7039.67	17524.50
Total	11698.12	7845.24	19543.35

28. The petitioner has furnished, vide Management Certificate dated 23.12.2011, the expenditure corresponding to the assets pertaining to Central portion retained by them and those transferred to POSOCO. Further, the petitioner has indicated in the petition that complete State portion has been retained by the petitioner. In view of the transfer of assets, the gross value of assets retained by the petitioner as on 1.4.2009 is as follows:-

(₹ in lakh)

Particulars	Gross value of assets retained by PGCIL
Central portion	9146.56
State portion	7845.24
TOTAL	16991.80

29. The above values of Central as well as State portions have been considered in the same ratio of 'Gross Deemed Loan' as being considered on 31.3.2009 as indicated herein under:-

(₹ in lakh)

Retained Gross Capital Cost as on 31.03.2009	Central Portion	State Portion	Total
Gross Deemed Loan	948.65	805.56	1754.21
Grant in Aid	8197.91	7039.67	15237.58
Total	9146.56	7845.24	16991.80

30. From the date of commercial operation (1.8.2003) up to 31.3.2009, the cost has been partially recovered by the petitioner by way of recovery of loan. GIA is not to be recovered. In view of the orders of Appellate Tribunal, applying the monthly recovery concept, the loan recovered up to 31.3.2009 has been worked out and it is as under:-

(₹ in lakh)

Capital recovered upto 31.3.2009	Central Portion	State Portion	Total
Gross Deemed Loan	249.24	168.83	418.07
Total	249.24	168.83	418.07

31. As indicated under Paragraph No. 4 above, part of the central portion assets were transferred to POSOCO whereas complete State portion assets have been

retained by PGCIL. Further, the Commission, vide order dated 8.12.2011 in Petition No. 68/2010, has observed as below:-

11. The petitioner has submitted that to meet the communication requirements under the ULDC projects, microwave links were implemented in four regions namely, Northern, Southern, North-Eastern and Eastern Region..... In the meeting held between the Ministry of Power and the Ministry of Communication and IT on 4.11.2008, it was decided to vacate the 2.3-2.4 GHz frequency band being used for ULDC Micro Wave links and to establish fibre optics based communications within two years time period which has been subsequently extended by one more year i.e. upto end of 2011. The petitioner has further submitted that the tariff for the Digital Microwave system installed under the ULDC scheme was being recovered considering the 15 year useful life of the project. On account of the change in Government Policy, the useful life of these microwave links have been reduced substantially to 6 to 9 years instead of 15 years. The petitioner has submitted that since it has already incurred the cost and the charges were being recovered considering 15 years of project life, it may be allowed to recover the accelerated depreciation to match the revised useful life for the Digital Microwave links till the end of the year 2011.”

32. Accordingly, the petitioner, vide Management Certificate dated 23.12.2011, has submitted the following detail for the gross capital as on 31.3.2009 retained by PGCIL for central portion by segregating into Microwave and Non- Microwave portions:-

(₹ in lakh)

Particular	Gross Retained Capital Cost as on 31.03.2009 for Central Portion
Microwave	736.94
Non-Microwave	8409.62
Total	9146.56

33. The above gross values have been considered for working out the fee and charges of Central portion of ULDC (NER) for 2009-14 period. In case of State Portion, as the complete cost as on 31.3.2009 has been retained by PGCIL, this retained cost has been considered for working out the fee and charges of State portion by further

segregating it in 'Microwave' and 'Non-Microwave' portion as given below. The segregation is as per the claims of petitioner:-

(₹ in lakh)	
Particular	Gross Retained Capital Cost as on 31.3.2009 for State Portion
Microwave	1805.87
Non-Microwave	6039.37
Total	7845.24

34. The Microwave and Non-Microwave portions corresponding to Central as well as State have been segregated in the same ratio of 'Gross Deemed Loan' as that considered for admitted Gross Capital Cost as on 31.3.2009. These are as follows:-

(₹ in lakh)						
Retained Gross Capital Cost as on 1.4.2009	Microwave			Non-Microwave		
	Central Portion	State Portion	Total	Central Portion	State Portion	Total
Gross Deemed Loan	76.43	185.43	261.86	872.22	620.13	1492.35
Grant in Aid	660.51	1620.44	2280.94	7537.40	5419.24	12956.64
Total	736.94	1805.87	2542.81	8409.62	6039.37	14448.99

35. The petitioner has submitted the values of Retained Gross Capital Cost as on 31.3.2009 for Central as well as State portion corresponding to Microwave and non-Microwave Systems. In our calculations, the Pro-rata Capital Recovered in respect of Retained Gross Capital for Microwave portion upto 31.3.2009 has been calculated by considering the Retained Gross Capital Cost as on 31.3.2009 in the ratio of total capital recovered from date of commercial operation to 31.3.2009 to Admitted Gross Capital Cost as on 31.3.2009. Similarly, Pro-rata Capital Recovered in respect of Retained Gross Capital for Non-Microwave portion upto 31.3.2009 has been worked out. These have been indicated overleaf:-

(₹ in lakh)

Pro-rata Capital Recovered in respect of Retained Gross Capital	Microwave			Non-Microwave		
	Central Portion	State Portion	Total	Central Portion	State Portion	Total
Deemed Loan	15.70	38.86	54.56	179.18	129.97	309.15
Total	15.70	38.86	54.56	179.18	129.97	309.15

36. Grant in aid has not been considered for working out Fee and Charges. The retained net capital cost as on 1.4.2009 has been arrived at by deducting the above calculated Pro-rata Capital Recovered in respect of Retained Gross Capital from the Retained Gross Capital Cost as on 31.3.2009. The same concept has applied for both Microwave and Non-Microwave portions. The details are as follows:-

(₹ in lakh)

Retained Net Capital Cost as on 01.04.2009	Microwave			Non-Microwave		
	Central Portion (RSCC)	State Portion	Total	Central Portion (RSCC)	State Portion	Total
Deemed Loan	60.73	146.57	207.30	693.04	490.16	1,183.21
Total	60.73	146.57	207.30	693.04	490.16	1183.21

37. These values have been considered for the purpose of calculation of Fee and Charges for 2009-14 period. The petitioner has submitted, vide affidavit dated 30.1.2013, that the digital microwave link in NER was targeted to be replaced completely by June, 2013 by Fibre Optic cable.

Additional capital expenditure

38. The details of additional capital expenditure claimed by the petitioner are as given below:-

	(₹ in lakh)	
	Central portion	State portion
Additional Capitalization during 2009-10	9.98	0.00
Additional Capitalization during 2010-11	9.36	0.00
Balance Expenditure	0.00	0.00

39. The petitioner has claimed the additional capital expenditure of ₹9.98 lakh and ₹9.36 lakh for 2009-10 and 2010-11 respectively on account of building and other civil works. Thus, it is allowed under Regulation 7 of Fees and Charges of Regional Load Despatch Centre and other related matters Regulations, 2009.

Rates for Recovery of Capital

40. Weighted average rate of interest works out to be 10.28% which has been applied for calculating the Capital Recovery Factor for loan.

41. The GIA amounting to ₹17524.5 lakh has already been expended by the petitioner as on 31.3.2009 and the petitioner has not claimed any equity funding for ACE. Therefore, the additional capital expenditure for 2009-10 and 2010-11 is now assumed to be through 100% loan only. Thus, for this additional capital expenditure, recovery factor is relevant for the 100% loan component. As equity component has been considered as NIL, there is no recovery factor corresponding to equity.

Monthly Capital Recovery Charges

42. Monthly recovery factors, as on 1.4.2009, for Central Portion as well as State Portion for 'Microwave System' & 'Non-Micro-wave System' have been arrived as hereunder:-

Monthly Capital Recovery factor	Microwave		Non-Microwave	
	Central Portion	State Portion	Central Portion	State Portion
Deemed Loan	0.02428	0.02428	0.01392	0.01392

43. Monthly capital recovery charges, as on 1.4.2009, for Central as well as State Portion for 'Microwave System' & 'Non-Micro-wave System' are worked out as hereunder:-

(₹ in lakh)

Monthly Capital Recovery Charges	Microwave System		Non-Microwave System	
	Central Portion	State Portion	Central Portion	State Portion
Deemed Loan	1.47	3.56	9.65	6.82
Total	1.47	3.56	9.65	6.82

While working out the capital recovery charges for loan, Weighted Average Rate of Interest, as indicated in Paragraph No. 34 above have been considered.

Operation and Maintenance Expenses

44. The Commission in its order dated 8.12.2011 in Petition No. 68/2010, directed as under:-

"27.....We have examined the data submitted by the petitioner regarding actual O&M expenses during 2002-03 to 2009-10 for 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....."

45. The petitioner has submitted, vide affidavit dated 14.2.2013, the detailed break up of O&M expenses for 2011-12 and anticipated O&M charges for the period 2012-12 and 2013-14. The detailed break-up of O&M expenses is as given below:-

Description	Year		
	2009-10	2010-11	2011-12
Employee Cost	14.05	12.53	19.41
Repairs & Maintenance	80.84	74.40	74.40
Power Charges	26.26	33.12	11.23
Training & Recruitment	0.00	0.00	0.00
Communication Expenses	0.00	0.00	0.00
Travelling Expenses	0.54	0.55	2.51
Printing & Stationery	0.00	0.00	0.00
Rent	0.00	0.00	-
Misc. Expenses	0.00	1.57	
Insurance	0.00	0.00	0.00
Others-viz. security, hiring of vehicle, EDP hire charges, Adv. & Publicity etc.	1.49	1.60	3.42
Rates & Taxes (Licence fee & Royalty to DOT & WPO)	138.48	138.48	109.63
Total Expenses	261.66	262.25	220.60
Corporate Office Expenses Allocation	18.19	20.91	8.25
R.O./ED Office Exp. Charged to Revenue	26.91	16.43	21.40
Self Insurance Reserve @ 0.1% on Gross Block	8.89	8.57	8.59
Grand Total	315.65	308.16	258.84

Anticipated O&M Charges for 2012-13 and 2013-14

(₹ in lakh)

Description	2012-13	2013-14
Employee Cost	22.41	23.00
Repairs & Maintenance	87.00	99.00
Power Charges	12.00	12.00
Training & Recruitment	0.00	0.00
Communication Expenses	1.00	1.00
Travelling Expenses	5.00	5.00
Printing & Stationery	0.00	1.00
Rent, Rates & Taxes (Licence fee & Royalty to DOT & WPO)	0.00	0.00
Other Expenses	5.73	3.00
Insurance	1.00	1.00
Total Expenses	134.14	145.00
CC Expenses	6.97	7.32
RHQ Expenses	25.30	26.57
Self Insurance	8.59	8.59
GRAND TOTAL	175.00	184.48

46. NTPC in its response has stated that O&M expenses be considered on normative basis instead of allowing actual O&M expenses.

47. The Commission in its order dated 8.12.2011 in Petition No. 68/2010, the relevant portion of which has been reproduced under Paragraph No. 43 above, has already decided that the petitioner would be entitled to recovery of O&M expenses actually incurred. Therefore, actual O&M expenses, after prudence check, is being allowed. The year-wise details of O&M expenses claimed and allowed are discussed overleaf:-

2009-10:

The petitioner has claimed O&M expenses of ₹315.65 lakh and the same is allowed.

2010-11:

The petitioner has claimed O&M expenses of ₹308.16 lakh and the same is allowed.

2011-12:

The petitioner has claimed O&M expenses of ₹258.84 lakh. Out of this, ₹255.42 lakh has been allowed. An amount of ₹3.42 lakh has not been allowed as the details of other expenses have not been provided by the petitioner.

2012-13:

The petitioner has claimed O&M expenses of ₹175.00 lakh. Out of this, ₹169.27 lakh has been allowed. An amount of ₹5.73 lakh has not been allowed as the details of other expenses claimed by the petitioner have not been provided.

2013-14:

The petitioner has claimed O&M expenses of ₹187.48lakh. Out of this, ₹184.48 lakh has been allowed. An amount of ₹3.00 lakh has not been allowed as the details of other expenses have not been provided by the petitioner.

48. The O&M charges allowed for the year 2012-13 to 2013-14 are subject to adjustment of actual expenses at the time of truing up. The petitioner shall submit the details of rates and taxes at the time of truing up. The O&M expenses claimed by the petitioner include both 'Microwave System' and 'Non-Microwave System'. The

segregation of system into 'Microwave-System' & 'Non-Microwave System' is not given and considered together.

49. The comparative summary of O&M expenses claimed and those allowed is given below:-

(₹ in lakh)		
Year	O&M expenditure claimed	O&M allowed
2009-10	315.65	315.65
2010-11	308.16	308.16
2011-12	258.84	255.42
2012-13	175.00	169.27
2013-14	187.48	184.48

50. O&M expenses for the years 2012-13 and 2013-14, which have been escalated @ 5.72% per annum over the expenses for the immediately preceding year, are subject to adjustment based on actual expenses at the time of truing up. O&M expenses claimed by the petitioner include both microwave assets and non-microwave assets which have been considered together.

Interest on Working Capital

51. The components of the working capital and the interest thereon are discussed hereunder:-

- (i) **Maintenance spares:** The maintenance spares at the rate of 1% of the historical cost escalated at the rate of 6% per annum from the date of commercial operation were considered for the period 2004-09 in the order dated 17.3.2011 in Petition No 40/2010. The petitioner has claimed the maintenance spares in accordance with the said order dated 17.3.2011.

Further, it has been submitted that the Microwave assets are being decommissioned in a phased manner and its complete replacement is considered by end of June, 2012. The petitioner has requested for recovery of accelerated depreciation of Microwave assets to match the revised useful life for the digital microwave link till the end of June, 2012. The maintenance spares @1% of the historical cost escalated @6% per annum from the date of commercial operation based on the regulations for determination of tariff applicable for the period 2004-09 is not proper as in the meantime the tariff regulations which are applicable during 2009-14 have been notified. Regulation 18 of the tariff regulations provides for consideration of 15% of O&M expenses towards maintenance spares of the transmission system. The norms for maintenance spares of Communication system have not been separately specified by the Commission. The maintenance spares are part of O&M expenses. Accordingly, the maintenance spares have been considered at the rate of 15% of O&M expenses each year for the purpose of calculation of working capital is as follows:-

Year	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Maintenance Spares @15% of O&M Expenses (Microwave & Non-Microwave)	47.347	46.224	38.313	25.390	27.672

52. The maintenance spares allowed for the years 2012-13 and 2013-14 are provisional and are subject to adjustment based on actual O&M expenses for these

years. Further, the maintenance spares have been calculated for Central portion only since the petitioner has not claimed O&M expenses for the States' portion.

- (ii) **O & M Expenses:** One month's O&M expenses allowed under Para 39 above have been considered as an element of working capital.
- (iii) **Receivables:** The receivables, as a component of working capital, have been worked out on the basis 2 months' of the annual fees and charges.
- (iv) **Rate of Interest:** In line with the tariff regulations, the SBI PLR of 12.25% as on 1.4.2009 has been considered as the rate of interest on working capital.

53. The interest on working capital has been allowed in keeping with the above norms.

Annual Fees and Charges

54. The annual fees and charges allowed for the assets of the Scheme are provided in Annexure and are summarized overleaf:-

(₹ in lakh)

Microwave Assets

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14 (pro-rata)
Central Portion					
Annual Capital Recovery Charges – Loan	17.70	17.70	17.70	17.70	4.42
Annual Capital Recovery Charges – Total	17.70	17.70	17.70	17.70	4.42
O&M	0.00	0.00	0.00	0.00	0.00
Interest on Working Capital	0.37	0.37	0.37	0.37	0.09
TOTAL ANNUAL CHARGES	18.07	18.07	18.07	18.07	4.52
States' Portion					
Annual Capital Recovery Charges – Loan	42.71	42.71	42.71	42.71	10.68
Annual Capital Recovery Charges – Total	42.71	42.71	42.71	42.71	10.68
O&M	0.00	0.00	0.00	0.00	0.00
Interest on Working Capital	0.89	0.89	0.89	0.89	0.22
TOTAL ANNUAL CHARGES	43.60	43.60	43.60	43.60	10.90

Non-Microwave Assets

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Central Portion					
Annual Capital Recovery Charges – Loan	115.78	117.57	119.39	119.39	119.39
Annual Capital Recovery Charges – Total	115.78	117.57	119.39	119.39	119.39
O&M	315.65	308.16	255.42	169.27	184.48
Interest on Working Capital	18.20	17.86	15.26	10.96	11.72
TOTAL ANNUAL CHARGES	449.64	443.60	390.08	299.62	315.59
States' Portion					
Annual Capital Recovery Charges – Loan	81.89	81.89	81.89	81.89	81.89
Annual Capital Recovery Charges – Total	81.89	81.89	81.89	81.89	81.89
O&M	0.00	0.00	0.00	0.00	0.00
Interest on Working Capital	1.71	1.71	1.71	1.71	1.71
TOTAL ANNUAL CHARGES	83.60	83.60	83.60	83.60	83.60

Sharing of fees and charges

55. 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.”

56. Accordingly, the fees and charges for the Central portion shall be shared by all concerned in accordance with Para 40 of the order dated 8.12.2011 read with Regulation 22 (1) of Fees and Charges of Regional Load Despatch Centre and other related matters Regulations, 2009. The Regulation 22 (1) has been reproduced hereunder:-

"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"

57. NTPC has submitted that the charges for the State sector portion may be shared only by state utilities in proportion to the capital cost incurred for the respective state and not all the respondents as proposed.

58. The fees and charges for the States' portion of the Scheme shall be shared by the States in proportion to capital cost incurred for SLDC portion for the respective State.

59. 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 2009 Tariff Regulations.

Filing fee

60. The petitioner has sought reimbursement of fee paid by it for filing the petition. In accordance with the Commission's order dated 11.1.2010 in Petition No. 109/2009, the petitioner shall be entitled to recover the filing fee directly from the beneficiaries on *pro-rata* basis.

Recovery of license fee

61. NTPC has submitted that license fee do not pertain to the ULDC scheme and are for the core transmission business of the petitioner.

62. The petitioner has sought recovery of the license fee. The petitioner shall be entitled for reimbursement of licence fee in accordance with Regulation 42A (1)(b) of the 2009 Tariff Regulations.

Service tax

63. 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. We consider petitioner's prayer pre-mature and accordingly this prayer is rejected.

Foreign Exchange Rate Variation

64. The petitioner has prayed that it be allowed to recover the FERV on the foreign currency loan deployed, directly from the beneficiaries on actual basis, without making application to the Commission. The petitioner shall be entitled to recovery of FERV, if applicable, in accordance with Regulation 40 of the 2009 Tariff Regulations.

65. With the above, the petition stands disposed of.

sd/-

(M. Deena Dayalan)
Member

sd/-

(V S Verma)
Member

ANNEXURE

Microwave: Central Portion - Charges (2009-14)

Microwave: State Portion - Charges (2009-14)

(₹ in lakh)

(₹ in lakh)

Particulars	On Capital expenditure as on 1.4.2009	Additional Capital Expenditure					On Capital expenditure as on 1.4.2009	Additional Capital Expenditure				
		2009-10	2010-11	2011-12	2012-13	2013-14		2009-10	2010-11	2011-12	2012-13	2013-14
Gross Capital Cost	736.94						1805.87					
Gross Deemed Loan	76.43						185.43					
Grant in Aid	660.51						1620.44					
O/S Capital Cost	721.24						1767.00					
O/S Deemed Loan	60.73						146.57					
Years (Capital to be recovered up to 31.06.2013)	4.25						4.25					
Months	51.00						51.00					
Weighted Average Rate of Interest p.a.	10.2800%						10.2800%					
Weighted Average Rate of Interest p.m.	0.8567%						0.8567%					
Monthly Recovery Factors -Loan	0.02428						0.02428					
Monthly Capital Recovery Charge - Loan	1.47						3.56					
Annual Capital Recovery Charge - Loan	17.70						42.71					
Annual Capital Recovery Charge - Loan		17.70	17.70	17.70	17.70	17.70		42.71	42.71	42.71	42.71	42.71
O&M Expenses		0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00
Interest on Working Capital [†]		0.37	0.37	0.37	0.37	0.37		0.89	0.89	0.89	0.89	0.89
Total Annual Fee & Charges		18.07	18.07	18.07	18.07	18.07		43.60	43.60	43.60	43.60	43.60

Interest on Working Capital[†]

Particular	2009-10	2010-11	2011-12	2012-13	2013-14	2009-10	2010-11	2011-12	2012-13	2013-14
Maintenance Spares	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
O&M Expenses (1 Month)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Receivables	3.01	3.01	3.01	3.01	3.01	7.27	7.27	7.27	7.27	7.27
Total	3.01	3.01	3.01	3.01	3.01	7.27	7.27	7.27	7.27	7.27
Rate of Interest on Working Capital	12.25%	12.25%	12.25%	12.25%	12.25%	12.25%	12.25%	12.25%	12.25%	12.25%
Interest on Working Capital	0.37	0.37	0.37	0.37	0.37	0.89	0.89	0.89	0.89	0.89

Total Fee & Charges (2009-14)

Microwave: Central Portion - Charges

Microwave: State Portion - Charges

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14 (Pro-rata)	2009-10	2010-11	2011-12	2012-13	2013-14 (Pro-rata)
Annual Capital Recovery Charge - Loan	17.70	17.70	17.70	17.70	4.42	42.71	42.71	42.71	42.71	10.68
Annual Capital Recovery Charge - Total	17.70	17.70	17.70	17.70	4.42	42.71	42.71	42.71	42.71	10.68
O&M Expenses (As per page no 118 &120 of the petition)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Interest on Working Capital[†]	0.37	0.37	0.37	0.37	0.09	0.89	0.89	0.89	0.89	0.22
Total Tariff	18.07	18.07	18.07	18.07	4.52	43.60	43.60	43.60	43.60	10.90

ANNEXURE

Non-Microwave: Central Portion - Charges (2009-14)

Non-Microwave: State Portion - Charges (2009-14)

(₹ in lakh)

(₹ in lakh)

Particulars	On Capital expenditure as on 1.4.2009	Additional Capital Expenditure					On Capital expenditure as on 1.4.2009	Additional Capital Expenditure				
		2009-10	2010-11	2011-12	2012-13	2013-14		2009-10	2010-11	2011-12	2012-13	2013-14
Gross Capital Cost	8409.62						6039.37					
Gross Deemed Loan	872.22						620.13					
Grant in Aid	7537.40						5419.24					
O/S Capital Cost	8230.44	9.98	9.36	0.00	0.00	0.00	5909.40	0.00	0.00	0.00	0.00	0.00
O/S Deemed Loan	693.04	9.98	9.36	0.00	0.00	0.00	490.16	0.00	0.00	0.00	0.00	0.00
Years	9.33	8.33	7.33	6.33	5.33	4.33	9.33	8.33333	7.33333	6.33333	5.33333	4.33333
Months	112.00	100.00	88.00	76.00	64.00	52.00	112.00	100.00	88.00	76.00	64.00	52.00
Weighted Average Rate of Interest p.a.	10.2800%	10.2800%	10.2800%	10.2800%	10.2800%	10.2800%	10.2800%	10.2800%	10.2800%	10.2800%	10.2800%	10.2800%
Weighted Average Rate of Interest p.m.	0.8567%	0.8567%	0.8567%	0.8567%	0.8567%	0.8567%	0.8567%	0.8567%	0.8567%	0.8567%	0.8567%	0.8567%
Monthly Recovery Factors -Loan	0.01392						0.01392					
		0.01493	0.01623	0.01796	0.02036	0.02391	0.01392	0.01493	0.01623	0.01796	0.02036	0.02391
Monthly Capital Recovery Charge - Loan	9.65	0.15	0.15	0.00	0.00	0.00	6.82	0.00	0.00	0.00	0.00	0.00
Annual Capital Recovery Charge - Loan	115.78	1.79	1.82	0.00	0.00	0.00	81.89	0.00	0.00	0.00	0.00	0.00

Total Fee & Charges (2009-14)

Non-Microwave: Central Portion - Charges

Non-Microwave: State Portion - Charges

Particulars		2009-10	2010-11	2011-12	2012-13	2013-14		2009-10	2010-11	2011-12	2012-13	2013-14
Annual Capital Recovery Charge - Loan		115.78	117.57	119.39	119.39	119.39		81.89	81.89	81.89	81.89	81.89
Annual Capital Recovery Charge - Total		115.78	117.57	119.39	119.39	119.39		81.89	81.89	81.89	81.89	81.89
O&M Expenses		315.65	308.16	255.42	169.27	184.48		0.00	0.00	0.00	0.00	0.00
Interest on Working Capital [†]		18.20	17.86	15.26	10.96	11.72		1.71	1.71	1.71	1.71	1.71
Total Tariff		449.64	443.60	390.08	299.62	315.59		83.60	83.60	83.60	83.60	83.60

Interest on Working Capital[†]

Particular		2009-10	2010-11	2011-12	2012-13	2013-14		2009-10	2010-11	2011-12	2012-13	2013-14
Maintenance Spares		47.35	46.22	38.31	25.39	27.67		0.00	0.00	0.00	0.00	0.00
O&M Expenses (1 Month)		26.30	25.68	21.29	14.11	15.37		0.00	0.00	0.00	0.00	0.00



Receivables		74.94	73.93	65.01	49.94	52.60		13.93	13.93	13.93	13.93	13.93
Total		148.59	145.84	124.61	89.43	95.64		13.93	13.93	13.93	13.93	13.93
Rate of Interest on Working Capital		12.25%	12.25%	12.25%	12.25%	12.25%		12.25%	12.25%	12.25%	12.25%	12.25%
Interest on Working Capital		18.20	17.86	15.26	10.96	11.72		1.71	1.71	1.71	1.71	1.71

