## Central Electricity Regulatory Commission New Delhi

#### Petition No. 57/TT/2012

Coram: Shri V.S. Verma, Member Shri M. Deena Dayalan, Member

Date of Hearing: 11.04.2013 Date of Order: 14.11.2013

#### In the matter of

Misc. 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 Western 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

- NTPC Ltd
   NTPC Bhawan
   Core-7, Scope Complex
   Institutional Area, Lodi road
   New Delhi-110 003
- Nuclear Power Corporation of India Ltd Nabhikya Bhawan Anu-shakti Nagar Mumbai-400 094\
- Narmada Control Authority
   Narmada Sadan, Sector-B, Scheme No. 74,
   Vijaynagar, Indore
   Madhya Pradesh-452 010
- Jindal Power Ltd OP Jindal STPS, PO: Tamnar, Gjarghoda Tehsil, District Raigarh, Chhattisgarh-496 107



# Chhattisgarh State Power Distribution Company Ltd (CSPDCL) P.O. Sundernagar

Dangania

Raipur-492 013

#### 6. Lanco Power Ltd

Plot No. 397, Phase-III, Udyog Vihar

Gurgaon

Haryana-122 016

## 7. Gujarat Urja Vikas Nigam Ltd (GUVNL)

Sardar Patel Vidyut Bhawan

Race Course

Vadodara-390 007

#### 8. Maharashtra State Electricity Distribution Company Ltd (MSEDCL)

Prakashgad, 5th floor

Bandra East

Mumbai-400 051

#### 9. MP Power Trading Company Ltd

Shakti Bhawan

Vidyut Nagar, Rampur

Jabalpur-482 008

#### 10. Goa Electricity Department

Government of Goa,

3rd floor, Vidyut Bhawan

Panjim-403 001

#### 11. Electricity Department, Union Territory of Daman and Diu

Saachivalaya,

Moti Daman,

Daman- 396 230

#### 12. Electricity Department, Union Territory of Dadra and Nagar Haveli

Secretariat, electricity Department,

66 kV Amli Road

Silvassa-396 230

## 13. Western Region Transmission (Maharashtra) Pvt. Ltd

12th floor, Building No. 10-B, DLF, Cyber city

Gurgaon

Haryana-122 022

# 14. Western Region Transmission (Gujarat) Pvt. Ltd

12th floor, Building No. 10-B, DLF, Cyber city,

Gurgaon

Haryana-122 022

....Respondents



Representatives of the Petitioner : Shri Upendra Pande, PGCIL

Shri S. S. Raju, PGCIL Shri M.M. Mondal, PGCIL

Representatives of the Respondents : Shri Anil Rawal, RPTL

Shri L.N. Mishra, WRTM/TG Shri M.A.K.P. Singh, NCA Shri Manoj Dubey, MPPMCL

#### **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;
- 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 the Commission's Order dtd. 08.12.2011 in Petition no. 68/2010, from the long term customers (DIC Designated ISTS customer);
- 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; and
- i) Pass such other relief as Commission deems fit and appropriate under the circumstances of the case and in the interest of justice."



- 2. The petitioner, Power Grid Corporation of India Ltd, who was earlier operating the Regional Load Despatch Centres (RLDCs) devised a scheme called the Unified Load Despatch and Communication Scheme (ULDC 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.
- 3. 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 system 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 of 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 Western Region presently retained by the petitioner.
- 4. The Scheme in Western Region was declared under commercial operation on 1.2.2006.
- 5. The Commission, vide order dated 7.11.2008 in Petition No.11/2007, has approved the fees and charges for the assets in the Western Region for the period 2004-09 for the expenditure incurred from the date of commercial operation to

31.3.2006. Subsequently, the Commission, vide order dated 15.3.2011 in Petition No.51/2010, approved the revised charges for the period 2004-09 for the expenditure incurred from 1.4.2006 to 31.3.2009.

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

(₹ in lakh)

Year	Central Portion	States' Portion
2009-10	1265.81	821.96
2010-11	1165.52	821.96
2011-12	1178.44	821.96
2012-13	1192.10	821.96
2013-14	1206.55	821.96

- 7. The replies to the petition have been filed by NTPC Ltd and Maharashtra State Electricity Distribution Company Ltd (MSEDCL).
- 8. Before we examine the petitioner's entitlement to fees and charges, it is considered appropriate to take notice of certain relevant facts.
- 9. The petitioner had filed Petition No 68/2010 wherein it raised certain issues in connection with the determination of fees and charges for the communication system (Central Portion) and the States' portion of the Scheme 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 had specified the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (the tariff regulations) applicable for the period 1.4.2009 to 31.3.2014. The tariff regulations do not specify the terms

and conditions for determination of charges for the assets covered under the Scheme owned by the petitioner. Therefore, the petitioner prayed for fixation of the norms for recovery of cost for communication system (Central portion) and the States' portion. The Commission in the absence of any regulations, decided to continue with the levelised tariff of the existing assets as followed while determining the charges for the tariff period 2004-09 while approving the fees and charges in its order dated 15.3.2011 in Petition No 51/2010. The relevant part of the order dated 8.12.2011 is extracted hereunder:

"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."

- 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 in Petition No. 68/2010 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 at the time of 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 tariff petitions. 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 tariff of the communication system shall be on similar lines as the system operation charges for the RLDCs.
- 15. Another aspect which deserves attention at this stage itself is regarding recovery of capital through loan and equity. The Commission in its order dated 15.3.2011 in Petition No 51/2010 had approved recovery of loan and equity based on the weighted average rate of interest and Return on Equity (RoE) using the following Capital Recovery Factor (CRF) for loan and equity for 15 years as under:

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 by 167<sup>th</sup> month and entire loan would be paid back by 175th month, instead of 180<sup>th</sup> month, the useful life of the assets considered under the Scheme. HVPNL further pointed out that by continuing recovery up to 180<sup>th</sup> 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 installments 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 installments by reducing number of installments 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 respect of all regions.

- 19. Recovery of loan and equity has been re-worked by adopting monthly recovery factor method as directed by the Appellate Tribunal. Charges for the year 2005-06 have been recalculated considering the pro-rata period during that year, which was earlier considered on annualized basis in order dated 15.3.2011 in Petition No.51/2010. The monthly recovery charges have been worked out for 2004-09 and 2009-14 periods and onwards. It is noticed that for Central portion, excess loan recovered by the petitioner during 2004-09 was ₹677.25 lakh and excess equity recovered during the same period was ₹344.93 lakh. Similarly, for State portion, excess loan recovered during 2004-09 was ₹427.44 lakh and excess equity recovered was ₹218.26 lakh. The excess amounts recovered by the petitioner shall be adjusted in future installments, beyond 2009-14 periods, by reducing the number of installments.
- 20. We proceed to examine the petitioner's proposal for approval of fees and charges based on the above principles.

#### **Capital Cost**

21. The Commission vide order dated 15.3.2011 in Petition No 51/2010 approved the fees and charges for the period up to 31.3.2009 based on the capital expenditure of ₹10377.73 lakh (Central portion) and ₹6959.82 lakh (States' portion). The tariff in the present petition has been claimed on the basis of capital cost of ₹7978.83 lakh

(Central portion) and ₹6959.82 lakh (States' portion) (Total ₹14938.65 lakh) for the assets retained by the petitioner.

22. From the date of commercial operation (1.2.2006) and up to 31.3.2009, the capital cost has been partially recovered by the petitioner through recovery of loan and equity. In view of the direction of the Appellate Tribunal, by applying the monthly recovery concept, the loan and equity recovered up to 31.3.2009 on the pre-transfer capital cost work out as under:-

Capital Cost Recovered upto 31.3.2009

(₹ in lakh)

	Central Portion	States' Portion	Total
Loan	1090.22	723.15	1813.37
Equity	197.90	132.34	330.24
Total	1288.12	855.49	2143.61

23. As already noticed, a part of the Central portion assets created under the Scheme were transferred to POSOCO whereas entire States' portion assets have been retained by the petitioner. Therefore, *pro rata* capital cost recovered for the assets retained by the petitioner as on 1.4.2009 has been worked out against the total capital cost recovered up to 31.3.2009 in the ratio of gross capital cost of the assets retained as on 1.4.2009 to admitted gross capital cost as on 31.3.2009 as per the order dated 15.3.2011 in Petition No 51/2010. Finally, the retained net capital cost as on 1.4.2009 has been worked out as the difference of the total capital cost recovered upto 31.3.2009 and *pro rata* capital cost recovered for the assets retained by the petitioner as on 1.4.2009. When calculated in this manner, the retained capital cost as on 1.4.2009 works out as follows, which has been considered for determination of fee and charges in the present petition:-

# Retained Net Capital Cost as on 1.4.2009

(₹ in lakh)

	Central Portion	States' Portion	Total
Loan	5167.77	4506.14	9673.91
Equity	1820.96	1598.19	3419.15
Total	6988.73	6104.33	13093.06

## **Additional Capital Expenditure**

24. The petitioner has not claimed any additional capital expenditure for the purpose determination of fee and charges.

## **Debt - Equity Ratio**

25. The details of debt-equity ratio considered for computation of fees and charges are as under:-

(₹ in lakh)

	Central Portion	Central Portion States' Portion	
Notional Loan	5167.77	4506.14	9673.91
Notional Equity	1820.96	1598.19	3419.15
Total	6988.73	6104.33	13093.06
Debt – equity Ratio	0		
Debt	73.94%	73.82%	73.89%
Equity	26.06%	26.18%	26.11%
Total	100.00%	100.00%	100.00%

#### Rates for Recovery of Loan and Equity

26. The weighted average rate of interest based on the details of loan furnished by the petitioner works out to be 4.2305% as shown overleaf. This rate after converting to monthly rate has been considered for working out the CRF corresponding to loan.

Loan	Net Loan outstanding as on 31.3.2009 (₹ in lakh)	Rate of interest as on 1.4.2009	Interest (₹ in lakh)	Weighted Average Rate of Interest
Bond-XIII -	322.93	8.63%	27.87	
Option-I				
Bond-XV	587.50	6.68%	39.25	
IBRD-I	385.18	8.34%	32.12	
IBRD-II	6026.00	3.64%	219.35	
IBRD-II	677.28	3.64%	24.65	
IBRD-II	819.90	3.64%	29.84	
Total Loan	8818.79		373.08	4.2305%

27. The Commission in its order dated 15.3.2011 in Petition No 51/2010 approved the fees and charges for the period up to 31.3.2009 by considering the 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, fee and charges of the assets transferred to POSOCO were allowed as per RLDC Regulations 2009, the assets retained with the CTU are neither covered under the RLDC Regulations nor under the 2009 Tariff Regulations. The tariff regulations applicable for the period 2009-14 provide for recovery of RoE (pre-tax), calculated by grossing up the base rate (normally @15.5% per annum) with the Corporate Tax/MAT rate for the year 2008-09 and is to be trued up subsequently with reference to the actual tax rate applicable under the provisions of the relevant Finance Act each year during the tariff period. As already mentioned earlier in this order, PGCIL has filed a miscellaneous petition (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/ to be installed by the petitioner after formation of POSOCO for the period 2009-14 block. Vide order dated 8.12.2011 in Petition No. 68/2010, it was decided to continue with the levelised tariff for the

existing assets in the absence of any provision in 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.

# **Capital Recovery Factor (CRF)**

28. Based on the recovery rates loan and equity as per the above discussion, CRF for Central Portion and States' Portion have been arrived as under:-

Monthly Recovery Factor for loan	0.008964
Monthly Recovery Factor for equity	0.015407

#### **Capital Recovery Charges**

29. The Capital Recovery Charges on the capital cost as on 1.4.2009 arrived at are as under:-

(₹ in lakh)

	Central Portion	States' Portion
Monthly Capital Recovery charge for loan	46.3217	40.3912
Monthly Capital Recovery charge for equity	28.0555	24.6232

## **Operation and Maintenance Expenses**

- 30. The Commission in the 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....."
- 31. The petitioner vide affidavit dated 29.1.2013 has submitted the detailed break-up of O&M expenditure for the period 2009-10 to 2010-11. The details submitted are given below:-

(₹ in lakh)

Description	Ye	ar	TOTAL
Description	2009-10	2010-11	
Employee Cost	131.60	31.99	163.59
Repairs & Maintenance	112.54	106.70	219.24
Power Charges	0.00	0.03	0.03
Training & Recruitment	0.08	0.00	0.08
Communication Expenses	0.37	0.00	0.37
Travelling Expenses	2.59	1.52	4.11
Printing & Stationery	0.00	0.00	0.00
Rent	0.16	0.00	0.16
Misc. Expenses	0.43	0.00	0.43
Insurance	0.00	0.04	0.04
Others: Security, Hiring of	2.29	0.55	2.84
Vehicles, EDP Hire			
Charges, etc	0.00	0.00	0.00
Rates & Taxes	0.00	0.00	0.00
Total	250.06	140.83	390.89
0	22.22	40.00	04.50
Corporate Office Expenses Allocation	32.68	48.86	81.50
RHQ Expenses Allocation	13.95	8.84	22.79
Loss on Disposal/write off	0.00	0.30	0.30
Self Insurance Reserve @	7.67	7.59	15.26
0.1% on Gross Block		. 100	
Township expenses from	0.00	0.00	0.00
WRLDC			
Grand Total	304.36	206.42	510.78



32. The petitioner has further submitted the estimated break-up of O&M expenditure for the years 2012-13 and 2013-14 as under:-

(₹ in lakh)

Description	2011-12	2012-13	2013-14
Description	(Actual)	(Estimated)	(Estimated)
Employee Cost	24.68	27.48	31.40
Repairs & Maintenance	132.83	139.00	150.56
Power Charges	0.00	0.00	0.00
Water Charges	0.00	0.00	0.00
Training & Recruitment	0.00	0.00	0.00
Legal Expenses	0.00	0.00	0.00
Professional Charges	0.00	0.00	0.00
Communication Expenses	0.00	0.00	0.00
Travelling Expenses	0.79	0.60	0.95
Sale of Tenders	0.00	2.83	2.50
Out of Pocket Exp. –Auditors	0.00	0.00	0.00
Printing & Stationery	0.00	0.00	0.00
EDP Hire & other charges	0.00	0.00	0.00
Entertainment Exp.	0.00	0.00	0.00
Rent	0.00	0.00	0.00
Misc. Expenses	0.00	0.00	0.00
Security Exp.	0.00	0.00	0.00
Hiring of Vehicles	0.00	0.00	0.00
Insurance	0.00	0.00	0.00
Rates & Taxes	0.00	3.37	2.87
Transit Accommodation Exp.	0.00	0.00	0.00
Income from Transit	0.00	0.00	0.00
Accommodation			
Others	0.40	2.13	1.85
Other Expenses-Telecom	13.46	90.68	96.00
Sub Total	172.16	266.09	286.15
Corporate Exp. allocated to	13.75	14.25	15.15
Revenue			
Exp. allocated to Revenue	13.93	13.95	14.50
Loss on Disposal Fixed Assets	0.91	1.40	1.60
Sub total	28.59	2.960	31.25
Self Insurance provided in WRHQ	7.48	6.95	7.26
Grand Total	208.23	302.64	324.66

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

- 34. The Commission in its order dated 8.12.2011 in Petition No. 68/2010, the relevant portion of which has been extracted above, has already decided that the petitioner would be entitled to recovery of O&M expenses actually incurred. Therefore, actual O&M expenses, subject to prudence check, are being allowed. The year-wise details of O&M claimed and allowed are discussed hereunder:-
  - (a) 2009-10: The petitioner has claimed O&M expenditure of ₹304.36 lakh, against which an amount of ₹303.93 lakh has been allowed. An amount of ₹0.43 lakh which has been claimed as Misc Expenses has not been considered as the details thereof have not been provided by the petitioner.
  - **(b) 2010-11:** The petitioner has claimed O&M expenditure of ₹206.42 lakh and the same has been allowed.
  - (c) 2011-12: The petitioner has claimed O&M expenditure of ₹ 208.23 lakh, out of which the sum of ₹193.46 lakh has been allowed. A total amount of ₹14.77 lakh has been disallowed as the details of expenses under the heads "Others" (₹0.40 lakh), "Other expenses Telecom" (₹13.46 lakh) and "Loss on disposal of fixed assets" (₹0.91 lakh) claimed by the petitioner have not been furnished.
  - (d) 2012-13: The petitioner has claimed estimated O&M expenditure of ₹302.64 lakh, against which ₹208.43 lakh has been allowed. A total amount of ₹94.21 lakh has not been allowed as the details of expenses under the heads "Others" (₹2.13 lakh), "Other expenses-Telecom (₹90.68 lakh) and "Loss on

disposal of fixed assets" (₹1.40 lakh) claimed by the petitioner have not been provided.

- (e) 2013-14: The petitioner has claimed estimated O&M expenditure of ₹324.66 lakh. Out of this, the amount of ₹225.21 lakh has been allowed. An amount of ₹99.45 lakh has not been allowed as the details of expenses under the heads "Others" (₹1.85 lakh), "Other expenses-Telecom" (₹96 Lakh) and "Loss on disposal of fixed assets" (₹1.60 lakh) claimed by the petitioner have not been given.
- 35. The summary of O&M expenses claimed and those allowed is given below:-

(₹ in lakh) Year **O&M Expenses Claimed** O&M Expenses Allowed 2009-10 304.36 303.93 2010-11 206.42 206.42 2011-12 208.23 193.46 2012-13 208.43 302.64 2013-14 324.66 225.21

36. O&M expenses for the years 2012-13 and 2013-14 are subject to adjustment based on actual expenses at the time of truing up.

## **Interest on Working Capital**

- 37. 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 15.3.2011 in Petition No 51/2010. The petitioner has claimed

maintenance spares in accordance with the said order dated 15.3.2011. The maintenance spares @1% of the historical cost escalated @6% per annum from the date of commercial operation is not proper as these are based on the regulations for determination of tariff applicable for the period 2004-09. 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 as given below:-

(₹ In lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Maintenance Spares @15% of O&M Expenses (Microwave	45.589	30.963	29.019	31.264	33.781
& Non-Microwave)					

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. The maintenance spares have been calculated for Central portion on the basis of the claim made by the petitioner for O&M expenses.

(ii) O & M Expenses: One month's O&M expenses allowed under Paragraph No.35 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.
- 38. The interest on working capital has been allowed in accordance with the above norms. The calculations in support of the interest on working capital allowed are given below:-

(₹ in lakh)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14	
Central Portion						
Maintenance	45.59	30.96	29.02	31.26	33.78	
Spares						
O&M Expenses	25.33	17.20	16.12	17.37	18.77	
Receivables	205.04	187.98	185.71	188.33	191.27	
Total	275.96	236.14	230.85	236.96	243.82	
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%	
Interest	33.81	28.93	28.28	29.03	29.87	
		States' Porti	on			
Maintenance	0.00	0.00	0.00	0.00	0.00	
Spares						
O&M Expenses	0.00	0.00	0.00	0.00	0.00	
Receivables	132.74	132.74	132.74	132.74	132.74	
Total	132.74	132.74	132.74	132.74	132.74	
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%	
Interest	16.26	16.26	16.26	16.26	16.26	

## **Annual Fees and Charges**

39. The annual fees and charges allowed for the assets of the Scheme presently administered by the petitioner are incorporated in Annexure to this order and are summarized overleaf:-

(₹ in lakh)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14				
Central Portion									
O&M 303.93 206.42 193.46 208.43 225.21									
Interest on Working Capital	33.81	28.93	28.28	29.03	29.87				
TOTAL ANNUAL CHARGES	1230.26	1127.87	1114.27	1129.98	1147.60				
	States	s' Portion							
O&M	0.00	0.00	0.00	0.00	0.00				
Interest on Working Capital	16.26	16.26	16.26	16.26	16.26				
TOTAL ANNUAL CHARGES	796.43	796.43	796.43	796.43	796.43				

40. A comparative statement of fees and charges as claimed by the petitioner and those allowed is given below:-

(₹ in lakh)

			(* 111 161111)
Period	Claimed	Allowed	Difference
Central Portion			
2009-10	1265.81	1230.26	(35.55)
2010-11	1165.52	1127.87	(37.65)
2011-12	1178.44	1114.27	(64.17)
2012-13	1192.10	1129.98	(62.12)
2013-14	1206.55	1147.60	(58.95)
States' Portion			
2009-10	821.96	796.43	(25.53)
2010-11	821.96	796.43	(25.53)
2011-12	821.96	796.43	(25.53)
2012-13	821.96	796.43	(25.53)
2013-14	821.96	796.43	(25.53)

# **Sharing of Fees and Charges**

41. 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."

- 42. Accordingly, the fees and charges for the Central portion shall be shared by all concerned in accordance with Paragraph No.40 of the order dated 8.12.2011 in Petition No. 68/2010. The fees and charges for the States' portion of the Scheme shall be shared by the States of Madhya Pradesh, Gujarat and Goa, that is, Madhya Power Trading Company Limited, Gujarat Urja Vikas Nigam Limited and Electricity Department, State of Goa, in proportion to capital cost incurred in respect of SLDC portion for the respective State.
- 43. 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.

#### **Recovery of License Fee**

44. The petitioner has sought recovery of the license fee, without specifying the amount. NTPC and MSEDCL have opposed any direction for recovery of licence fee. The petitioner shall be entitled for licence fee in accordance with Regulation 42A of the 2009 Tariff Regulations.

## **Foreign Exchange Rate Variation**

- 45. 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 in accordance with Regulation 40 of the 2009 Tariff Regulations.
- 46. With the above, the petition stands disposed of.

sd/-(M Deena Dayalan) Member sd/-(V.S. Verma) Member

#### **ANNEXURE**

## **Central Portion- Annual Capital Recovery Charges (2009-14)**

(₹ in lakh) Particular / Year 2009-10 2010-11 2011-12 2012-13 2013-14 **Gross Capital Cost** (As on 1.4.2009) 7978.83 Net Capital Cost® (As on 1.4.2009) 6988.73 Net Notional Ioan (1) 5167.77 Net Equity (2) 1820.96 No. of years 11.8333 No. of Months 142.00 Rate of Interest p.a. (A) 4.2305% Rate of Interest p.m.  $\{(i)=(A)/12\}$ 0.35254% Monthly Recovery factor <u>i x (1+i)</u>n - Loan (B) 0.008964 (1+i)<sup>n</sup> -1 **Monthly Capital** Recovery Charges -**Loan**  $\{(C)=(1)x(B)\}$ 46.3217 **Annual Capital** Recovery Charges -Loan  $\{(D)=(C)*12\}$ 555.86 Rate of Return on Equity 15.500% p.a. (E) Rate of Return on Equity 1.29166% p.m.  $\{(i)=(E)/12\}$ Monthly Recovery factor i x (1+i)<sup>n</sup> 0.015407 - Equity (F) (1+i)n -1 **Monthly Capital** Recovery Charges -**Equity**  $\{(G)=(F)^*(2)\}$ 28.0555 **Annual Capital** Recovery Charges -**Equity**  $\{(H)=(G)*12\}$ 336.67 **Monthly Capital** Recovery Charges -Total  $\{(I)=(C)+(G)\}$ 74.38 **Annual Capital** Recovery Charges -Total  $\{(J)=(D)+(H)\}$ 892.53 892.53 892.53 892.53 892.53 206.42 208.43 225.21 O&M 303.93 193.46 **Interest on Working** Capital\* 28.93 29.03 33.81 28.28 29.87 **TOTAL ANNUAL** 1230.26 1127.87 1114.27 1129.98 1147.60 **CHARGES** 



<sup>@</sup> Difference of the total capital cost recovered upto 1.3.2009 and pro-rata capital cost recovered for the assets retained by the petitioner for the same period. # As indicated in Paragraph No. 38 of the order.

# **State Portion- Annual Capital Recovery Charges (2009-14)**

(₹ in lakh) Particular / Year 2010-11 2009-10 2011-12 2012-13 2013-14 **Gross Capital Cost** (As on 1.4.2009) 6959.82 Net Capital Cost® (As on 1.4.2009) 6104.33 Net Notional Ioan (1) 4506.14 Net Equity (2) 1598.19 No. of years 11.8333333 No. of Months 142.00 Rate of Interest p.a. (A) 4.2305% Rate of Interest p.m.  $\{(i)=(A)/12\}$ 0.35254% Monthly Recovery factor i x (1+i)<sup>n</sup> – Loan (B) (1+i)<sup>n</sup> -1 0.008964 Monthly Capital Recovery Charges -**Loan**  $\{(C)=(1)x(B)\}$ 40.39 Annual Capital Recovery Charges -**Loan**  $\{(D)=(C)*12\}$ 484.69 Rate of Return on Equity 15.500% p.a. (E) Rate of Return on Equity 1.29166% p.m.  $\{(i)=(E)/12\}$ Monthly Recovery factor i x (1+i)<sup>n</sup> 0.015407 Equity (F) (1+i)<sup>n</sup> -1 Monthly Capital Recovery Charges -**Equity**  $\{(G)=(F)^*(2)\}$ 24.6232 **Annual Capital** 

295.48

65.01

780.17

0.00

16.26

796.43

780.17

0.00

16.26

796.43

780.17

0.00

16.26

796.43

780.17

0.00

16.26

796.43

780.17

0.00

16.26

796.43



Recovery Charges – Equity {(H)=(G)\*12}

Monthly Capital Recovery Charges – Total {(I)=(C)+(G)}

Annual Capital Recovery Charges – Total {(J)=(D)+(H)}

Interest on Working

TOTAL ANNUAL

**CHARGES** 

O&M

Capital#

<sup>@</sup> Difference of the total capital cost recovered upto 1.3.2009 and pro-rata capital cost recovered for the assets retained by the petitioner for the same period. # As indicated in Paragraph No. 38 of the order.