

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition No. 74/TT/2012**

**Coram:**

**Shri V.S. Verma, Member  
Shri M. Deena Dayalan, Member**

**Date of Hearing: 23.7.2013**

**Date of Order : 27.1.2014**

**In the matter of:**

Approval under sub-section (4) of Section 28 of Electricity Act, 2003 for determination of fees and charges for National Load Despatch Centre- NLDC (PGCIL portion) for the period 2009-14 block.

**And in the matter of**

Power Grid Corporation of India Limited  
Soudamini, Plot No 2, Sector 29  
Gurgaon - 122001

**.....Petitioner**

**Vs**

1. National Thermal Power Corporation Ltd.  
NTPC Bhawan, Core-7, Scope Complex,  
7, Institutional Area, Lodhi Road,  
New Delhi-110 003.
2. Singrauli Super Thermal Power Station,  
Shakti Nagar  
UP-231 222.
3. Rihand Super Thermal Power Station-I  
Rihand Nagar  
UP-231 223.
4. Rihand Super Thermal Power Station-II  
Rihand Nagar  
UP-231 223.
5. Dadri National Capital Power Project  
Dadri Dhaulana Road  
Distt. Gautam Buddh Nagar  
UP-201 008.

6. Firoz Gandhi Unchahar Thermal Power Project-I  
Unchahar, Distt. Raibareilly  
UP
7. Firoz Gandhi Unchahar Thermal Power Project-II  
Unchahar, Distt. Raibareilly  
UP
8. Firoz Gandhi Unchahar Thermal Power Project-III  
Unchahar, Distt. Raibareilly  
UP
9. Anta Gas Power Project  
Distt. Baran  
Rajasthan-325 209.
10. Auraiya Gas Power Project  
Dibiyapur  
Distt. Etawah  
UP-206 244.
11. Dadri Gas Power Project  
Dhaulana Road  
Distt. Gautam Buddh Nagar  
UP-201 008.
12. Farakka Super Thermal Power Plant  
NTPC  
Farakka
13. Kahalgaon Super Thermal Power Plant-I  
NTPC  
Kahalgaon
14. Kahalgaon Super Thermal Power Plant-II  
NTPC  
Kahalgaon
15. Talcher Super Thermal Power Plant Stage-II  
NTPC  
Talcher
16. Ramagundam STPS  
RSTPS, Jyothi Nagar  
Distt. Karim Nagar  
AP-505 215.
17. NTPC, Talcher STPS  
Kaniha, P.O. Deepshikha  
Distt. Angul  
Orissa-759 147.

18. Simhadri Super Thermal Power Project  
National Thermal Power Corporation Ltd.  
Post: NTPC Simhadri-531 020.
19. Korba STPS Stage 1 and 2  
PO Vikas Bhawan  
Jamnipalli, Korba Distt.  
Chhattisgarh-495 450.
20. Vindhyachal STPS, Stage-I  
PO: Vindhyanagar  
Sidhi District  
Madhya Pradesh-486 885.
21. Vindhyachal STPS, Stage-2  
PO: Vindhyanagar  
Sidhi District  
Madhya Pradesh-486 885.
22. Vindhyachal STPS, Stage-3  
PO: Vindhyanagar  
Sidhi District  
Madhya Pradesh-486 885.
23. Kawas Gas Power Station  
PO: Aditya Nagar  
Surat District  
Gujarat-394 516.
24. Gandhar Gas Power Station  
PO: NTPC Township  
Bharuch Distt.  
Gujarat-392 215.
25. Sipat STPS  
Sipal  
Chhattisgarh-495 558.
26. National Hydro Power Corporation Ltd.  
NHPC Office Complex  
Lodhi Road  
New Delhi-110 003.
27. Bairasiul Hydro Electric Project  
NHPC Ltd.  
Surangini, Distt. Chamba  
HP-176 317.
28. Salal Hydro Electric Project  
NHPC Ltd.

- Jyotipuram, Distt. Udhampur  
J&K-182 312.
29. Tanakpur Hydro Electric Project  
NHPC Ltd.  
Banbassa, Distt. Champawa  
Uttarakhand-262 310
30. Chamera-I Hydro Electric Project  
NHPC Ltd.  
Khairi, Distt. Chamba  
HP-176 310
31. Uri Hydro Electric Project  
NHPC Ltd.  
Mohra, Distt. Baramulla  
J&K-193 122.
32. Chamera-II Hydro Electric Project  
NHPC Ltd.  
Khairi, Distt. Chamba  
HP-176 310
33. Dhauliganga HEP  
NHPC Ltd.  
Tapovan, Dharchula, Pithograph  
Uttarakhand-262 545.
34. Dulhasti Hydro Electric Project  
NHPC Ltd.  
Chenab Nagar, Distt. Kishtwar  
J&K-182 206.
35. Sewa-II Power Station  
Mashke, P.O-Khari, Tahsil-Dalhausie  
Distt. Chamba  
HP-176 325.
36. Teesta Hydra  
Teesta-V Hydro  
Electric Project, NHPC  
Singtam, East Sikkim
37. Rangeet Hydro Electric Project  
NHPC  
PO Rangit Nagar, South Sikkim.
38. Loktak HEP  
NHPC Ltd.  
Vidyut Vihar, Komkeirap

- Manipur-795 124.
39. Satluj Jal Vidyut Nigam Ltd. (SJVN)  
Jhakri, Rampur, Distt. Shimla-172 201.
  40. THDC India Ltd.  
Bhagirath Puram, Tehri  
Uttarakhand-249 001.
  41. Nuclear Power Corporation of India Ltd. (NPCIL)  
Nabhkiya Bhawan  
Anu-Shakti Nagar  
Mumbai-400 094.
  42. Narora Atomic Power Station  
Narora, Distt. Bulandshahar  
UP-202 389.
  43. Rajasthan Atomic Power Station-B  
Anu Shakti Vihar  
Kota, Rajasthan-323 303
  44. Rajasthan Atomic Power Station-C  
Anu Shakti Vihar  
Kota, Rajasthan-323 303
  45. Madras Atomic Power Station  
Nuclear Power Corp. of India Ltd.  
Kalpakkam-603 102.
  46. Nuclear Power Corp. of India Ltd.  
Kaiga Generating Station  
P.O. Kaiga, Via Karwa  
Karnataka-581 400.
  47. Kudankulam Nuclear Power Project  
Nuclear Power Corp. of India Ltd.  
P.O. Kudankulam, Radhapuram Taluk  
Tirunelveli District  
Tamil Nadu-627 106.
  48. Nuclear Power Corp. of India Ltd.  
Kakrapara Atomic Power Station  
PO:Via Vyara, Surat Distt.  
Gujarat-395 651.
  49. Nuclear Power Corp. of India Ltd.  
Tarapur Atomic Power Station-1 and 2  
PO: TAPP, Thane District

- Maharashtra-401 504.
50. Nuclear Power Corpn. of India Ltd.  
Tarapur Atomic Power Station-3 and 4  
PO: TAPP, Thane District  
Maharashtra-401 504.
  51. Nuclear Power Corpn. of India Ltd.  
Vikram Sarabhai Bawan, 9-S-30  
Anushakti Nagar  
Mumbai-400 094.
  52. ADHPL  
Bhilwara Towers  
A-12, Sector-1  
NOIDA-201 301.
  53. Indira Gandhi Super Thermal Power Project  
Aravali Power Company Pvt. Ltd.  
PO-Jharli  
Dist-Jhajjar
  54. Jaypee Karcham Hydro Corporation Ltd. (JKHCL)  
Sect-128, NOIDA-201 304.
  55. Everest Power Pvt. Ltd.  
1<sup>st</sup> Floor, Hall-1, NBCC Tower  
Bhikaji Cama Place, New Delhi-110 066.
  56. Shree Cement Ltd.  
PO Box No. 33, Bangur Nagar  
Beawar-305 901.  
Distt: Ajmer
  57. Chandigarh (Electricity Department) UT Chadigarh,  
Sector-9 D, Chandigarh-160 019.
  58. Delhi Transo Ltd.,  
SLDC Building (Behind Jakir Hussain College),  
Tagore Hostel Lane, Minto Road,  
New Dehi-110 002.
  59. Haryana Vidyut Prasaran Nigam Ltd.,  
Room No.-213, Shakti Bhawan, Sector-6,  
Panchkula-134 109.
  60. Himachal Pradesh State Electricity Board,  
Totu, Shimla-171 011.

61. Power Development Department,  
Narwal Bala, Gladni-180 004.
62. PSTCL,  
SLDC Building, 220kV Sub Station, Ablowal,  
Patiala-147 001.
63. Vidyut Bhawan, Jyoti Nagar,  
Vidyut Marg, Jaipur-302 015.
64. U.P. Power Corporation Ltd.,  
11th Floor, Shakti Bhawan Extn.,  
14-Ashok Marg,  
Lucknow-226 001.
65. DRM Office, Northern Central Railway,  
Nawabyusuf Road,  
Allahabad.
66. Uttaranchal Power Corporation Ltd.,  
Kanwli Road, Urja Bhawan,  
Dehradun-248 001
67. Powerlinks Transmission Ltd.,  
10th Floor, DLF Tower-A,  
District Centre, Jasola,  
New Delhi-110 044.
68. Orissa Hydro Power Corporation Ltd.,  
Burla Power House,  
Dist. Sambalpur, Burla-768 017.
69. Mejia Thermal Power Station,  
DVC, PO  
MTPS, Dist. Bankura-722 183.
70. West Bengal State Electricity Distribution Co. Ltd.,  
Bidyut Bhawan, 8th Floor (A Block),  
Block DJ, Salt Lake City,  
Calcutta-700 091.
71. Bihar State Electricity Board  
Vidyut Bhawan, Bailey Road  
Patna-800 001.
72. Grid Corporation of Orissa Ltd.  
Vidyut Bhawan, Janpath  
Bhubaneshwar-751 007.
73. Power Department

Govt. of Sikkim  
Gangtok-727 102.

74. Jharkhand State Electricity Board  
Engineering Building  
HEC Township  
Dhurwa, Ranchi-834 004.
75. Damodar Valley Corporation  
DVC Tower, VIP Road  
Calcutta-700 054.
76. Northe-Eastern Electric Power Corporation Ltd. (NEEPCO)  
15, NBCC Tower, Bhikaji Cama Place  
New Delhi.
77. AGBPP Assam Gas Based Power Plant  
NEEPCO Ltd.  
Kathalguir, VIII. Bokuloni,  
Tinsukia, Assam-786 191.
78. AGTPP Agartala Gas Turbine Power Plant  
NEEPCO Ltd.  
Ramchandranagar, Agartala  
Tripura (West)-799 008.
79. Doyang HEP  
NEEPCO Ltd., Wokha  
Nagaland
80. Kopili HEP  
NEEPCO Ltd.  
Umrangsoo, N. C. Hills  
Assam
81. Kopili-2 HEP  
NEEPCO Ltd.  
Umrangsoo, N. C. Hills  
Assam
82. Khandong HEP  
NEEPCO Ltd.  
Umrangsoo, N. C. Hills  
Assam
83. Ranganadi HEP  
NEEPCO Ltd.  
Yazali, Dist. Lower Subansiri  
AP-791 119.



84. Arunachal Pradesh SEB Dept. of Power  
Govt. of Ar. Pradesh  
Itanagar-791 111.
85. APDCL Assam Power Distribution Company Ltd.  
ASEB, Bijuli Bhavan, Aaltan Bazar  
Guwahati-781 001.
86. Manipur SEB Dept. of Power  
Govt. of Manipur  
Imphal-795 001.
87. Meghalaya Electricity Corp. Ltd. (MeECL)  
Lumjingshai, Short Round Road  
Shillong-793 001.
88. Mizoram SEB Power and Electricity Dept.  
Govt. of Mizoram  
Khatla, Aizwal-796 001.
89. Nagaland SEB Dept. of Power  
Govt. of Nagaland  
Kohima-797 001.
90. Tripura State Electricity Corp. Ltd. (TSECL)  
Bidyut Bhawan, North Banamalipur  
Agartala-799 001.
91. Neyveli Lignite Corpn. Ltd.  
PO Neyveli-607 801.
92. LANCO-Kondapalli Power Pvt. Ltd.  
Plot No. 4, Software Units Layout  
Hitech City, Madhapur  
Hyderabad-500 081.
93. Andhra Pradesh Power Co-ordination Committee  
APTRANSCO  
Vidyut Soudha  
Hyderabad-500 082.
94. Power Company of Karnataka Ltd.  
Room No. 503, KPTCL Building, Kaveri Bhawan  
Bangalore-560 009.
95. Kerala State Electricity Board (KSEB),  
Vaidyuthi Bhavanam,  
Pattom, Thiruvananthapuram-695 004.

96. TANGEDCO  
7<sup>th</sup> Floor, Eastern Wing  
144, Anna Salai  
Chennai-600 002.
97. Electricity Department,  
Government of Puducherry  
Puducherry-605 001.
98. Electricity Department, Government of Goa  
Vidyut Bhawan, Panaji,  
Near Mandvi Hotel, Goa-403 001.
99. Narmada Control Authority  
Narmada Sadan, Sector-B, Scheme No. 74  
Vijaynagar, Indore-452 010.
100. Jindal Power Ltd.  
OP Jindal STPS, PO: Tamnar  
Gjarghoda Tehsil  
Distt. Raigarh  
Chhattisgarh-496 107.
101. CSPDCL  
PO Sundernagar, Dangania  
Raipur-492 013.
102. Lanco Power Ltd.  
Plot No. 397, Phase-III, Udyog Vihar  
Gurgaon-122 016.
103. Gujarat Urja Vikas Nigam Ltd.,  
Sardar Patel Vidyut Bhawan,  
Race Course Road, Vadodara-390 007.
104. Maharashtra State Electricity Distribution Company Limited,  
Prakashgad, 4th floor  
Andehri (East), Mumbai-400 052.
105. Madhya Pradesh Power Trading Company Ltd.,  
Shakti Bhawan, Vidyut Nagar  
Rampur  
Jabalpur-482 008.
106. Goa Electricity Department  
Government of Goa  
3<sup>rd</sup> Floor, Vidyut Bhawan  
Panjim-403 001.

107. Electricity Department, Union Territory of Daman and Diu  
Sachivalaya, Moti Daman  
Daman-396 210.
108. UT of Dadra Nagar and Haveli Secretariat,  
Electricity Department,  
66 kV Amla Road  
U.T., Silvassa-396 230.
109. Western Region Transmission (Maharashtra) Pvt. Ltd.  
12<sup>th</sup> Floor, Building No. 10-B, DLF Cyber City  
Gurgaon-122 022.
110. Western Region Transmission (Gujarat) Pvt. Ltd.  
12<sup>th</sup> Floor, Building No. 10-B, DLF Cyber City  
Gurgaon-122 022.

....Respondents

**For the petitioner** : Shri S.S. Raju

**For the respondent(s)** : Shri Naveen Nath Das, NCA, Indore  
Shri Rohit Chhabra, NTPC  
Shri Ajay Dua, NTPC

### ORDER

The petitioner has made the following prayers, namely –

- a) Approve the Fees and charges for the communication 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 a 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 Commission's order 8.12.2011 in Petition No. 68/2010, from the long term customers (DIC Designated ISTS customer);
- h) As communication system of NLDC has been retained by the petitioner as per Satnam Singh Committee recommendations and in view of POSOCO letter dated 24.10.2011, the lease charges for dark fibres awarded to NLDC (POSOCO) may please be passed on to the petitioner; and
- i) Allow provisional tariff.

2. The petitioner who was earlier operating the Regional Load Despatch Centres (RLDCs) devised a scheme called the Unified Load Despatch and Communication Scheme with the objective of strengthening the load despatch infrastructure and augmenting communication system for efficient discharge of load despatch functions.

3. Ministry of Power under its notification dated 2.3.2005 constituted the National Load Despatch Centre (NLDC), to discharge the following functions, namely:-

- (a) supervision over the Regional Load Despatch Centres;
- (b) scheduling and despatch of electricity over inter-regional links in accordance with grid standards specified by the Authority and grid code specified by Central Commission in coordination with Regional Load Despatch Centres;
- (c) coordination with Regional Load Despatch Centres for achieving maximum economy and efficiency in the operation of National Grid;

- (d) monitoring of operations and grid security of the National Grid;
- (e) supervision and control over the inter-regional links as may be required for ensuring stability of the power system under its control;
- (f) coordination with Regional Power Committees for regional outage schedule in the national perspective to ensure optimal utilization of power resources;
- (g) coordination with Regional Load Despatch Centres for the energy accounting of inter-regional exchange of power;
- (h) coordination for restoration of synchronous operation of national grid with Regional Load Despatch Centres;
- (i) coordination for trans-national exchange of power;
- (j) providing operational feedback for national grid planning to the Authority and the Central Transmission Utility;
- (k) levy and collection of such fee and charges from the generating companies or licensees involved in the power system, as may be specified by the Central Commission; and
- (l) dissemination of information relating to operations of transmission system in accordance with directions or regulations issued by Central Electricity Regulatory Commission and the Central Government from time to time.

4. The administrative approval and expenditure sanction for establishment for NLDC was accorded by Ministry of Power, 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. 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 , NLDC 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.

5. As per the 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 June, 2008. However, the NLDC scheme was declared under commercial operational on 1.4.2009, with delay of nine months.

6. 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 have been transferred to POSOCO. The petitioner is *inter alia* left with the assets associated

with the communication system of NLDC. This petition has been filed for determination of fees and charges for the period 1.4.2009 to 31.3.2014 for the assets associated with the communication system of National Load Despatch Centre retained by the petitioner. The petitioner has claimed the following fees and charges:-

(₹ In lakh)					
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Annual Capital Recovery Charges-Loan	0.00	0.00	0.00	0.00	0.00
Annual Capital Recovery Charges-Equity	88.10	88.10	88.10	100.32	112.53
<b>Annual Capital Recovery Charges-Total</b>	<b>88.10</b>	<b>88.10</b>	<b>88.10</b>	<b>100.32</b>	<b>112.53</b>
<b>O&amp;M Expenses</b>	<b>35.00</b>	<b>37.00</b>	<b>39.12</b>	<b>45.88</b>	<b>53.04</b>
<b>Interest on Working Capital</b>	<b>3.51</b>	<b>3.61</b>	<b>3.71</b>	<b>4.22</b>	<b>4.74</b>
<b>Total Annual Charges</b>	<b>126.61</b>	<b>128.71</b>	<b>130.93</b>	<b>150.42</b>	<b>170.31</b>

7. In addition, the petitioner has claimed the following lease charges:-

(₹ In lakh)		
Details	Fixed up to 31.3.2009	Recurring during 2009-10 and onwards
Lease charges for 2005-09 for interim NLDC	58.55	-
Lease charges for Bandwidth for standby channel	115.56	44.99 (per annum)
<b>Total</b>	<b>174.11</b>	

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 filed Petition No. 68/2010 wherein it raised certain issues in connection with the determination of fees and charges for the portions retained with the petitioner consequent to transfer of assets pertaining to load dispatch functions 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 communication assets owned by the petitioner. Therefore, the petitioner prayed for fixation of the norms for recovery of cost for communication system. In the absence of any regulations, the Commission decided to continue with the levelised tariff as allowed for the Regional Load Despatch Centres while approving the fees and charges for the tariff period 2004-09. The relevant part of Commission's order dated 8.12.2011 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. The Commission, in order dated 8.12.2011 in Petition No. 68/2010, further 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. These microwave links are working in the 2.3-2.5 GHz frequency band allocated by Ministry of Communication (MOC). During August, 2008, MOC informed that as per Government of India guidelines, 2.3-2.4 GHz was to be allocated to Broad Band Wireless (BWA) and therefore the users of 2.3-2.4 GHz band would have to either shift to another frequency band of 2.7-2.9 GHz or to switch over to fibre optic based communication. 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."

12. Another issue raised by the petitioner was regarding admissibility of O&M expenses recoverable in respect of 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.

13. 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.

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. Another aspect which bears attention at this stage itself is regarding recovery of capital through loan and equity. The Commission, in its order dated 18.3.2011 in Petition No 28/2010, while approving the fees and charges for Northern Regional Load Despatch Centre had approved 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.

17. Haryana Vidyut Prasaran Nigam Ltd (HVPNL), a utility in Northern Region and party respondent in the petition pertaining to approval of fees and charges

for Northern Regional Load Despatch Centre, 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 167<sup>th</sup> month and entire loan would be paid back in 175<sup>th</sup> 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.

18. HVPNL filed an appeal (Appeal No 21/2010) before the Appellate Tribunal arguing that the charges be computed on monthly basis.

19. 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.”

20. The principle decided by the Appellate Tribunal in the judgment dated 11.11.2011 is being followed for the purpose of determining fees and charges for NLDC communication system.

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

### **Capital Cost**

22. As per the breakup of capital cost submitted by the petitioner under Management Certificate dated 20.1.2012, a total capital expenditure of ₹466.66 lakh was incurred on NLDC communication system up to 31.3.2009. The petitioner has claimed fees and charges based on this capital expenditure.

23. The capital cost of ₹466.66 lakh as on 31.3.2009 as claimed by the petitioner has been considered for the purpose of determination of fees and charges in the present petition.

### **Time over-run**

24. As per the investment approval letter dated 24.5.2005, NLDC scheme was scheduled to be commissioned within 36 months from the date of approval, i.e. by 1.6.2008. However, NLDC scheme was declared under commercial operational on 1.4.2009, with a delay of 9 months. The reason for delay as stated by the petitioner is mainly due to interruption in getting the clearance from Municipal Corporation of Delhi (MCD) for modification of existing building. Considering the facts and circumstances of the case, the delay of 9 months is being condoned.

### **Additional/Projected Capital Expenditure**

25. The petitioner has claimed ₹120.77 lakh on account of anticipated capital expenditure during 2012-13. The petitioner has not submitted any details in support of expenditure of ₹120.77 lakh. As such, the anticipated capital expenditure has not been allowed.

### **Debt – Equity Ratio**

26. The petitioner has not contracted any loan for the assets covered in this petition. However, in keeping with the Tariff Regulation, 2009, notional debt-equity ratio of 70:30 as on 1.4.2009 has been considered, though the petitioner has considered the entire capital cost towards equity.

### **Rates for Recovery of Loan and Equity**

27. In line with Regulation 16 (5) of Tariff Regulation, 2009, weighted average rate of interest works out to be 8.0209% per annum, which has been applied for calculating the Capital Recovery Factor for loan.

28. In the context of CRF for equity portion, applying the logic similar to that applied in ULDC petitions for 2009-14 period in this petition too, rate of return on equity of 15.50% has been considered for calculating the Capital Recovery Factor for equity.

29. Both the above rates are on annual basis and they have been converted to monthly rates.

30. The weighted average rate of interest on notional loan is worked out at 8.0209% per annum as shown overleaf:-

(₹ in lakh)

Loan	As on 31.3.2010	As on 31.3.2009	Average Loan/ Interest during the year	Weighted Average Rate of Interest per annum
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 Loan during the year			<b>3144111.00</b>	-
Interest on loan and Finance Charges	203852.00	300521.00	252186.50	-
(b) Average Interest during the year			<b>252186.50</b>	-
<b>Weighted Average Rate of Interest {(b)/(a)}</b>				<b>8.0209%</b>

31. The 2009 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 stated earlier in this order, the petitioner filed a miscellaneous petition (Petition No. 68/2010) for fixation of tariff norms for recovery of cost of communication system etc 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 the 2009 Tariff Regulations regarding determination of tariff of communication system of the petitioner. 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**

32. Based on the recovery rates of loan and equity as above, Capital Recovery Factor (CRF) has been arrived at as given hereunder:-

<b>(₹ in lakh)</b>	
Monthly Capital Recovery Factor – Loan	0.00957
Monthly Capital Recovery Factor – Equity	0.01434

### **Annual Capital Recovery Charges**

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

<b>(₹ in lakh)</b>	
Monthly Capital Recovery charges – Loan	3.12570
Monthly Capital Recovery charges – Equity	2.00756
<b>Total</b>	<b>5.13326</b>

### **Operation and Maintenance Expenses**

34. 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....."

35. In its submission dated 31.1.2013, the petitioner has revised its claim for O & M charges. In the revised claim, the petitioner has not claimed O & M charges for the years 2009-10, 2010-11 and 2011-12 on the ground that the equipment system was under warranty. The petitioner has claimed anticipated O & M charges of ₹25 lakh and ₹180 lakh for 2012-13 and 2013-14 respectively.

36. The petitioner has not given the detailed break-up of O&M expenses claimed for the year 2012-13 and 2013-14. O&M charges claimed have been provisionally considered, subject to actual expenditure approved by the Commission. The petitioner is directed to submit the detailed break-up of O&M expenditure 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:** Regulation 18 of the 2009 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. 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 overleaf;



(₹ In lakh)					
Year	2009-10	2010-11	2011-12	2012-13	2013-14
Maintenance Spares @15% of O&M Expenses	0	0	0	3.75	27

(ii) **O & M Expenses:** One month's O&M expenses allowed under Paragraph 32 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 2009 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 keeping 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
Maintenance Spares	0.00	0.00	0.00	3.75	27.00
O&M Expenses (1 month)	0.00	0.00	0.00	2.08	15.00
Receivables (2 Months)	10.48	10.48	10.48	14.86	41.98
<b>Total</b>	<b>10.48</b>	<b>10.48</b>	<b>10.48</b>	<b>20.69</b>	<b>83.98</b>
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%
<b>Interest on Working Capital</b>	<b>1.28</b>	<b>1.28</b>	<b>1.28</b>	<b>2.53</b>	<b>10.29</b>

39. Interest on working capital allowed for the years 2012-13 and 2013-14 is provisional and is subject to adjustment based on actual O&M expenses for these years.

### Lease Charges

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

### Annual Fees and Charges

41. The annual fees and charges allowed for the assets of the Scheme presently administered by the petitioner are summarized overleaf:-

(₹ In lakh)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Annual Capital Recovery Charges-Loan	37.51	37.51	37.51	37.51	37.51
Annual Capital Recovery Charges-Equity	24.09	24.09	24.09	24.09	24.09
<b>Annual Capital Recovery Charges-Total</b>	<b>61.60</b>	<b>61.60</b>	<b>61.60</b>	<b>61.60</b>	<b>61.60</b>
<b>O&amp;M Expenses</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>25.00</b>	<b>180.00</b>
<b>Interest on Working Capital</b>	<b>1.28</b>	<b>1.28</b>	<b>1.28</b>	<b>2.53</b>	<b>10.29</b>
<b>Total Annual Charges</b>	<b>62.88</b>	<b>62.88</b>	<b>62.88</b>	<b>89.13</b>	<b>251.89</b>
<b>Lease Charges</b>	<b>219.10</b>	<b>44.99</b>	<b>44.99</b>	<b>44.99</b>	<b>44.99</b>
<b>Net Charges</b>	<b>281.98</b>	<b>107.87</b>	<b>107.87</b>	<b>134.12</b>	<b>296.88</b>

### Sharing of fees and charges

42. 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.”

43. Accordingly, the fees and charges 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. Regulation 22 (1) is being extracted 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"

44. 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**

45. In the petition the petitioner has sought recovery of the license fee, without specifying the amount. However, in its submission dated 25.3.2013, the petitioner has stated that licence fee is not applicable in the present case. Accordingly, the question of recovery of licence fee does not arise.

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

sd/-  
**(M. Deena Dayalan)**  
**Member**

sd/-  
**(V. S. Verma)**  
**Member**