CENTRAL ELECTRICITY REGULATORY COMMISSION **NEW DELHI**

Petition No. 83/2010

Dr. Pramod Deo, Chairperson Coram:

Shri S.Jayaraman, Member Shri V.S.Verma, Member

Shri M.Deena Dayalan, Member

Date of Order: 14.2.2011 **Date of Hearing: 29.7.2010**

In the matter of:

Approval under subsection (4) of section 28 of Electricity Act 2003 read with Regulation 4 of Central Electricity Regulatory Commission (fees & charges of Regional Load Despatch Centre and other related matters) Regulations, 2009 for NLDC Charges (POSOCO Portion) for the control period 1.4.2009 to 31.3.2014

And

In the matter of:

Power Grid Corporation of India Ltd

.....Petitioner

Vs

(A)Northern Regional Load Despatch Centre, New Delhi

(I) Users under the category of Distribution Licensees and **Buyers**

- CMD, UPPCL, Uttar Pradesh Power Corporation Limited, 01. Shakti Bhawan, 14-Ashok Marg, Lucknow-226001
- Principal Secretary, Government of J&K, Civil secretariat, 02. Srinagar, J&K.
- 03. CMD, Rajasthan Rajya Vidyut Prasaran Nigam Limited, Vidyut Bhawan, Vidyut Marg, Jaipur-302005
- Chairman, Punjab State Electricity Board, The Mall, 04. Patiala-147 001
- 05. Managing Director, Haryana Vidyut Prasaran Nigam Limited, Shakti Bhawan, Sector-6, Panchkula-134109.
- CMD, Delhi Transco Limited, Shakti Sadan, Kotla Road, 06. New Delhi-110 002
- Chairman, Himachal Pradesh State Electricity Board, 07. Kumar House, Vidyut Bhawan, Shimla-171004
- Managing Director, Power Transmission Corporation of 08. Uttarakhand Limited, 7-B, Lane No-1, Vasant Vihar Enclave, Dehradun - 248 001.
- 09. Chief Engineer, Electricity Department, UT Chandigarh, Sector 9-D, UT Chandigarh-160019
- 10. Chief Electrical Engineer, North Central Railway, GM

- Office Building, Allahabad, UP.
- Executive Director, NRTS-I, Power grid Corporation of India Ltd., B-9, Qutab Institutional Area, New Delhi-110016

(II) Users under the category of Generating Stations and Sellers

- 12. General Manager, Singrauli Super Thermal Power Station, Shakti Nagar, UP-231222
- 13. General Manager, Rihand Super Thermal Power Station-I, Rihand Nagar, UP-231223
- 14. General Manager, Rihand Super Thermal Power Station-II, Rihand Nagar, UP-231223
- General Manager, Dadri National Capital Power Project, Dadri Dhaulana Road, Distt. Gautam Buddh Nagar, UP-201008
- 16. General Manager, Firoz Gandhi Unchahar Thermal Power Project-I, Unchahar, Distt. Raibareilly, UP
- 17. General Manager, Firoz Gandhi Unchahar Thermal Power Project-II, Unchahar,, Distt. Raibareilly, UP
- 18. General Manager, Firoz Gandhi Unchahar Thermal Power Project-III, Unchahar, Distt. Raibareilly, UP
- 19. General Manager, Dadri Gas Power Project, Dhaulana Road, Distt. Gautam Buddh Nagar, UP-201008
- 20. General Manager, Auraiya Gas Power Project(Gas Fired, RLNG Fired, Liquid Fired), Dibiyapur, Distt Etawah, UP-206244
- 21. General Manager, Anta Gas Power Project (Gas Fired, RLNG Fired, Liquid Fired), Distt. Baran, Rajasthan-325209
- 22. Station Director, Narora Atomic Power Station, Narora, Distt. Bulandshahar, UP-202389
- 23. Station Director, Rajasthan Atomic Power Station-B, Anu Shakti Vihar, Kota, Rajasthan-323303
- 24. General Manager, Bairasiul Hydro Electric Project, NHPC Ltd., Surangini, Distt. Chamba, HP-176317
- 25. General Manager, Salal Hydro Electric Project, NHPC Ltd, Jyotipuram, Distt. Udhampur, J&K-182312
- 26. General Manager, Tanakpur Hydro Electric Project, NHPC Ltd., Banbassa, Distt. Champawa,Uttrakhand-262310
- 27. General Manager, Chamera-I Hydro Electric Project, NHPC Ltd., Khairi, Distt. Chamba, HP-176310
- 28. General Manager, Uri Hydro Electric Project, NHPC Ltd., Mohra, Distt. Baramulla, J&K-193122
- 29. General Manager, Chamera-II Hydro Electric Project,NHPC Ltd., Karian, Distt. Chamba, HP-176310
- 30. General Manager, Dhauliganga Hydro Electric Project, NHPC Ltd., Tapovan, Dharchula, Pithoragarh,

- Uttrakhand-262545
- 31. General Manager, Dulhasti Hydro Electric Project, NHPC Ltd., Chenab Nagar, Distt. Kishtwar, J&K-182206
- 32. General Manager, Satluj Jal Vidyut Nigam Ltd. Power Project, Jhakri, Rampur, Distt. Shimla, HP-172201
- 33. General Manager, Tehri Hydro Development Corporation Ltd., Pragatipuram, Rishikesh, Uttrakhand-249201

(III) Users under the category of Inter-State Transmission Licensees

- Executive Director, NRTS-I, Power Grid Corporation of India Ltd., B-9, Qutab Institutional Area, New Delhi-110016
- Director, Operations, Powerlinks Transmission Ltd., 10th
 Floor, DLF Tower-A, District Centre, Jasola, New Delhi-110044

(B) Western Regional Load Despatch Centre

(I) Users under the category of Distribution Licensees and Buyers

- 1. Managing Director, CSPTCL, P.O. Sundernagar, Dangania, Raipur-492013.
- 2. Chairman, GUVNL, Sardar Patel Vidyut Bhavan, Race Course, Vadodara-390 007.
- 3. Chairman&Managing Director, M.P Power Trading Co.Ltd, Shakti Bhavan, Vidyut Nagar, Rampur, Jabalpur-482008
- 4. Managing Director, MSEDCL, Prakashgad, Bandra (East), Mumbai-400051.
- 5. Chief Electrical Engineer, Goa Electricity Department, Government of Goa, Vidyut VBhavan, 3rd Floor, Panaji, Goa.
- 6. Secretary(P), UT of Dadra Nagar Haveli, Silvassa-396230.
- 7. Secretary, UT of Daman & Diu, Moti Daman.
- 8. Executive Director, WRTS-I, Power Grid Corporation of India Ltd., P O Uppalwadi, SampritinagarNagpur.440 026
- 9. Additional General Manager, Bhadravathi HVDC, Power Grid Corporation of India Ltd, Sumthana Village, Bhadravathi(Tahsil), Bhadravathi, Chandrapur(Dist),

- Maharashtra-442 902
- 10. Additional General Manager, Vindhayachal HVDC, Power Grid Corporation of India Ltd, P.O.Vindhyanagar, P.Box.No.12, Singrauli(Dist), Madhya Pradesh-486 885

(II) Users under the category of Generating Stations and Sellers

- General Manager, Korba STPS, National Thermal Power Corporation, P.O.Vikas Bhavan, Jamnipali, Korba(Dist), Chhattisgarh- 495 450
- General Manager, STAGE-I, Vindhayachal STPS, National Thermal Power Corporation of India Ltd, P.O Vindhyanagar, Sidhi(Dist), Madhya Pradesh – 486 885
- General Manager, STAGE-II, Vindhayachal STPS, National Thermal Power Corporation of India Ltd ,P.O Vindhyanagar, Sidhi(Dist),Madhya Pradesh – 486 885
- General Manager, STAGE-III, Vindhayachal STPS, National Thermal Power Corporation of India Ltd, P.O Vindhyanagar, Sidhi(Dist), Madhya Pradesh – 486 885
- General Manager, Kawas Gas Power Project, National Thermal Power Corporation of India Ltd , P.O.Aditya Nagar, Surat- 394 516
- General Manager, Gandhar Gas Power Project, National Thermal Power Corporation of India Ltd, P.O.NTPC Township, Bharuch(Dist), Gujarat- 392215
- 17. General Manager, SIPAT TPS, National Thermal Power Corporation of India Ltd, SIPAT, Chhattisgarh.
- Station Director, Tarapur Atomic Power Station 1&2, Nuclear Power Corporation of India Ltd, P.O.TAPP, Thane (Dist). Maharashtra-401 504
- Station Director, Tarapur Atomic Power Station 3&4,
 Nuclear Power Corporation of India Ltd, P.O.TAPP,
 Thane (Dist), Maharashtra-401 504
- 20. Station Director, Kakrapar Atomic Power Station, Nuclear Power Corporation of India Ltd, Anumala. P.o, Via Vyara, Surat, Gujarat-395 651
- 21. Member(Power), NCA,EMC Office, D ¾, Narmada Colony Scheme, No.78, Vijayanagar, Indore -452010
- 22. Executive Director, Jindal Power Limited, O.P. Jindal Super Thermal Power Plant, Village&P.O:Tamnar, Tehsil: Gharghoda, Dist: Raigarh, Chattisgarh- 496 107
- 23. General Manager(Comml), LANCO Amarkantak Power

- Pvt. Ltd., Plot No. 397, Phase-III, Udyog Vihar, Gurgaon-122016, Haryana
- 24. Chief Executive Officer, Adani Power Limited, Registered Office, Shikhar, 9th Floor, Near Mithakhali Road, Navarangpura, Ahamedabad- 380 009.

(III) Users under the category of Inter State Transmission Licensees

25. Executive Director, WRTS-I, Power Grid Corporation of India Ltd., P O Uppalwadi, SampritinagarNagpur.440 026

(C)Eastern Regional Load Despatch Centre

(I) Users under the category of Generating Stations and Sellers

- General Manager Farakka Super Thermal Power Plant, NTPC, Farakka
- 2. General Manager Kahalgaon Super Thermal Power Plant I, NTPC, Kahalgaon.
- 3. General Manager Kahalgaon Super Thermal Power Plant II, NTPC, Kahalgaon.
- 4. Executive Director, Talcher Super Thermal Power Plant, Stage II, NTPC, Talcher
- 5. Chief Engineer (Elect)Teesta Hydro, Teesta V Hydro Electric Project, NHPC, Singtam, East Sikkim
- Chief Engineer Rangeet Hydro Electric Poject, NHPC, P.
 Rangit Nagar, South Sikkim.
- 7. Chief Engineer Burla Power House, Orissa Hydro Power Corporation Ltd., Dist. Sambalpur, Burla 768017
- 8. Chief Engineer Mejia Thermal Power Station, DVC, P.O. MTPS, Dist Bankura 722183

(II) Users under the category of Distribution Licensees and Buyers

- 1. Chairman, Bihar State Electricity Board, Vidyut Bhavan, Bailey Road, Patna –800 021
- 2. Chairman, Jharkhand State Electricity Board, Engineering Bldg, Dhurwa Road, Ranchi, Jharkhand.
- 3. Chairman, Damodar Valley Corporation, VIP Road, Bidhannagar, Kolkata
- 4. Chairman, West Bengal State Electricity Distribution Corporation Ltd, Bidyut Bhawan Salt Lake, Kolkata

 Chairman, Grid Corporation of Orissa Ltd, Janpath, Bhubaneswar
 Secreatry, Power Deptt, Govt of Sikkim, Power Deptt., Govt. of Sikkim, Kazi Road, Gangtok

(III) Users under the category of Inter State Transmission Licensees

- 1. Executive Director, ERTS I, Alankar Place, Patna
- General Manager, Powerlinks Transmission Limited, Vidyut Nagar, P.O. Satellite Township, Siliguri – 734 015

(D) Southern Regional Load Despatch Centre

(I) Users under the category of Generating Stations and Sellers

1 General Manger

RAMAGUNDAM STG I & II

National Thermal Power Corporation

RSTPS, Jyothi Nagar, Dist. Karim Nagar, A.P. 505 215

2 General Manger

RAMAGUNTAM STG III

National Thermal Power Corporation

RSTPS, Jyothi Nagar, Dist. Karim Nagar, A.P. 505 215

3 General Manger

NTPC, TALCHER STG II

Angul, Orissa-7591011

4 General Manger

NLC TPS II STG I

Nevveli Lianite Corpn. Ltd.

Thermal Power Station II, Neyveli 607 807, Tamil Nadu

5 General Manger

NLC TPS II STG II

Nevveli Lignite Corpn. Ltd,

Thermal Power Station II, Neyveli 607 807, Tamil Nadu

6 General Manger

NLC TPS I EXPANSION

Neyveli Lignite Corpn. Ltd

Thermal Power Station I (Expn.), Neyveli 607 807, Tamil Nadu

7 Station Director

MAPS

Nuclear Power Corpn. Of India Ltd

Madras Atomic Power Station, Kalpakkam - 603 102,

Tamil Nadu

8 Station Director

KGS UNITS 1&2

Nuclear Power Corpn. Of India Ltd

Kaiga Generating Station, Kaiga – 581 400, Karwar, Karnataka

9 Station Director

KGS UNIT 3

Nuclear Power Corpn. Of India Ltd

Kaiga Generating Station, Kaiga – 581 400, Karwar, Karnataka

10 Chairman & Managing Director

LANCO, KODAPALLI

LANCO KONDAPALLI POWER PVT. LTD

Kondapalli, Ibrahimpatnam Mandal, PIN 521 228 (A.P.)

(II) Users under the category of Distribution Licensees and Buyers

11 Executive Director SR-II

Power Grid Corporation of India

Southern Regional Transmission System - II

32, Race Course Raod, Bangalore - 560 001

12 Chairman & Managing Director , APTRANSCO

Vidyut Soudha, Hyderabad – 500 082

13 Managing Director ,KPTCL

Cauvery Bhavan, Bangalore-560 009, Karnataka

14 Chairman, KSEB

Vaidyuthi Bhavanam, Pattom

Trivandrum-695 004, Kerala

15 Chairman, TNEB

144, Anna Salai

Chennai - 600 002, Tamil Nadu

16 Secretary (Power), PUDUCHERRY ELE. DEPT

Electricity Dept. of Pondicherry

Pondicherry - 605 001

17 Goa Electricity Board

Office of Chief Electrical Engineer (Electrical)

Govt. of Goa, Vidyuth Bhavan, 3rd Floor, Panaji, Goa-403001

(III) Users under the category of Inter State Transmission Licensees

18 Executive Director SR-II

Power Grid Corporation of India

Southern Regional Transmission System – II

32, Race Course Raod, Bangalore - 560 001

(E) North Eastern Regional Load Despatch Centre

(I) Users under the category of Distribution licensees and Buyers

- Chairman, ASEB, Bijuli Bhavan, Paltan Bazar, Guwahati-781001
- 2. Chairman, MeSEB, Lumjingshai, Short Round Road, Shillong-793001
- Chairman & Managing Director, TSECL Agartala-799001, Tripura
- 4. Chief Engineer (W Zone), Dept. of Power, Govt. of Ar. Pradesh, Itanagar- 791111
- 5. Engineer-in-Chief, Dept. of Power, Govt. of Mizoram, Aizawl- 796001, Mizoram
- Chief Engineer (Power), Dept. of Power, Govt. of Nagaland, Kohima- 797001
- 7. Chief Engineer (Power), Dept. of Power, Govt. of Manipur, Imphal- 795001

(II) Users under the category of Generating Stations and Sellers

- 8. General Manager, Doyang HEP, NEEPCO, Wokha, Nagaland
- 9. General Manager, Ranganadi HEP, NEEPCO, P.O. Ranganadi Proj. Dist. Subansiri, Ar. Pradesh-791121
- General Manager, AGBPP, NEEPCO, Kathalguri, Tinsukia, Assam
- 11. General Manager, AGTPP, NEEPCO, Ramchandranagar, Agartala, Tripura
- 12. General Manager, KHANDONG HEP, NEEPCO, Umrangsoo, N.C.Hills, Assam
- 13. General Manager, KOPILI HEP, NEEPCO, Umrangsoo, N.C.Hills, Assam

- 14. General Manager, KOPILI-2 HEP, NEEPCO, Umrangsoo, N.C.Hills, Assam
- Chief Engineer, NHPC Loktak HEP Leimatak-795124,
 Manipur

(III) Users under the category of Inter State Transmission Licensees

16. Executive Director, NERTS, Power Grid Corporation of India Ltd., Lapalang, Shillong-793006, Meghalaya

.....Respondents

The following were present:

- 1. Shri S.K.Soonee, CEO,POSOCO
- 2. Shri U.K.Tyagi, PGCIL
- 3. Shri N.S.Sodha, PGCIL
- 4. Shri Sunil Kumar, PGCIL
- 5. Shri M.M.Mondal, PGCIL
- 6. Shri Prashant Sharma, PGCIL
- 7. Shri R.K.Gupta, PGCIL
- 8. Shri Mahesh Kumar, PGCIL
- 9. Shri S.S.Raju, PGCIL
- 10. Shri V.V.Sharma, NLDC
- 11. Shri Debasis DE. NRLDC
- 12. Shri V.K.Agarwal, NRLDC
- 13. Shri D.P.Thakur, NRLDC
- 14. Shri V.Suresh, SRLDC
- 15. Shri P.R.Raghuram, SRLDC
- 16. Shri Devandra Kumar, ERLDC
- 17. Shri P.Pentayya, ERLDC
- 18. Shri M.G.Root, WRLDC
- 19. Shri S.R.Narasimhan, WRLDC
- 20. Shri T.S.Singh, NERLDC
- 21. Shri M.L.Jadav, NPCIL
- 22. Shri P.K.Panchal, HPPC
- 23. Shri V.K.Padha, NTPC
- 24. Shri S.K.Meena, NHPC
- 25. Shri S.M.Siddiqui, THDC
- 26. Shri R.B.Sharma, Advocate, BSEB
- 27. Shri S.N.Singh, UPPCL

ORDER

This petition has been filed by Power Grid Corporation of India Limited on behalf of Power System Operation Corporation Limited (POSOCO) for approval of the charges of National Load Despatch Centre (POSOCO Portion) for the control period 1.4.2009 to 31.3.2014 under sub-section (4) of Section 28 of Electricity Act, 2003 read with Regulation 4 of Central Electricity Regulatory Commission (Fees and Charges of Regional Load Despatch Centre and other related matters) Regulations, 2009 (hereinafter "the RLDC fees regulations"). The petitioner has also sought the following reliefs:

- (a) Approve the Additional Capital expenditure and Capital Expenditure as mentioned in para 10 of the petition.
- (b) 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 respondents.
- (c) Allow the petitioner to bill and recover Service Tax on RLDC charges separately from the respondents, if petitioner is subjected to such service tax.
- (d) Allow the petitioner to bill and adjust impact on HR expenses due to revision of pay in case of non-executives w.e.f. 1.1.2007 during 2009-14 period, if any, from the respondents.
- (e) Allow the petitioner to bill and recover pre-incorporation expenses of POSOCO as one time charges from the users.
- (f) Approve the reimbursement of expenditure towards publishing of notices in Newspapers and other expenditure (if any) in relation to the filing of petition.

- (g) Pass such other order as the Hon'ble Commission deems fit and appropriate in these circumstances of the case and in the interest of justice.
- 2. Power System Operation Corporation Ltd. (POSOCO) is a wholly owned subsidiary of Power Grid Corporation of India Ltd., the petitioner herein. POSOCO has been created as per the directives of Government of India as contained in letter No-41/20/2005-PG dated 4.7.2008 for independent system operation of the National Load Despatch Centre (NLDC) and Regional Load Despatch Centres (RLDCs). As per the said letter dated 4.7.2008, POSOCO shall discharge the following functions:
 - (a) To supervise and control, all aspects concerning operations and manpower requirement of RLDCs and NLDC. All the employees and executives working with RLDCs and NLDC will be from the cadres of POSOCO.
 - (b) To act as the apex organization for human resource requirement of NLDC and RLDCs,
 - (c) To ensure planning and implementation of infrastructure required for smooth operation and development of NLDC and RLDCs,
 - (d) To coordinate the functioning of NLDC and RLDCs,
 - (e) To advise and assist state level Load Despatch Centres including specialized training etc.
 - (f) To perform any other function entrusted to it by the Ministry of Power.

- 3. Section 26 of the Electricity Act, 2003 (the Act) provides that "the Central Government may establish a centre at a national level, to be known as the National Load Despatch Centre for optimum scheduling and despatch of electricity among Regional Load Despatch Centres." The said section further provides that the constitution and functions of the National Load Despatch Centre shall be such as may be prescribed by the Central Government. In exercise of the statutory obligation, the Central Government has prescribed the National Load Despatch Centre Rules, 2005 which *inter alia* lays down the following functions of NLDC:
 - (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.
- (I) 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 petitioner has submitted that administrative approval and expenditure sanction for establishment of NLDC was accorded by the Central Government vide letter No.12/15/2003-PG dated 24.5.2005 at an estimated cost of Rs.44.96 crores including IDC of 1.77 crores at 4th quarter 2004 price level. The final scope of work under the NLDC scheme is as under:
 - (a) Establishment of control centre at New Delhi with back-up at ERLDC Kolkata;
 - (b) Interface equipment like routers and hub for for data acquisition from RLDCs and NLDC/Back up NLDC;

- (c) Communication system for data, voice anf fax between RLDCs, NLDC and Backup NLDC through dedicated wideband networks on fibre optics;
- (d) Auxiliary power supply system; and
- (e) Other infrastructural facilities such as air-conditioning, fire fighting,DG set construction/renovation of buildings.

The petitioner has further submitted that as per original project approval, NLDC scheme was scheduled to be commissioned within 36 months from the date of approval, i.e.June 2008. However, the NLDC scheme was declared under operational with effect from 1.4.2009 with a delay of nine months. The petitioner has clarified that the clearance for modification of the existing building was delayed by the Municipal Corporation of Delhi. As on the date of commercial operation, the assets of NLDC were on the books of PGCIL. In the 235th Board meeting of PGCIL held on 15.4.2010, the book values of the assets as on 1.4.2009 to be transferred to POSOCO was decided. The Board of PGCIL further decided that the book value of the assets as on 1.4.2009 would be updated to 31.3.2010 before proceeding on actual transfer to be effective from 1.4.2010. The petitioner has submitted that POSOCO was incorporated as a limited company on 20.3.2009 and was issued the certificate for commencement of business with effect from 23.3.2010. The petitioner has further submitted that the book of accounts is being separately maintained in respect of POSOCO with effect from 1.4.2009. The gross value of the assets of POSOCO has been certified by the auditor in its certificate dated 13.5.2010 which has been placed as **Annexure 17** to the petition.

5. The petitioner has claimed the following charges for the POSOCO portion of NLDC:

				(₹ in lak	h)
	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	495.88	611.48	715.34	698.37	445.57
Interest on Loan	105.64	94.99	78.38	42.48	13.14
Return on equity	193.85	233.64	269.40	287.58	303.94
O & M Expenses Excluding Human Resource Expenses	1138.51	1204.43	1274.19	1524.32	1612.52
Human Resource Expenses	696.94	1306.15	1749.39	2116.22	2493.66
Total	2630.82	3450.69	4086.70	4668.97	4868.83

- 6. Reply to the petition has been filed by UPPCL only. Gist of the submissions in the reply by the above respondent is as under:
 - (a) As per the report of the Committee for Transfer of Assets to NLDC (POSOCO), the gross value of the transferred assets is ₹ 2520.15 lakh with accrued depreciation of ₹ 5.69 lakh and net value of the asset is ₹ 2514.15 lakh. However as per the Auditor's certificate, the capital cost upto 31.3.2009 including IEDC and IDC is ₹ 2341.36 lakh. There is discrepancy of about 173.10 lakh in the capital cost which needs to be explained by the petitioner.
 - (b) Base rate of RoE has been taken as 16% as against 15.5% in accordance with Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009. Though POSOCO has been calculating Return on Equity after considering MAT rate, in case of assets transferred to POSOCO, corporate tax of 33.99% has been considered which needs to be explained by the petitioner.

- (c) The petitioner has taken the rate of depreciation of SCADA software as 30%, SCADA hardware as 15% and IT equipment as 15%. The petitioner needs to explain whether these rates have been approved by the Commission.
- (d) Petitioner's prayer to adopt floating rates of interest is not tenable since no floating rate of interest has been contracted and CERC(Terms and Conditions of Tariff) Regulations, 2009 do not provide for the same.
- (e) There is no justification for escalation of HR expenditure since in the light of the Commission's order dated 11.2.2010 in Petition No.262/2009, base norms of 2007-08 has already been escalated @ 5.72% per annum to reach 2009-10 price level which has further been escalated for subsequent years up to 2014 @5.72%.
- 7. We have considered the submissions of UPPCL and the same have been discussed under the relevant heads of this order.
- 8. We have examined the submission of the petitioner with reference to all relevant records produced and heard the parties regarding approval of charges of NLDC (POSOCO portion). We have approved the NLDC charges for the period 2009-14 as per the details given in the succeeding paragraphs.
- 9. Considering the fact that the separation of POSOCO from PGCIL is in transition, we have decided that charges of POSOCO i.e. NLDC and RLDCs for the tariff period 2009-14 shall be determined by the Commission based on the petitions filed in accordance with the provisions of Central Electricity Regulatory Commission (Fees and Charges of Regional Load Despatch

Centre and other related matters) Regulations, 2009. However, PGCIL shall bill the beneficiaries/users upto the date of transfer of assets to POSOCO and after the transfer, billing shall be made on the beneficiaries/users by NLDC and RLDCs as the case may be.

CAPITAL COST

- 10. Regulation 6 of the RLDC fees regulations provides as under:
 - "(1) Capital cost for a Regional Load Despatch Centre shall include the expenditure incurred or projected to be incurred during the control period, including Interest During Construction (IDC) and financing charges, any gain or loss on account of Foreign Exchange Rate Variation (FERV) during construction, and Incidental Expenditure During Construction (IEDC) in line with the CAPEX plan:

Provided that the value of the assets not in use shall not form part of capital cost.

(2) The capital cost admitted by the Commission after prudence check shall form the basis for determination of charges:

Provided that prudence check may include scrutiny of the reasonableness of the capital expenditure, financing plan, IDC, IEDC, use of efficient technology, cost over-run and time over-run, and such other matters as may be considered appropriate by the Commission:

Provided further that the capital cost appearing in the books of accounts of the Power System Operation Company for the respective Regional Load Dispatch Centre and National Load Dispatch Centre as on the date of transfer along with the approved CAPEX plan for the control period shall be the basis for determination of charges."

11. The petitioner has submitted that approval of Government of India was accorded for NLDC scheme comprising of Communication and Control Centre functions at an approved cost of ₹ 44.96 crores. As per the recommendations of the Satmam Singh Committee in the "Report of the Task Force on capital expenditure to emoluments for personnel in Load Despatch Centres", NLDC Scheme has been segregated into Control Centre functions which is under

transfer to POSOCO and Communication portion which has been retained with PGCIL. The total expenditure incurred on the scheme inclusive of POSOCO portion and communication portion is ₹ 41.61 crore which is within the approved cost of NLDC project. The petitioner has submitted that the present petition has been filed for POSOCO portion and the petition for the communication portion will be filed by PGCIL separately.

12. The petitioner in its affidavit dated 20.5.2010 has submitted the breakup of estimated capital expenditure as shown in the Auditor's certificate and the projected additional capital expenditure as shown in the Form 6B for the years 2010-11 onwards are as under:

S.	Nature of Expenditure	Amount								
No.		(₹ in lakhs)								
(A)	(A) NLDC Scheme (POSOCO Portion as per Govt. of India									
	approval)									
1	Expenditure upto DOCO(1.4.2009)	2510.41								
2	Balance estimated expenditure for 2009-10	302.95								
3	Balance estimated expenditure for 2010-11	391.45								
4	Total Expenditure on NLDC scheme	3204.81								
	(POSOCO portion= 1+2+3)									
(B)	(B) CAPEX as per management approval									
5	CAPEX plan of NLDC as per management	1050.00								
	approval									
6	Total (4+5)	4254.81								

It has been further submitted that NLDC has projected CAPEX of ₹ 10.50 crore upto 2013-14 which is less than the CAPEX of ₹ 74.35 crore recommended by Satnam Singh Committee Report for a typical Load Despatch Centre from 2009-10 to 2013-14.

13. On the basis of the Chartered Accountant's certificate, the petitioner has claimed an amount of ₹ 2510.41 lakh as the capital cost as on 1.4.2009

which is inclusive of ₹ 569.13 lakh on account of leasing charges of fibres. The petitioner has explained that NLDC project was scheduled to be commissioned in May 2008 and the associated communication was to be kept ready a few months before commissioning of NLDC. Therefore, fibres were taken on lease with effect from 1.4.2008. Since the expenditure on account of leasing of fibres pertains to the period 1.4.2008 to 31.3.2009, the expenditure of ₹ 569.13 lakh has been capitalized in the project cost. The leasing charges have been proportionately apportioned in the SCADA/EMS hardware and Software items mentioned in the Auditor's certificate.

- 14. We are unable to agree with the submission of the petitioner. In the absence of creation of asset, we do not find any justification for including the expenditure in the capital cost. Instead it may be reimbursed to NLDC as one-time expenses. Accordingly, the lease charges have been deducted proportionally from the capital cost of EMS/SCADA Hardware and Software as on 1.4.2009. This leaves a balance of ₹ 1941.28 lakh (Including FERV Loss of ₹ 39.64 lakh pertaining to domestic borrowing cost IBRD-III Loan taken to P& L Account.
- 15. As per the auditor's certificate dated 15.10.2009, the above stated sum ₹ 1941.28 lakh includes ₹ 445.14 lakh towards initial spares. As may be seen from the above extracted provision, the RLDC fees regulations do not have any provision towards initial spares. The petitioner has also clarified vide its affidavit dated 20.5.2010 that the procurement of initial spares was done as a part of the NLDC Project for which letter of awards was placed much before

the RLDCs fees regulations came into being . As the RLDC fees regulations do not prescribe any ceiling towards the cost of initial spares, we allow capitalization of spares for which awards were placed as a part of NLDC project prior to coming into force of RLDC fees regulations. Accordingly, ₹445.14 lakh has been allowed in the capital cost and the capital cost amounting to ₹ 1941.28 lakh has been considered for the purpose of calculation of NLDC charges.

ADDITIONAL CAPITAL EXPENDITURE

- 16. Regulation 7 of the RLDC fees regulations provides as under:
 - **"7. Additional Capitalisation. -** (1) The capital expenditure incurred or projected to be incurred after the date of commercial operation may, in its discretion, be admitted by the Commission, subject to prudence check:

Provided that any expenditure on acquiring the minor items or the assets like tools and tackles, furniture, air-conditioners, voltage stabilizers, refrigerators, coolers, fans, washing machines, heat convectors, mattresses, carpets etc. brought after the date of commercial operation shall not be considered for additional capitalization for determination of fees and charges."

17. Details of the projected capital expenditure claimed by the petitioner is as under:

(₹ in lakh)

Assets	2009-10	2010-11	2011-12	2012-13	2013-14
Freehold Land	0.00	0.00	0.00	0.00	0.00
Leasehold Land	0.00	0.00	0.00	0.00	0.00
Building & Other Civil Works	33.61	54.50	100.00	0.00	0.00
Auxilliray Power System	10.53	0.00	0.00	0.00	0.00
Furniture-Office & other	0.00	0.00	0.00	0.00	0.00
SCADA Hardware with Test					
Equipment & Spares (IT Equipments)	173.60	289.86	0.00	25.00	25.00
Softwares (IT Equipments)	93.23	439.07	100.00	275.00	125.00
Total	310.97	783.43	200.00	300.00	150.00

18. The petitioner has submitted the following details relating to the projected CAPEX Plan of NLDC as under:

(₹ in lakh)

S. No.	Description	2009-10	2010-11	2011-12	2012-13	2013-14
1	Civil Works	Nil	50	100	NIL	NIL
2	IT Systems	NIL	350	100	300	150

- 19. The petitioner has explained the requirement for the projected expenditure as under:
 - (a) An estimated expenditure of ₹ 150 lakh is to be incurred towards renovation and modernisation of the office for NLDC and POSOCO corporate during 2010-11 and 2011-12. The estimates are based on the letters of awards placed under NLDC scheme for renovation works for establishing the NLDC control room.
 - (b) Procurement of the servers for the IT systems involving an estimated expenditure of ₹ 300 lakh during 2010-11 is under process.
 - (c) Software for open access is under implementation in the RLDCs at a cost of ₹ 30 lakh for each RLDC. Same estimate has been taken for NLDC as well during 2010-11.
 - (d) ERP shall be implemented at the corporate level by POSOCO. A provision of ₹ 300 lakh has been made for the same during 2012-13.
 - (e) Provision of ₹ 270 lakh has been made for procurement of the computer hardware and the software packages under the IT systems for power exchange, renewable Energy certificate coordination and integration of WAMS with the existing SCADA-EMS systems during 2011-14.

20. The Commission in order dated 21.9.2010 in Petition No. 230/2010 (suo motu) in the matter of determination of fee and charges payable under Regulation 11 of the Central Electricity Regulatory Commission (Terms and Conditions for Recognition and Issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010 has allowed NLDC to claim Revenue and Capital Expenditure in connection with the implementation of REC Mechanism. In Para 18 of the said order, the Commission has observed as under:

"18. Initially all the capital items related expenses of Central Agency are going to be funded through MNRE Grant. Any additional cost and expenses of Central Agency towards capital items, as well as operating expenses of manpower, administrative and general expenses, repairs and maintenance of assets, up-gradation and applicable taxes and duties could be met from the fee and charges paid by the Eligible Entities towards registration and issuance of REC."

The petitioner has also claimed capital cost associated with Renewable Energy Certificates and revenue cost would be covered in O&M expenses. The expenditure on account of REC Mechanism has been allowed to be capitalized as additional capital expenditure after prudence check. Any grant received from MNRE shall be adjusted and the capital cost to that extent shall be reduced at the time of truing up under Regulation 5 of the RLDC fees regulations.

DEBT- EQUITY RATIO

- 21. Regulation 8 of the the RLDC fees regulations provides as under:
 - "8. Debt-Equity Ratio. (1) The actual debt: equity ratio appearing in the books of accounts as on the date of transfer shall be considered for the

opening capital cost of National Load Despatch Centre and Regional Load Despatch Centres.

(2) For an investment made on or after the date of transfer, if the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan:

Provided that where equity actually deployed is less than 30% of the capital cost, the actual equity shall be considered for determination of charges:

Provided further that the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment.

Explanation.- The premium, if any, raised by the Power System Operation Company while issuing share capital and investment of internal resources created out of its free reserve, for the funding of the capital expenditure, and funds created out of the LDC Development Fund as approved by the Commission shall be reckoned as paid up capital for the purpose of computing return on equity, provided such premium amount and internal resources are actually utilised for meeting the capital expenditure."

- 22. On a scrutiny of the petition it is observed that total loan amount as per Form 4D, which shows debt-equity as on the date of commercial operation, does not reconcile with the actual loan details submitted by the petitioner in Form 5B. The petitioner was asked to reconcile the loans in the two forms. Petitioner in its reply vide affidavit dated 25.8.2010 in response to RoP has submitted that IBRD III loans drawl during the year i.e. IBRD III of ₹ 106.55 lakh (drawl date 12.5.2009) and ₹ 16.63 Lakhs (drawl date 15.5.2009) were drawn after date of commercial operation but have been included for funding cost upto date of commercial operation.
- 23. As per Form 5B actual loan as on 1.4.2009 is amounting to ₹ 1235.74 lakh. The financial package approved for the project as per form 4D is 70:30 and the Petitioner has claimed debt-equity in the ratio of 70:30 for the purpose of cost as on date of commercial operation. The same has been considered for the of purpose of calculation of annual charges.

24. The details of Debt-Equity of asset as on 1.4.2009 claimed by the petitioner in Form-4D (including IBRD III Loans of ₹ 123.18 lakh drawn after commercial operation but included for funding cost up to the date of commercial operation as per prayer of the petitioner) have been considered as debt-equity as on date of transfer which is given overleaf:-

Particulars	Financial Package a	as Approved	Actual Financial Pa	
	Amount (₹ in lakh)	%	Amount (₹ in lakh)	%
Debt	2243.37	70.00%	1358.92	54.13%
Equity	961.44	30.00%	1151.49	45.87%
Total	3204.81	100.00%	2510.41	100.00%

25. As stated above, the lease charges of fibre has been disallowed from the capital cost. Consequent thereto, the debt-equity has undergone a change. Accordingly, the details of debt-equity considered for the purpose of calculation of annual charges is as follows:

Particulars	Financial Package a	as Approved	Admitted Financial on DOC	Ū
Amount (₹ in lakh %		Amount (₹ in lakh)	%	
Debt	2243.37	70.00%	1358.90	70.00%
Equity	961.44	30.00%	582.38	30.00%
Total	3204.81	100.00%	1941.28	100.00%

26. As regards the projected additional capital expenditure, the same has been serviced in the debt-equity ratio of 70:30.

RETURN ON EQUITY

- 27. Regulation 12 of the RLDC fees regulations provides that,-
 - **"12. Return on equity. -** (1) Return on equity shall be computed in Rupee term on equity base determined in accordance with Regulation 8 of these regulations.

- (2) Return on equity shall be computed on pre-tax base rate of 16% to be grossed up as per the sub-clause (3) of this regulation.
- (3) The rate of return on equity shall be computed by grossing up the base rate with the normal tax rate for the financial year 2009-10 applicable to the Power System Operation Company:

Provided that return on equity with respect to the actual tax rate applicable to the Power System Operation Company in line with the provisions of the relevant Finance Acts of the respective year during control period shall be trued up at the end of the control period.

(4) Rate of return on equity shall be rounded off to three decimal points and be computed as per the formula given below:-

Rate of pre-tax return on equity = Base rate / (1-t)

Where t is the applicable tax rate in accordance with sub clause (3)".

28. UPPCL has questioned the rate of return at 16% instead of 15.5% given in CERC (Terms and Conditions of Tariff) Regulations and calculation of ROE at normal corporate tax rate. It is clarified that the charges of NLDC and RLDCs are not being determined under CERC(Terms and Conditions of Tariff) Regulations, 2009 and the applicable rate of return is 16% as per RLDC fees regulations. As regards the applicability of tax rate, the petitioner was asked vide ROP dated 29.7.2010 to submit the documents in support of the claim of rate of tax for the purpose of grossing up the return on equity and the details of tax benefits available under Section 80IA of the Income Tax Act, 1961. The petitioner in its affidavit dated 25.8.2010 has submitted that the issue has been examined in consultation with Statutory Auditors of PowerGrid and it has transpired that since the responsibilities and functions performed by NLDC and RLDCs are not covered under Section 80IA of the Income Tax Act, 1961, prima facie, the tax benefits under Section 80IA may not be available for NLDC and RLDCs. As regards the applicability of tax rate, it has been submitted that NLDC is under commercial operation with effect from 1.4.2009

and being a newly formed company, the applicability of tax rate to the company is not known, the corporate/normal tax rate was taken for computing the return on equity in the petition for fee and charges of NLDC. Moreover, para 3.3.3 of the Statement of Reasons of the RLDC fees regulations provides for computing return on equity on normal tax rate subject to truing up at the end of the control period. Accordingly, the petitioner has prayed that corporate/normal tax rate may be considered for computing ROE subject to truing up at the end of the control period. Since the rate of tax applicable to NLDC and RLDCs is not known, we are of the view that the rate of return should be calculated at normal/corporate tax rate to be trued up at the end of the control period. Accordingly, corporate tax rate has been considered for the purpose of computing the return on equity as a part of NLDC charges.

29. Return on Equity has been calculated at the normal/corporate tax rate in accordance with Regulation 12 of RLDC fees regulations as under:

(₹ in lakh)

		2009-10	2010-11	2011-12	2012-13	2013-14
Gross Notional Equity	582.38					
Addition due to additional capital expenditure	0.00					
Opening Equity	582.38	582.38	675.68	910.70	970.70	1060.70
Addition due to additional capital expenditure		93.29	235.03	60.00	90.00	45.00
Closing Equity		675.68	910.70	970.70	1060.70	1105.70
Average Equity		629.03	793.19	940.70	1015.70	1083.20
Return on Equity (Base Rate)		16.00%	16.00%	16.00%	16.00%	16.00%
Tax rate for the year 2009-10	30.00%	33.990%	33.990%	33.990%	33.990%	33.990%
Rate of Return on Equity (Pre Tax)		24.239%	24.239%	24.239%	24.239%	24.239%
Return on Equity (Pre Tax)		152.47	192.26	228.02	246.20	262.56

INTEREST ON LOAN

- 30. Regulation 13 of the RLDC fees regulations provides that,-
 - "13. Interest on loan capital. (1) The loans determined in accordance with Regulation 8 shall be considered as gross normative loan for calculation of interest on loan.
 - (2) The normative loan outstanding as on 1.4.2009 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2009 from the gross normative loan.
 - (3) The repayment for respective year of the control period shall be deemed to be equal to the depreciation allowed for that year.
 - (4) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio at the beginning of each year applicable to the respective Regional Load Despatch Centre:

Provided that if there is no actual loan for a particular year but normative loan is still outstanding, the last available weighted average rate of interest shall be considered:

Provided further that if the Regional Load Despatch Centre does not have actual loan, then the weighted average rate of interest of the Power System Operation Company as a whole shall be considered.

- (5) The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.
- (6) The Power System Operation Company shall make every effort to refinance the loan as long as it results in net savings on interest and in that event the costs associated with such re-financing shall be borne by the users and the net savings shall be shared between the users and the Power System Operation Company, as the case may be, in the ratio of 2:1.
- (7) The changes to the terms and conditions of the loans shall be reflected from the date of such re-financing.
- (8) In case of dispute, any of the parties may make an application in accordance with the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999, as amended from time to time, including statutory re-enactment thereof for settlement of the dispute:

Provided that the users shall not withhold any payment on account of the interest claimed by the users and the Power System Operation Company during the pendency of any dispute arising out of refinancing of loan."

- 31. In these calculations, interest on loan has been worked out in the following manner:
- (a) Gross amount of loan, repayment of instalments and rate of interest and weighted average rate of interest on actual average loan have been considered as per the petition.
- (b) The repayment for the tariff period 2009-14 shall be deemed to be equal to the depreciation allowed for that period.
- (c) Moratorium period availed by the transmission licensee, the repayment of the loan shall be considered from the first year of commercial operation of the project and shall be equal to the annual depreciation allowed.
- (d) Weighted average rate of interest on actual loan worked out as per (i) above is applied on the notional average loan during the year to arrive at the interest on loan.
- (e) The interest on Loan has been calculated on the basis of rate prevailing as on 01.04.2009. Any change in rate of Interest subsequent to 1.4.2009 will be considered at the time of truing up.
- 32. Details of the interest on loan has been worked on the above basis as under:

(₹ in lakh)

		2009-10	2010-11	2011-12	2012-13	2013-14
Gross Notional Loan	1358.90					
Addition due to additional capital expenditure	0.00					
Gross Normative Loan	1358.90	1358.90	1576.58	2124.98	2264.98	2474.98
Cumulative Repayment upto Previous Year		0.00	356.57	828.74	1404.78	2039.75
Net Loan-Opening		1358.90	1220.00	1296.23	860.20	435.23
Addition due to additional capital expenditure		217.68	548.40	140.00	210.00	105.00
Repayment during the year		356.57	472.17	576.03	634.97	540.23
Net Loan-Closing		1220.00	1296.23	860.20	435.23	0.00
Average Loan		1289.45	1258.12	1078.22	647.71	217.61
Weighted Average Rate of Interest on Loan		6.5284%	6.1729%	6.2101%	6.2246%	6.1739%
Interest		84.18	77.66	66.96	40.32	13.44

DEPRECIATION

- 33. Regulation 14 of the RLDC fees regulations provides for computation of depreciation in the following manner, namely:
 - **14. Depreciation. -** (1) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission.
 - (2) The salvage value of the asset (excluding IT equipments and Software's) shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset. The salvage value for IT equipments and Software's shall be considered as NIL and 100% value of the assets shall be considered depreciable.
 - (3) Land shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the capital cost of the asset.
 - (4) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in **Appendix-III** to these regulations for the assets of the Regional Load Despatch Centre.
 - (5) Assets fully depreciated shall be shown separately
 - (6) Value of the assets not in use or declared obsolete shall be taken out from the capital cost for the purpose of calculation of depreciation.
 - (7) The balance depreciable value as on the date of transfer shall be worked out by deducting the cumulative depreciation from the gross depreciable value of the assets appearing in the books of accounts of the Power System Operation Company for the respective Regional Load Despatch Centre and National Load Despatch Centre as on the date of transfer.
- 34. Depreciation has been calculated annually based on straight line method and at rates specified in Appendix-III as per Regulation 14. UPPCL has questioned the rate of depreciation for SCADA software at 30.00% and SCADA hardware at 15.00%. It is clarified that the claim has been made by the petitioner as per the depreciation schedule specified in RLDC fees regulations and the same has been accepted.

35. Details of the depreciation have been worked out as under:

(₹ in lakh)

		2009-10	2010-11	2011-12	2012-13	2013-14
Rate of Depreciation		17.0058%	17.8585%	18.3702%	18.7546%	19.3515%
Depreciable Value (excluding IT equipments and softwares)	90%	598.32	642.71	712.23	757.23	757.23
Depreciable value of IT equipments and softwares	100%	1431.97	1929.85	2344.31	2544.31	2769.31
Total Depreciable Value		2030.29	2572.55	3056.54	3301.54	3526.54
Remaining Depreciable Value		2030.29	2215.98	2227.80	1896.77	1486.79
Depreciation		356.57	472.17	576.03	634.97	698.72

OPERATION & MAINTENANCE EXPENSES

- 36. Regulation 15 of the RLDC fees regulations prescribes for methodology for computation of operation and maintenance expenses as extracted hereunder:
 - **15.** Operation and Maintenance Expenses (excluding human resource expenses). (1) Operation and maintenance expenses (excluding human resource expenses) shall be derived on the basis of actual operation and maintenance expenses for the years 2004-05 to 2008-09, based on the audited balance sheets. The O&M expenses shall be normalized by including abnormal operation and maintenance expenses, donation, loss-in-stock, prior-period adjustments, claims and advances written off, provisions, etc, if any, after prudence check by the Commission.
 - (2) The normalised operation and maintenance expenses, after prudence check, for the years 2004-05 to 2008-09, shall be escalated at the rate of 5.17% to arrive at the normalized operation and maintenance expenses at the 2008-09 price level respectively and then averaged to arrive at normalized average operation and maintenance expenses for the 2004-05 to 2008-09 at 2008-09 price level. The average normalized operation and maintenance expenses at 2008-09 price level shall be escalated at the rate of 5.72% to arrive at the operation and maintenance expenses for year 2009-10.
 - (3) The operation and maintenance expenses for the year 2009-10 shall be escalated further at the rate of 5.72% per annum to arrive at permissible operation and maintenance expenses for the subsequent years of the tariff period."
- 37. As may be seen from the above extracted provision, O&M expenses for the period 2009-14 is to be calculated based on the actual expenditure during 2004-05 to 2008-09. As submitted by the petitioner, NLDC was commissioned

only on 1.4.2009 and hence there is no historical data available. In view of this, the O&M expenditure has been calculated based on the expenditure during 2009-10 and by applying 5.72% escalation thereon as stated in the RLDC fees regulation. The expenses for AMC for SCADA have been considered as ₹ 194.43 lakh at the rate of 10% of ₹ 19443 lakhs which is considered reasonable. The above expenses have been admitted provisionally which shall be subsequently adjusted based on actual at the time of truing up under regulation 5 of the RLDC fees regulations.

- 38. As regards the repair and maintenance cost, the petitioner had submitted vide its affidavit dated 24.6.2010 that AMC for the already operational SCADA systems were awarded by the RLDCs at varying rates from 7 to 15% of the equipment cost. In case of NLDC, the AMC has been considered as 10% of the equipment cost. Repair and maintenance cost for civil works as well as plant and machinery is considered as 6% of the building and other civil works plus auxiliary supply. Accordingly, the maintenance expenses for 2009-10 has been worked out as ₹ 41.48 lakh. Appropriate escalation has been provided at 5.72% for the succeeding years. Needless to add that the above stated estimates will be trued up based on the actual expenditure data as per regulation 5 of the RLDC fees regulations.
- 39. As regards administrative and general expenditure, the petitioner has stated that the figures are inclusive of POSOCO corporate centre. It has been reported that the building wherein POSCO and NLDC are located is being jointly used by Powergrid and POSOCO. The methodology for apportioning the charges for common services between Powergrid and POSOCO is being

evolved. The figures are presently based on budget estimates. Further, a sum a sum of ₹ 80 lakh has been deducted from of ₹ 1099.13 lakh, towards security expenses, meeting, seminars, etc. and ₹ 1019.13 lakh has been allowed.

40. Based on the above, the following is allowed towards O&M expenditure other than human resources expenditure:

(₹ in lakh)

Total O&M expenses other than human resources expenses	1000.01	1121.21	1105.41	1447.00	1519.34
Total OSM expenses other than	1060.61	1121.27	1185.41	1447.66	1519.34
expenses, etc.					
Administrative and general	1019.13	1077.42	1139.05	1204.21	1273.09
Repairs and maintenance	41.48	43.85	46.36	243.45	246.25
	2009-10	2010-11	2011-12	2012-13	2013-14
	0000 40	0040 44	0044.40	0040 40	0040

HUMAN RESOURCE EXPENSES

- 41. Regulation 16 of the RLDC fees regulations provides that the O&M expenses in respect of Human Resources shall be calculated as per the following methodology:
 - "16. Human Resource Expenses. (1) Human resource expenses shall be derived on the basis of actual human resource expenses for the years 2004-05 to 2008-09, based on the audited balance sheets. The human resource expenses shall be normalized by excluding abnormal Human resource expenses, ex-gratia, VRS expenses, prior-period adjustments, claims and advances written-off, provisions, etc, if any, after prudence check by the Commission.
 - (2) The normalised human resource expenses, after prudence check, for the years 2004-05 to 2008-09, shall be escalated at the rate of 5.17% to arrive at the normalized human resource expenses at the 2008-09 price level respectively and then averaged to arrive at normalized average human resource expenses for the 2004-05 to 2008-09 at 2008-09 price level. The average normalized human resource expenses at 2008-09 price level shall be escalated at the rate of 5.72% to arrive at the operation and maintenance expenses for year 2009-10:

Provided that human resource expenses for the year 2009-10 shall be further rationalized considering 50% increase in employee cost on account of pay

revision of the employees of the Public Sector Undertakings to arrive at the permissible operation and maintenance expenses for the year 2009-10.

- (3) The human resource expenses for the year 2009-10 shall be escalated further at the rate of 5.72% per annum to arrive at permissible human resource expenses for the subsequent years of the tariff period."
- 42. The petitioner has submitted that the human resource expenses for NLDC have been calculated considering the present employee cost to the company and escalating it at the rate of 5.72% for the subsequent years as provided in the RLDC fees regulations. Manpower has been increased progressively in line with the GB Pradhan Committee Report and to meet the functional requirement for fulfilling various functions assigned to NLDC.
- 43. The petitioner has proposed the number of employees in NLDC during the period 2009-10 to 2013-14 as under:

	2009-10	2010-11	2011-12	2012-13	2013-14
Executives	29	54	68	79	89
Non-Executives	12	15	20	20	20
Total	41	69	88	99	109

The petitioner has submitted the projected HR expenses for the period 2009-10 to 2013-14 as under:

₹ in lakhs

Financial Year	2009-10	2010-11	2011-12	2012-13	2013-14
HR Cost	696.94	1306.15	1749.39	2116.22	2493.66

44. The petitioner has requested that Human resources expenses be allowed based on cost to company (CTC). Needless to add that the above prayer is not in conformity with the RLDC fees regulations. As the historical data is not available for computation of the O&M expenses in accordance with the RLDC fees regulations, the expenditure has been calculated on

provisional basis based on the unaudited data for 2009-10 subject to the condition that the same shall be trued up in accordance with regulation 5 of the RLDC fees regulations.

- 45. Regarding the justification for increase in number of employees from 41 to 109 during the control period of 2009-14, the petitioner has submitted that the projected manpower combines the requirements of NLDC and POSOCO Corporate Center and has been proposed in view of the additional responsibilities like Transmission Pricing, Renewable Energy Certificates, Integration of Renewable Energy Sources with Grid, Power Exchanges, collection and disbursement of funds, ancillary services etc. which have been recently entrusted to NLDC and POSOCO Corporate. It is further submitted that the manpower requirement projected in the petition is in line with the recommendations of G.B. Pradhan Committee report and the RLDC fees regulations.
- 46. We have considered the submission of the petitioner. GB Pradhan Committee Report contained the following recommendation with regard to manpower:

"3.1 Manpower requirement

The Load Despatch Centres have to function round-the-clock with suitably skilled manpower for System Operation, Market Operation, research, analysis, regulatory affairs, logistics (system data acquisition, Energy Management, communication, IT systems) and other establishment services to carry out the functions discussed in Section 2.3 of this report. A literature survey and a reality check of all the LDCs with the help of a survey were done to assess the manpower requirements. Considering the prevailing work load and the likely responsibilities that will arise in the future, an assessment of the staffing requirement for a typical LDC has been made and is placed at Annex-IX. The committee perceives the LDC as an executive oriented body with

people predominantly from the field of Electrical Engineering supported by other faculties such as Electronics Engineering, Information Technology etc. Further, additional persons with Commerce, Economics, Humanities and Legal background would also be required to look after financial and legal aspects. It would be seen that on an average 60 to 70 skilled executives might be required in a typical LDC."

47. The Commission has taken due cognizance of the importance of manpower in RLDCs/NLDC in the Statement of Objects and Reasons of the RLDC fees regulations. The relevant para is extracted as under:

"3.77 The Commission recognizes the increase in responsibilities of RLDCs/NLDC over the years starting with implementation of Availability Based Tariff (ABT), short term open access in inter-State transmission, integration of regional grids and the recent operation of multiple Power Exchanges. The operation of the Indian electricity grid would only become more and more complex necessitating demand for ancillary services. Integration of renewable energy sources and introduction of Renewable Energy Certificates (RECs) and its entire administration would be another major challenge. The RLDCs/NLDC would have to be strengthened considerably in terms of human resource to undertake these additional responsibilities. Such a situation has already been envisaged by the Pradhan committee. It is expected that the RLDCs/NLDC would factor these requirements suitably."

48. In view of the above, we find that there is sufficient justification for additional manpower as projected by the petitioner, subject to prudence check. The petitioner has proposed to increase the executive strength from 29 up to 89 by 2014 which includes 56 for NLDC and 33 for POSOCO Corporate. G B Pradhan Committee has recommended 60 to 70 number of executives for a typical Load Despatch Centre (LDC). However, functions of NLDC are different from a typical LDC in that while a typical LDC has scheduling and grid operation as main functions, NLDC is primarily concerned with coordination with RLDCs for inter-regional scheduling and monitoring of the Indian power system apart from other works to be done as a centralized

agency for implementing various initiatives at central level. After prudence check, the number of executives for NLDC and POSOCO Corporate has been allowed as 74 in 2014. The number of non-executives has been kept at existing level keeping in view of the specialized functions and introduction of modern office technologies.

49. Keeping in view above factors, the HR expenses allowed to the petitioner have been calculated as under:

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Man-power Cost on the level of 2009-10	696.94	736.81	778.95	823.51	870.62
Additional Man-power Cost	0.00	467.24	759.96	883.77	976.79
Total HR Expenses	696.94	1204.05	1538.91	1707.28	1847.40
No. of Employees (Executive and non-executive; including POSOCO Corporate)	41	67	81	85	87

INTEREST ON WORKING CAPITAL

- 50. Regulation 18 of the RLDC fees regulations, provides as under:
 - **18. NLDC Charges and Corporate Office Expenses. -** (1) To the extent applicable, NLDCcharges shall be computed by following the methodology specified for computing annual charges of Regional Load Despatch Centres except interest on working capital.
 - (2) The Corporate Office Expenses, computed in accordance with the actual expenses incurred, shall be allowed by the Commission, after prudence check.
 - (3) NLDC charges and corporate office expenses shall be apportioned to the Regional Load Despatch Centre on the basis of the demand served in the respective region.
- 51. The petitioner has not claimed any interest on working capital as it is not admissible in case of NLDC in accordance with Regulation 18(1) of RLDC fees regulations.

NLDC CHARGES

52. NLDC charges which have been allowed in this order are summarized as under:

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	356.57	472.17	576.03	634.97	698.72
Interest on Loan	84.18	77.66	66.96	40.32	13.44
Return on Equity	152.47	192.26	228.02	246.20	262.56
O & M Expenses Excluding Human Resource Expenses	1060.61	1121.27	1185.41	1447.66	1519.34
Human Resource Expenses	696.94	1204.05	1538.91	1707.28	1847.40
Total	2350.77	3067.42	3595.33	4076.43	4341.45

CHARGES FOR FIBRE LEASE

53. In para 13 of the order, we have not allowed capitalization of ₹ 569.13 lakh on account of leasing of fibres as it does not add to the capital asset of the petitioner. However, the expenses were incurred in connection with the commissioning of the NLDC project which is in the interest of the respondents. Therefore, the said amount will be directly reimbursed by the beneficiaries/users on pro-rata basis.

PRE-INCORPORATION EXPENSES

54. The petitioner has claimed an amount of ₹ 127.09 lakh towards preincorporation expenses. This expense has been incurred for
incorporation of POSOCO which has been created in pursuance of
the mandate given in sub-section (3) of section 26 and proviso to
sub-section (2) of section 27 of the Act. Since creation of POSOCO as
an independent organization serves a larger public purpose, we
direct that the expenditure shall be directly reimbursed by the
users/beneficiaries on pro-rata basis.

PUBLICATION EXPENSES

55. The petitioner has sought approval for the reimbursement of expenditure in connection with the publication of notices in the newspaper and other expenditure relating to filing the petition. Since the expenditure has been incurred for meeting a statutory requirement, we allow the direct reimbursement of these expenses by the users/beneficiaries on pro-rata basis.

SERVICE TAX

- 56. The petitioner has made a specific prayer to be allowed to bill and recover the Service tax on Transmission charges separately from the respondents, if the petitioner is subjected to service tax. At present, system operation is not subject to service tax. Therefore, the prayer of the petitioner is premature.
- 57. As per Regulation 18(3) of the RLDC fees regulations, NLDC charges and Corporate Office expenses shall be apportioned to the Regional Load Despatch Centres on the basis of the demands served in the respective regions. Accordingly, the NLDC charges and corporate office expenses and other fees as approved by us in this order shall be apportioned among the five RLDCs on the basis of the demand served during the period April 2009 to March 2010, as per the Peak Demand and Peak Met report published by Central Electricity Authority, a copy of which is enclosed as **Annexure** to this order.

58. This order disposes of Petition No. 83/2010.

Sd/- Sd/- Sd/- Sd/
(M.Deena Dayalan) (V.S.Verma) (S.Jayaraman) (Dr. Pramod Deo)

Member Member Member Chairperson

<u>Peak Demand and Peak Met (Revised) for the period April, 2009 to March, 2010 based on the Power Supply Position Report of Central Electricity Authority.</u>

State / System / Region	March, 2010				April, 2009 – March, 2010			
	Peak Demand	Peak Met	Surplus / D	eficit (-)	Peak Demand	Peak met Surp		lus / Deficit
	(MW)	(MW)	(MW)	(%)	(MW)	(MW)	(MW)	(%)
Chandigarh	195	195	0	0.0	308	308	0	0.0
Delhi	3,411	3,411	0	0.0	4,502	4,408	-94	-2.1
Haryana	5,398	4,618	-780	-14.4	6,133	5,678	-455	-7.4
Himachal Pradesh	1,095	1,095	0	0.0	1,118	1,158	40	3.6
Jammu & Kashmir	2,247	1,441	-806	-35.9	2,247	1,487	-760	-33.8
Punjab	6,355	5,497	-858	-13.5	9,786	7,407	-2,379	-24.3
Rajasthan	6,567	6,567	0	0.0	6,859	6,859	0	0.0
Uttar Pradesh	10,332	8,133	-2,199	-21.3	10,856	8,563	-2,293	-21.1
Uttarakhand	1,269	1,207	-62	-4.9	1,397	1,313	-84	-6.0
Northern Region	32,594	28,741	-3,853	-11.8	37,159	31,439	-5,720	-15.4
Chattisgarh	2,264	2,582	-82	-3.1	2,819	2,703	-116	-4.1
Gujarat	10,040	9,047	-993	-9.9	10,406	9,515	-891	-8.6
Madhya Pradesh	6,973	5,910	-1,063	-15.2	7,490	6,415	-1,075	-14.4
Maharashtra	19,388	14,664	-4,724	-24.4	19,388	14,664	-4,724	-24.4
Daman & Diu	236	236	0	0.0	280	255	-25	-8.9
Dadar Nagar Haveli	514	477	-37	-7.2	529	494	-35	-6.6
Goa	485	437	-48	-9.9	485	453	-32	-6.6
Western Region	39,609	32,586	-7,023	-17.7	39,609	32,586	-7,023	-17.7
Andhra Pradesh	12,168	10,880	-1,288	-10.6	12,168	10,880	-1,288	-10.6
Karnataka	7,942	6,897	-1,045	-13.2	7,942	6,897	-1,045	-13.2
Kerala	3,109	2,982	-127	-4.1	3,109	2,982	-127	-4.1
Tamil Nadu	11,125	9,738	-1,387	-12.5	11,125	9,813	-1,312	-11.8
Pondicherry	327	288	-39	-11.9	327	294	-33	-10.1
Lakshadweep	6	6	0	0.0	6	6	0	0.0
Southern Region	32,178	29,049	-3,129	-9.7	32,178	29,049	-3,129	-9.7
Bihar	1,975	1,475	-500	-25.3	2,249	1,509	-740	-32.9
DVC	1,938	1,910	-28	-1.4	1,938	1,910	-28	-1.4
Jharkhand	894	881	-13	-1.5	1,088	947	-141	-13.0
Orissa	3,075	3,048	-27	-0.9	3,188	3,120	-68	-2.1
West Bengal	6,094	5,963	-131	-2.1	6,094	5,963	-131	-2.1
Sikkim	87	85	-2	-2.3	96	94	-2	-2.1
Andaman –	40	32	-8	-20.0	40	32	-8	-20.0
Nicobar								
Eastern Region	13,220	12,275	-945	-7.1	13,220	12,384	-836	-6.3
Arunachal Pradesh	80	71	-9	-11.3	95	78	-17	-17.9
Assam	830	788	-42	-5.1	920	874	-46	-5.0
Manipur	93	91	-2	-2.2	111	99	-12	-10.8
Meghalaya	280	204	-76	-27.1	280	250	-30	-10.7
Mizoram	65	59	-6	-9.2	70	64	-6	-8.6
Nagaland	96	95	-1	-1.0	100	96	-4	-4.0
Tripura	135	132	-3	-2.2	176	173	-3	-1.7
North-Eastern	1,565	1,358	207	-13.2	1,760	1,445	-315	-17.9
Region								
All India	119,166	104,009	-15.157	-12.7	119,166	104,009	-15,157	-12.7

Lakshadweep and Andaman & Nicobar Islands are stand-alone systems, power supply position of these, does not form part of regional requirement and availability