CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI

Petition No. 100/2010

Coram: **Dr. Pramod Deo, Chairperson**
Shri S.Jayaraman, Member
Shri V.S.Verma, Member
Shri M.Deena Dayalan, Member

Date of Hearing: 29.7.2010 **Date of Order: 18.3.2011**

In the matter of:

Approval of fees and charges of North Eastern Regional Load Despatch Centre (POSOCO portion) under sub-section (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 the control period 1.4.2009 to 31.3.2014

And

In the matter of:

Power Grid Corporation of India Ltd **……Petitioner**

Vs

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

1. Chairman, ASEB, Bijuli Bhavan, Paltan Bazar, Guwahati-781001
2. Chairman, MeSEB, Lumjingshai, Short Round Road, Shillong-793001
3. 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
6. Chief Engineer (Power), Dept. of Power, Govt. of Nagaland, Kohima- 797001
7. Chief Engineer (Power), Dept. of Power, Govt. of Manipur, Imphal- 795001

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

1. General Manager, Doyang HEP, NEEPCO, Wokha,

Nagaland General Manager, Ranganadi HEP, NEEPCO, P.O. Ranganadi Proj. Dist. Subansiri, Ar. Pradesh-791121
2. General Manager, AGBPP, NEEPCO, Kathalguri, Tinsukia, Assam
3. General Manager, AGTPP, NEEPCO, Ramchandranagar, Agartala, Tripura
4. General Manager, KHANDONG HEP, NEEPCO, Umrangsoo, N.C.Hills, Assam
5. General Manager, KOPILI HEP, NEEPCO, Umrangsoo, N.C.Hills, Assam
6. General Manager, KOPILI-2 HEP, NEEPCO, Umrangsoo, N.C.Hills, Assam
7. Chief Engineer, NHPC Loktak HEP Leimatak-795124, Manipur

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

1. 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 T.S.Sinha, NERLDC

ORDER

This petition has been filed by Power Grid Corporation of India Ltd. on behalf of the Power System Operation Corporation Ltd. (POSOCO) for approval of the fees and charges of North-Eastern Regional Load Despatch Centre for the control period 1.4.2009 to 31.3.2014 under Sub-section (4) of

Section 28 of Electricity Act 2003 (hereinafter referred to as "the Act") read with Regulation 4 of Central Electricity Regulatory Commission (fees and charges of Regional Load Despatch Centre and other related matters) Regulations 2009 (hereinafter referred to as "the RLDC fees regulations"). The petitioner has sought the following reliefs:

(a) Approve the charges for NERLDC for the control period 2009-14 as per para 9 of the petition;

(b) Approve the CAPEX as mentioned in para 8 of the petition;

(c) Allow the petitioner to bill and adjust impact of interest on loan due to change in interest rate on account of floating rate of interest applicable during 2009-14, if any;

(d) Allow the petitioner to bill and recover Service Tax on RLDC charges separately from the respondents, if petitioner is subjected to such service tax;

(e) Allow the petitioner to bill and adjust impact on HR expenses due to revision of pay in case of non-executives with effect from 1.1.2007 during 2009-14 period, if any, from the respondents;

(f) Allow the petitioner to bill and adjust impact on transfer of building/part of building where NERLDC is located and other associated facilities like staff quarters from POWERGRID(NERTS) during 2009-14 from the respondents;

(g) Approve the reimbursement of expenditure towards publishing of notices in Newspapers and other expenditure (if any) in relation to the filing of petition;

(h) Allow Power Grid on behalf of POSOCO to raise bills and receive payments for ERLDC and allow POSOCO to raise bills and receive payments on commencement of business of POSOCO;

(i) Allow petitioner to bill and recover pre-incorporation expenses of POSOCO as one time charges from the users; and

(j) Pass such other order as the Commission deems fit and appropriate in these circumstances of the case and in the interest of justice.

2. 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 Centers (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 27 of the Act provides that the Central Govt. shall establish a centre for each region to be known as Regional Load Despatch Centre having territorial jurisdiction as determined by the Central Govt. for the purposes of exercising the powers and discharging the functions under the Act. The RLDC shall be operated by Government company or authority or corporation established or constituted by or under any central Act as may be notified by the Central Government. Section 28 of the Act deals with the functions of the Regional Load Despatch Centre which is extracted as under:

> ***"Section 28. (Functions of Regional Load Despatch Centre): ---*** *(1) The Regional Load Despatch Centre shall be the apex body to ensure integrated operation of the power system in the concerned region.*
>
> *(2) The Regional Load Despatch Centre shall comply with such principles, guidelines and methodologies in respect of the wheeling and optimum scheduling and despatch of electricity as the Central Commission may specify in the Grid Code.*
>
> *(3) The Regional Load Despatch Centre shall –*
>
> *(a) be responsible for optimum scheduling and despatch of electricity within the region, in accordance with the contracts entered into with the licensees or the generating companies operating in the region;*

(b) monitor grid operations;

(c) keep accounts of quantity of electricity transmitted through the regional grid;

(d) exercise supervision and control over the inter-State transmission system; and

(e) be responsible for carrying out real time operations for grid control and despatch of electricity within the region through secure and economic operation of the regional grid in accordance with the Grid Standards and the Grid Code.

(4) The Regional Load Despatch Centre may levy and collect such fee and charges from the generating companies or licensees engaged in inter-State transmission of electricity as may be specified by the Central Commission."

4. North Eastern Regional Load Despatch Centre (NERLDC) is the apex body to ensure integrated operation of the Eastern Regional Power System. NERLDC is empowered under Section 29(1) of the Act to give such directions and exercise and supervision and control as may be required for ensuring stability of grid operation and for achieving the maximum economy and efficiency of the power system in the North-Eastern Region. NERLDC is also responsible for carrying out real time operations for grid control and despatch of electricity over inter-regional links in accordance with the Grid Standards and the Grid Code.

5. Establishment of RLDCs and SLDCs was taken up by the petitioner as a unified project under the Unified Load Despatch and communication (ULDC) project. Under this project, Remote Terminal Units (RTUs) and associated equipments were installed at the substations, hardware and software systems were installed at control centers. Communication network systems were laid for data/speech communication between substations and control centers. The ULDC scheme of NERLDC was declared under commercial operation with effect from 1.8.2003. The revised cost estimates

were approved by the Government of India vide letter dated 31.3.2003 at an estimated cost of ₹ 26381 lakh including IDC of ₹ 3460 lakh out of the which the central sector portion was ₹ 25000 lakh**.**

6. The scope of work under ULDC scheme was as under:

   (i) Establishment of Control Centers at Regional and State level for Supervisory Control and Data Acquisition (SCADA) and Energy Management System (EMS) which includes Regional System Coordination Centre (RSCC), Central Project Coordination Centre and State Load Despatch Centers and sub LDCs.

   (ii) Remote Terminal Units (RTUs) at various 400 kV/220 kV/132 kV substations and generating stations.

   (iii) Adaptation work at substation and generating stations to meet the requirement of data acquisition through RTUs.

   (iv) Associated dedicated communication network comprising fibre optic, microwave and PLCC terminals for state and central sector.

   (v) Auxiliary power supply system comprising Uninterrupted Power Supply (UPS) and 48 V DC power supply are provided at all the control centers at some wideband locations including control centers for communication equipment.

   (vi) Other infrastructural facilities such as air-conditioning, fire-fighting, construction/renovation of buildings, etc.

7. Tariff for the NER-ULDC for the period up to 31.3.2009 was approved by the Commission vide its order 3.2.1009 in Petition No. 147/2005. The petitioner has submitted that the SCADA/EMS system commissioned at the time of commissioning was considered to be having life of 15 years. However, in view of the fast changing power sector scenario in India, implementation of ABT and fast obsolescence of technology has resulted in shorter life span of the SCADA/EMS system installed under the ULDC scheme. It has been further submitted that Government of India constituted a Task Force under the chairmanship of Shri Satnam Singh, CMD, Power Finance Corporation of India Limited to look into the financial aspects of augmentation and upgradation of Load Despatch Centre and issues related to emoluments for personnel engaged in System Operation. The recommendations of the Task Force regarding ownership of ULDC assets as under:

(a) Ownership of new RTUs should rest with the entities in whose premises these RTUs would be located. Regarding ownership of existing as well as work-in-progress RTUS in central sector stations and state sector stations, these could rest with the CTU and STUs/SEBs respectively as per the prevailing arrangement. However, in due course of time, modalities for their transfer to actual entities can be planned by mutual consent.

(b) The responsibility of owning and providing the communication system from substation to the nearest control centre as well as between control centres should continue to be that of CTU or

STUs/SEBs. However, in case of any special requirements, the LDCs can assess, plan and take on lease such communication system from other telecom service providers also.

(c) The computer system along with software and peripherals located in the control centre building of NLDC/RLDCs and SLDC/Sub-LDCs should be transferred to respective entities managing these LDCs.

8. The petitioner has further submitted that the Task Force also recommended a life span of 5 to 7 years for the system in operation and 3 years for normal IT systems. Since the present system is under Annual Maintenance Contract with the Original Equipment Manufacturer up to January 2013, it would be just possible to meet the grid operation requirement up to 2014 with some up-gradations in the present system and some optimization in terms of resources, and beyond that, the present system would have to undergo a major up-gradation/replacement.

9. The petitioner has submitted that in line with the recommendations of the Task Force, the control centre at the regional level (RSCC) with SCADA and EMS functions along with the associated power supply, air conditioning and other infrastructure facilities would be transferred to the RLDC for discharging its statutory functions out of the scope of ULDC. For identifying the assets to be transferred, committees comprising the members of Central Transmission Utility and RLDCs were constituted and based on the report of these committees, the assets for transfer to POSOCO(NLDC and RLDCs)

were identified and book values of the assets (gross block and net block) as on 1.4.2009 were finalized. The Board of Power Grid in its 235th meeting held on 15.4.2010 approved the book value of the assets to be transferred to POSOCO as on 1.4.2009 and it was also decided that book value of assets on 31.3.2009 would be further updated to 31.3.2010 before proceeding with the actual transfer to be effected from 1.4.2010. The petitioner has further submitted that separate accounts are being maintained as per the RLDC fees regulations based on the assets value as on 1.4.2009. Accordingly, the petition has been filed for approval of fees and charges of NERLDC for the control period from 1.4.2009 to 31.3.2014. The petitioner has placed on record a copy of the certificate dated 2.5.2010 from the Chartered Accountant showing the segregation of assets and opening capital cost of assets in NER-ULDC as on 1.4.2009 which is placed as Annexure-III to the Affidavit dated 28.5.2010.

10. The petitioner has claimed the following fees and charges:

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	672.97	711.26	322.92	373.74	1081.70
Interest on Loan	9.12	0.00	0.00	33.01	60.33
Return on equity	27.00	42.21	61.21	124.47	232.53
Interest on Working Capital	50.47	63.08	66.85	80.46	107.82
O & M Expenses Excluding Human Resource Expenses	374.20	399.20	460.07	497.99	553.29
Human Resource Expenses	731.40	1068.83	1366.02	1657.55	1912.31
NLDC Charges	36.07	47.31	56.03	64.01	66.75
Total	**1901.23**	**2331.90**	**2333.10**	**2831.23**	**4014.73**

11. None of the respondents have filed reply to the petition.

12. Having heard the parties and examined the material on records, we proceed to dispose of the petition.

13. 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 of North Eastern Region up to the date of transfer of assets to POSOCO (NERLDC) and after the transfer, billing shall be made on the beneficiaries/users by NERLDC.

<u>CAPITAL COST</u>

14. 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."*

15. The petitioner has claimed the following capital expenditure during 2009-14 as under:

(₹ in lakh)

Expenditure up to	Balance estimated expenditure during 2009-14					Total estimated expenditure
31.3.2009	2009-10	2010-11	2011-12	2012-13	2013-14	31.3.2014
2657.20	36.00	382.40	140.00	1600.00	1372.00	6187.71

16. The petitioner has submitted Auditor's certificate dated 2.5.2010 in support of its claim of capital cost as on 1.4.2009 amounting to ₹ 2657.20 lakh, which includes ₹ 2296.08 lakh received from Government of India as Grant. However, for the purpose of tariff calculation, the petitioner in its affidavit dated 28.5.2010 has revised the claim for capital cost to ₹ 361.12 lakh after excluding the Government of India Grant. The amount of ₹ 361.12 lakh has been considered for the purpose of determination of fees and charges of NERLDC. CAPEX of ₹ 3530.40 lakh projected by the petitioner during the control period 2009-14 has been considered under additional capital expenditure.

17. It is noticed that the capital expenditure projected by the petitioner includes cost of replacement of certain assets. However, the value of the assets not in use has not been removed from the capital base in accordance with proviso to Regulation 6(1) of RLDC fees regulations as quoted above. The petitioner is directed to comply with the requirement of Regulation 6(1) of RLDC fees regulations and file the necessary details at the time of truing up of the fees and charges allowed under this order.

ADDITIONAL CAPITAL EXPENDITURE

18. 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."*

19. The petitioner in its affidavit dated 25.6.2010 has submitted that CAPEX plan of ₹ 3530.40 lakh shall be incurred during 2009-14 for the following:

(a) Renovation and modernization of office area of NERLDC at fifth floor of the existing building at Shillong;

(b) Procurement of IT systems, software package for open access application, power exchange scheduling software, ERP, data ware house, DTS, replacement of the existing SCADA;

(c) Procurement of new auxiliary power supply system as back-up to the existing setup; and

(d) Procurement of communication system for real time communication with Remote Control of SLDCs.

20. The petitioner has further submitted that the CAPEX for NERLDC has been planned in line with the RLDC fees regulations and the recommendations of G B Pradhan Committee and Task Force under Shri Satnam Singh. It has been submitted that the Task Force has recommended

a CAPEX of ₹ 74.35 crores for a typical load dispatch centre during the period 2009-14 with year-wise break up under the following major heads as under:

(₹ in lakh)

CAPEX AS PER THE RECOMMENDATIONS OF SATNAM SINGH REPORT							
S. No.	**Item**	**2009-10**	**2010-11**	**2011-12**	**2012-13**	**2013-14**	**Total**
1	Control Centre upgradation	920	1200	2650	350	350	5470
2	Off-line system	310	85	85	145	125	750
3	Infrastructure	450	280	145	185	155	1215
4	Total	1680	1565	2880	680	630	7435

21. The petitioner has submitted that its CAPEX plan has been approved by the management keeping in view the recommendations of the Task Force. The details of CAPEX plan are as under:

(₹ in lakh)

Heads of Expenditure	**2009-10**	**2010-11**	**2011-12**	**2012-13**	**2013-14**	**Total**
Civil works	0.00	25.00	0.00	0.00	0.00	25.00
IT systems	36.00	337.40	130.00	1600.00	1360.00	3463.40
Power supply	0.00	20.00	0.00	0.00	12.00	32.00
Communication system	0.00	0.00	10.00	0.00	1050.67	10.00
Total	**36.00**	**382.40**	**140.00**	**1600.00**	**1372.00**	**3530.40**

22. The petitioner has submitted the following justification in support of its CAPEX plan for 2009-14:

(i) The civil works would be carried out in 2010-11 for development of the office facilities for NERLDC. An estimated expenditure of ₹ 25.00 lakh would be incurred towards renovation and modernization in 2010-11. The estimates are based on approved CPWD per square feet rates for building structure.

(ii) Procurement of the IT systems involving both hardware and software for various RLDC specific functions as well as replacement of existing SCADA have been estimated progressively from 2009-10 to 2013-14. Open access hardware and software have already been procured and others are under installation/procurement process.

(iii) Enterprises Resource Planning (ERP) is under implementation at corporate level and the same system would be shared by NERDLC alongwith other RLDCs. Provision of ₹ 100 lakh has been made towards the same.

23. Subsequently, the petitioner vide its affidavits dated 3.1.2011 has submitted the detailed break-up of hardware and software component as applicable for the CAPEX projected for the control period 2009-14. The petitioner has submitted that Despatcher Training Simulator (DTS) proposed to be implemented in 2010-11 at an estimated cost of ₹ 275 lakh and back-up control centre at an estimated cost of ₹ 10 lakhs in 2013-14 may not be considered. Expenditure if any on account of these items would be claimed at the time of truing up.

24. We have considered the CAPEX plan submitted by the petitioner in the light of the provisions of the RLDC fees regulations, the justifications advanced in support of the claim and the responsibilities entrusted to the RLDCs under the Act and various regulations of the Commission. In our view,

the CAPEX plan submitted by the petitioner needs to be approved except the following expenditure:

(a) The petitioner has claimed an amount of ₹ 30.00 lakh during 2011-12 on account of implementation of power tracing methodology. In this connection, it is noted that we have accorded approval for funding of the project from the surplus in UI pool vide order dated 11.9.2008 issued on File No.20/10(6)/2007-CERC. Since funds have been made available from surplus in UI pool for this purpose, we are not inclined to allow CAPEX of ₹ 30 lakh during 2011-12 on account of implementation of power tracing methodology.

(b) The petitioner has also claimed a CAPEX of ₹ 10.00 lakh on account of R & D expenditure and pilot project proposed to be incurred in 2012-13. Clause (3) of Regulation 9 of RLDC fees regulations provides that POSOCO shall be entitled to utilize the money deposited in LDC Development Fund for funding R & D projects including other things. Therefore, proposed expenditure for R & D project is not separately allowed under CAPEX.

(c) The expenditure towards DTS and back-up control centre has not been considered in this order in view of the submission by the petitioner in its affidavit dated 3.1.2011.

(d) An expenditure of ₹ 50 lakhs has been proposed by the petitioner to procure software for offline study. Out of ₹ 50 lakhs, an amount of ₹ 30 lakhs has been allowed keeping in view the amount proposed/allowed in other RLDCs for similar purpose.

25. Further, the reasoning for the modifications and curtailments effected against some of the items are as under:

(a) The petitioner has classified an expenditure of ₹ 25 lakh for CAPEX in the year 2010-11 in the category 'Others' as per Annexure-III (Depreciation Schedule) with rate of depreciation of 5.28%. However, the expenditure pertains to renovation of 5th floor behind canteen and hence same has been classified under category 'Building and Civil Works-containing plant and equipments' with rate of depreciation of 3.34%. Petitioner has claimed ₹ 50 lakh for Software for Offline Study (IT Software), This has been restricted to ₹ 30 lakh.

(b) As stated above, in respect of replacement of certain items, proposed CAPEX has been considered without taking into consideration removal of original cost and cumulative depreciation pertaining to assets being replaced. This will be considered at the time of truing up.

(c) Petitioner has claimed CAPEX for Communication system for RC SLDCs (in 2011-12) in the Head of 'Others' with rate of depreciation 5.28%. However, the same has been considered under the head of 'Communication Equipments' with rate of depreciation being 6.33%.

(d) Petitioner has followed different methodologies for treatment of CAPEX Expenditure with regard to certain items such as Metering Data Processing Systems, classification of IT Equipments in Hardware and Software etc. These have been considered as per affidavit dated 3.1.2011.

(e) The petitioner has claimed ₹ 400 lakh (₹ 100 lakh in 2011-12, ₹ 200 lakh in 2012-13 and ₹ 100 lakh in 2013-14) for implementation of WAMS and PMU in North-Eastern Region. The expenditure for pilot scheme of WAMS/PMU, if envisaged, shall be incurred under CAPEX only after approval of NERPC which will be adjusted at the time of truing up.

26. In view of the above, the capital expenditure including CAPEX allowed to North Eastern Regional Load Despatch Centre are as under:

(₹ in lakh)

Details	As on 31.3.2009	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Block	361.12	361.12	397.12	484.52	594.52	2184.52
Additional Capital expenditure		36.00	87.40	110.00	1590.00	1362.00
Capital cost allowed		397.12	484.52	594.52	2184.52	3546.52

DEBT- EQUITY RATIO

27. Regulation 8 of 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 Centers.*

(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 utilized for meeting the capital expenditure."*

28. The following detail of debt-equity of asset as on 1.4.2009 claimed by the petitioner in Form-4D has been considered as on date of transfer:-

Particulars	**Financial Package as on 1.4.2009**	
	Amount (₹ in lakh)	**%**
Debt	255.12	70.65%
Equity	106.00	29.35%
Total	**361.12**	**100.00%**

29. It is also noticed that in the total capital cost of the project is ₹ 361.12 lakh, actual debt claimed in form 5B is ₹ 255.10 lakh and there is a minor difference of ₹ 2000/- which has been taken by the petitioner in Debt. The same has been considered for the purpose of tariff calculations. Debt-equity ratio of 70:30 has been adopted for the additional capital expenditure and accordingly equity base for different years of the tariff period has been determined.

RETURN ON EQUITY

30. 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)"*

31. The petitioner has prayed that corporate/normal tax rate may be considered for computing ROE subject to truing up at the end of 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 part of RLDC charges.

32. Return on equity has been calculated at the normal/corporate tax rate in accordance with Regulations 12 of RLDC fees regulations as under Details of return on equity calculated are as under:

(₹ in lakh)

		2009-10	2010-11	2011-12	2012-13	2013-14
Opening Equity	106.00	106.00	116.80	143.02	176.02	653.02
Addition due to additional capital expenditure		10.80	26.22	33.00	477.00	408.60
Closing Equity		116.80	143.02	176.02	653.02	1061.62
Average Equity		111.40	129.91	159.52	414.52	857.32
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)		**27.00**	**31.49**	**38.67**	**100.48**	**207.81**

INTEREST ON LOAN

33. 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 re-finance 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"

34. The interest on loan has been calculated on the basis of rate prevailing as on 1.4.2009. It has been submitted that change in interest rate due to floating rate of interest applicable, if any, for the project may be allowed to be claimed or adjusted for the control period directly from the beneficiary. The petitioner in its affidavit dated 28.5.2010 has clarified that the rate of interest of proposed loans as shown in Form 5B have been taken notionally as per Bond XXX for the rate of interest only. The petitioner in its affidavit dated 30.8.2010, has further submitted that that POWERGRID and POSOCO has made back to back arrangement with Power Grid to pay annual principal repayment and interest. The petitioner has considered actual loans and the proposed loans for the computation of weighted average rate of interest for calculation of interest on loan.

35. In these calculations, interest on loan has been worked out as detailed below:

(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) 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 (a) above is applied on the notional average loan during the year to arrive at the interest on loan. However, if there is no actual loan for a particular year but normative loan is still outstanding, the last available weighted average rate of interest has been considered.

(e) Actual loans have been entirely repaid in the year 2012-13. The petitioner has claimed additional capital expenditure during 2009-14 period due to which the normative loan remains unpaid during the year 2013-14. The last available Weighted Average rate of interest i.e. 12.25% has been applied for calculation of interest on loan for the year 2013-14 which is subject to truing up at the end of the tariff period.

36. Details of the interest on loan worked on the above basis is as under:

(₹ in lakh)

		2009-10	2010-11	2011-12	2012-13	2013-14
Gross Normative Loan	255.12	255.12	280.32	341.50	418.50	1531.50
Cumulative Repayment upto Previous Year		100.87	196.38	303.15	418.50	734.12
Net Loan-Opening		154.25	83.94	38.35	0.00	797.38
Addition due to additional capital expenditure		25.20	61.18	77.00	1113.00	953.40
Repayment during the year		95.51	106.77	115.35	315.62	646.69
Net Loan-Closing		83.94	38.35	0.00	797.38	1104.09
Average Loan		119.09	61.14	19.17	398.69	950.73
Weighted Average Rate of Interest on Loan		12.2500%	12.2500%	12.2500%	12.2500%	12.2500%
Interest		**14.59**	**7.49**	**2.35**	**48.84**	**116.46**

DEPRECIATION

37. 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.*

38. Depreciation has been calculated annually based on Straight Line Method and at rates specified in ***<u>Appendix-III</u>*** as per Regulation 14 of the RLDC fees regulations. The petitioner has claimed depreciation rate of 9.5% for Refrigerator Cooler and AC-Office for opening capital cost as on 1.4.2009 for an expenditure of ₹ 0.32 lakh Since the items of Refrigerator Cooler has been included therein the same has been classified under category 'Office equipment' with rate of depreciation of 6.33%.

39. The petitioner in the affidavit dated 28.5.2010 has stated that ***<u>Pro-rata</u>*** grant of ₹ 2296 lakh have been allocated to POSOCO assets out of total grant (including central and state portion) of ₹ 17525 lakh drawn for NER ULDC Scheme. No separate grant has been drawn for POSOCO (NERLDC). The petitioner has claimed depreciation on gross block of assets including amount funded out of the Government Grant of ₹ 2296.08 lakh. However, depreciation has been allowed on the gross block of assets as proportionately reduced by Grant amount from all assets and proportionately reducing cumulative depreciation amount as on 1.4.2009. The above view taken by us is in conformity with the earlier decision of the commission in its order dated 31.3.2003 in Review Petition No.145/2002 in Petition No.46/2000 extracted hereinbelow:

> *"33. The parties have also referred to the Accounting Standard 12 of the Institute of Chartered Accountants of India, which lays down the procedure for treatment of Government grants in the accounts. Government grants are assistance by Government in cash or kind to an enterprise for past or future compliance with certain conditions. They exclude those forms of government assistance which cannot reasonably have a value placed upon them and transactions with government which cannot be*

distinguished from the normal trading transactions of the enterprise. Accounting Standard 12 provides the following method for accounting of Government grants in the financial statements:

> *"Government grants related to specific fixed assets should be presented in the balance sheet by showing the grant as a deduction from the gross value of the assets concerned in arriving at their book value. Where the grant related to a specific fixed asset equals the whole, or virtually the whole, of the cost of the asset, the asset should be shown in the balance sheet at a nominal value. Alternatively, government grant related to depreciable fixed assets may be treated as deferred income which should be recognised in the profit and loss statement on a systematic and rational basis over the useful life of the asset, i.e. such grant should be allocated to income over the periods and in the proportion in which depreciation of on those assets is charged."*

34. From the above, it is observed that there can be two alternative methods of presentation in financial statements of grants related to specific assets, which are

(i) The grant is shown as a deduction from the gross value of the asset concerned in arriving at its book value. The grant is thus recognized in the Profit & Loss statement over the useful life of a depreciable asset by way of a reduced depreciation charge. Where the Grant equals the whole or virtually the whole of the cost of the asset, the asset is shown in the Balance sheet at a nominal value.

(ii) Grant related to depreciable assets are treated as deferred income, which is recognized in the profit and loss statement on a systematic and rational basis over the useful life of the asset. Such allocation to income is usually made over the periods and in the proportions in which depreciation on related assets is charged.

35. The Commission in its order dated 20.8.2002 had allowed the tariff in accordance with the first alternative. However, it may be observed that although treatment of grant for the purpose of depreciation is different in both the alternatives but the net impact on tariff on account of depreciation is same. Under first alternative, the gross block is reduced by the amount of grant and the depreciation is provided on reduced gross block. Under second alternative, depreciation is provided on the total gross block but the amount equal to the depreciation on the specific assets related to grant is shown as income in the respective year in the Profit and Loss Account and would be deductible from the tariff.

36. From the above it may be observed that the historical cost of the asset and not the replacement cost of the asset is to be considered for depreciation in the tariff. The historical cost (the completion cost) of Chandrapur HVDC back-to-back station is Rs. 931.51 crore. Out of this amount, Rs 321.55 crore was recovered through ODA grant, leaving a balance of recoverable amount of Rs. 609.96 crore, which has been allowed to be recovered through tariff as depreciation as per the Commission's order dated 20.8.2002.

37. Now we proceed to examine the matter from the point of view of PGCIL, whose contention is that depreciation is the replacement cost of the asset. If for the sake of argument, it is presumed to be so, the end result cannot be different. If PGCIL had placed the order on the total amount of capital cost, it would have incurred an additional amount of Rs.321.55 crores, equivalent to ODA grant. In a sense, this amount had not been spent and is with the PGCIL. In the light of above discussion PGCIL cannot be permitted to recover the sum of Rs, 321.55 crore equivalent to ODA grant afresh as an element or depreciation through tariff, for, this would mean *double recovery, resulting in its unjust enrichment at the cost of the user of the transmission system or the ultimate consumer. We cannot, therefore, allow ODA grant to be recovered afresh through Depreciation.*

38. We have approached the issue raised by PGCIL from different perspectives. However, not withstanding our finding that that ODA grant of Rs. 321.55 crore is a part of the actual capital expenditure on construction of Chandrapur HVDC back-to-back station, our conclusion remains unaltered that it does not qualify for recovery through depreciation. The earlier decision of the Commission on this issue cannot be faulted on any count whatsoever. We therefore reject the contention of PGCIL on this ground."

40. Accordingly, grant has been reduced from assets proportionately as on 1.4.2009 as well as from the cumulative depreciation. Depreciation has been claimed as per rate specified in ***Appendix-III*** of the RLDC fees regulations.

41. Details of the depreciation worked out are as under:

(₹ in lakh)

		2009-10	2010-11	2011-12	2012-13	2013-14
Rate of Depreciation		25.1922%	24.2217%	23.2023%	22.7145%	22.5680%
Depreciable Value (excluding IT equipments and softwares)	90%	16.39	36.64	61.39	65.89	71.29
Depreciable value of IT equipments and softwares	100%	360.91	400.11	471.31	1316.31	2786.31
Total Depreciable Value		377.30	436.75	532.70	1382.20	2857.60
Balance Useful life of the asset		-	-	-	-	-
Remaining Depreciable Value		231.05	194.99	184.16	908.48	2068.26
Depreciation		**95.51**	**106.77**	**125.18**	**315.62**	**646.69**

OPERATION & MAINTENANCE EXPENSES

42. Regulation 15 of the RLDC fees regulations prescribes the for methodology for computation of operation and maintenance expenses:

***"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 excluding 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."

43. The petitioner has considered under Operation and Maintenance Expenses the expenditure to be incurred on repair and maintenance of SCADA/EMS system, AC Plant, DG set, other charges towards water, power supply, housekeeping etc. and administrative and general expenses. The petitioner has claimed the following O & M expenses as under:

(₹ in lakh)

Items	2009-10	2010-11	2011-12	2012-13	2013-14
Repairs and maintenance expenses	206.21	218.01	230.48	243.66	257.60
Administrative and general expenses	85.19	90.06	95.22	100.66	106.42
Total	291.40	308.07	325.69	344.32	364.02

44. The petitioner in its affidavit dated 25.6.2010 has submitted that the Repair and Maintenance (R&M) expenditure indicated for 2004-05 to 2008-09 in Form 7C are based on audited expenditure for the relevant years. It has been further submitted that the maintenance of SCADA equipment is the major cost component in overall R&M expenditure of ERLDC (POSOCO) and is required to be considered while estimating the future expenditure and its reimbursement. Hence, the normative value has been taken to arrive at the indicative normalized R&M expenditure at the price level of 2009-10 inclusive of maintenance of SCADA equipments.

45. Regarding Administrative and General Expenses, the petitioner has submitted that the expenditure indicated in Form 7D of the petition are based on the audited expenditure for the period 2004-05 to 2008-09 and the same has been normalized as per Regulation 15 of the RLDC fees regulations.

46. It is seen from the documents placed on record that the AMC for SCADA/EMS was awarded on 16.6.2008 whereas the petitioner has taken notional AMC expenditure of ₹ 167.60 lakhs during 2004-05 to 2007-08 to arrive at the Repair & Maintenance Cost in 2009-10. For the purpose of calculation, actual AMC of ₹167.60 lakh for each of the years during 2009-14 has been considered. For other items under R&M, the normalized R&M expenditure is calculated on the basis of actual expenditures during 2004-05 to 2008-09 and has been escalated as per the methodology given in Regulation 15 of RLDC fees regulations as quoted above.

47. Based on the above, the following O&M expenses have been allowed under O&M expenses:

(₹ in lakh)

ITEMS	2009-10	2010-11	2011-12	2012-13	2013-14
Repairs and maintenance expenses	180.17	180.89	181.65	182.46	183.30
Administrative and general expenses	85.19	90.06	95.22	100.66	106.42
Total	265.36	270.95	276.87	283.12	289.72

Human Resource Expenses

48. Regulation 16 of the RLDC fees regulations provides that the Human Resources shall be calculated as per the following methodology:

> *"(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, ifany, 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".*

49. The petitioner has submitted that Human Resource Expenses for NERLDC have been calculated taking the present employee cost to company (CTC) and escalating it @ 5.72% for the subsequent years as provided in the RLDC fees regulations. It has been further submitted manpower has been increased progressively to meet the shortfall which is in line with the G.B. Pradhan Committee Report and for meeting the functional requirements to discharge the following functions entrusted to RLDCs:

(a) facilitating the reform process in the Indian Power Sector

(b) expanding market option functions under power exchange, short term open access, medium term contracts, long term contracts

(c) collection and disbursement of large funds

(d) ancillary services

(e) institutional building

(f) capacity building of SLDCs

(g) integration of renewable energy sources

(h) any other functions assigned by Govt. of India and CERC from time to time

50. The petitioner has claimed the projected human resources expenses as under:

(₹ in lakh)

Financial Year	2009-10	2010-11	2011-12	2012-13	2013-14
HR Cost	731.40	1068.83	1366.02	1657.55	1912.31

51. In compliance with the direction of the Commission, the petitioner has submitted the revised calculation on HR expenses vide affidavit dated 1.11.2010. It has been submitted that HR expenses have been arrived at by considering the actual HR expenses for the period 2004-05 to 2008-09 and normalizing the same for the period 2009-10 to 2013-14 as per Regulation 16 of RLDC fees regulations. The revised HR expenses submitted by the petitioner as under:

(₹ in lakh)

Financial Year	2009-10	2010-11	2011-12	2012-13	2013-14
Normalised HR expenses	568.27	779.73	954.70	1106.07	1221.18

52. The petitioner has further submitted the details of provisions included in HR expenses during 2006-07. As per Regulation 16 of RLDC fees regulations, the provisions and ex-gratia are not to be allowed. Accordingly, provision for ₹ 128.55 Lakhs and ₹ 263.67 lakhs during 2007-08 and 2008-09, respectively ha s been excluded from actual; HR expenses during these years, while calculating the normalized HR expenses. Similarly, ₹ 2.78 lakhs, ₹ 45.04 lakhs and ₹. 5.48 lakhs towards ex-gratia has been excluded from HR expenses during the years 2004-05, 2005-06, 2005-06 and 2007-08 , respectively.

53. Regarding the increase in number of employees during the control period of 2009-10 to 20013-14, it has been submitted that this increase is in line with G.B. Pradhan Committee Report where the requirement for skilled manpower has been recommended as under:

> ***"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."*

54. We do appreciate the significance of the human resource especially in the context of RLDC/NLDC. In this connection, the following observation by the Commission in the Statement of Objects and Reasons for the RLDC fees regulation is relevant:

> *"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."*

55. Considering the above the additional manpower requirement of NERLDC has been considered for calculation of Human Resource Expenses during 2009-14. The following human resource expenses have been allowed:

(₹ in lakh)

HR-Expenses	2009-10	2010-11	2011-12	2012-13	2013-14
HR-Cost Based on the norms as per Regulations 16 of RLDC fees regulations	510.65	539.86	570.74	603.39	637.90
HR Cost for Additional Man-Power Requirement	0.00	53.99	114.15	156.88	229.65
Total HR-Expenses	**510.65**	**593.85**	**684.89**	**760.27**	**867.55**
Number of employees (executive and non executive	50	55	60	63	68

INTEREST ON WORKING CAPITAL

56. Regulation 17 of the RLDC fees regulations provides as under:

> ***"17. Interest on Working Capital.-*** *(1) The working capital shall cover :*
>
> *(i) Operation and maintenance expenses excluding human resource expenses for one month;*
>
> *(ii) Human resource expenses for one month;*
>
> *(iii) NLDC charges for one month; and*

> *(iv) Receivables equivalent to two months of the system operation charges and market operation charges as approved by the Commission.*
>
> *(2) Rate of interest on working capital shall be on normative basis and shall be equal to the shortterm Prime Lending Rate of State Bank of India as on 1.4.2009.*
>
> *(3) Interest on working capital shall be payable on normative basis notwithstanding that the Power System Operation Company has not taken any loan for working capital from any outside agency."*

57. Interest on working capital has been calculated based on the following:

(a) O&M expenses except HR expenses: O&M expenses as allowed under para 48 above has been considered for one month on pro-rata basis.

(b) Human Resource Expense: Human resource expenses as allowed under para 55 above has been considered for one month on pro-rata basis.

(c) NLDC Charges for one month: Charges equivalent to one month of NLDC charges approved vide our order dated 14.2.2011 in Petition No. 83/2010 has been considered.

(d) Receivables: Receivables equivalent to two months of system operation charges and market operation charges as determined under Regulation 20 of RLDC fees regulations.

58. While calculating the rate of interest on working capital, the State Bank of India Prime Lending Rate as on 1.4.2009 @ of 12.25% has been considered. It is clarified that as per Regulation 17(3) of RLDC fees regulations, interest on working capital is payable on normative basis

notwithstanding the fact that the petitioner has not taken any loan from any outside agency for working capital.

59. Accordingly, interest on working capital has been worked out as under:

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
NLDC Charges	2.69	3.50	4.11	4.66	4.96
O & M Expenses Excluding Human Resource Expenses	21.47	21.93	22.42	22.95	23.50
Human Resource Expenses	42.55	49.49	57.07	63.36	72.30
Receivables	160.91	179.33	200.72	266.71	373.00
Total	227.61	254.25	284.32	357.67	473.75
Rate of interest	12.25%	12.25%	12.25%	12.25%	12.25%
Interest	**27.88**	**31.15**	**34.83**	**43.81**	**58.03**

NLDC CHARGES

60. Regulation 18 (3) of the RLDC fees regulations provides for apportionment of the NLDC charges and corporate office expenses among the RLDCs as under:

> *"(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."*

61. In accordance with the above provision, NLDC charges as approved vide our order dated 14.2.2011 in Petition No. 83/2010 have been apportioned among the five Regional Load Despatch Centers to be recovered along with their fees and charges.

RLDC FEES AND CHARGES

62. Fees and charges for Eastern Regional Load Despatch Centre allowed during the control period 2009-14 are summarized as under:

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	95.51	106.77	125.18	315.62	646.69
Interest on Loan	14.59	7.49	2.35	48.84	116.46
Return on Equity	27.00	31.49	38.67	100.48	207.81
Interest on Working Capital	27.88	31.15	34.83	43.81	58.03
O & M Expenses Excluding Human Resource Expenses	257.58	263.17	269.09	275.34	281.94
Human Resouce Expenses	510.65	593.85	684.89	760.27	867.55
NLDC Charges & Corporate Office expenses	32.23	42.06	49.29	55.89	59.52
Total	**965.44**	**1075.97**	**1204.30**	**1600.25**	**2238.01**

PRE-INCORPORATION EXPENSES

63. The petitioner has prayed to be allowed to bill and recover the pre-incorporation expenses of POSOCO as onetime charges from the users. We have already approved reimbursement of pre-incorporation expenses by the users in our dated 14.2.2011 in Petition No. 83/2010. The expenditure will be proportionately recovered by the RLDCs from their users.

PUBLICATION EXPENSES

64. 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

65. 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

TRANSFER OF BUILDING

66. The petitioner has prayed to be allowed to bill and adjust impact on transfer of building/part of building of ERLDC and other associate facilities likes staff quarters from POWERGRID during 2009-14 period from the respondents. We find that there is no demand from POWERGRID for transfer of office building and staff quarters. Moreover, the expenditure has not been included in the CAPEX plan for 2009-14 and accordingly, the same has not been considered during the control period.

67. The fees and charges allowed shall be recovered on monthly basis in accordance with Regulation 26 of the RLDC fees regulations.

68. This order disposes of Petition No. 100/2010.

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