

Report of the Task Force
on
Capital Expenditure
and
Issues Related to
Emoluments for Personnel
in
Load Despatch Centres

March 2009
New Delhi

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Acronyms

AMC	Annual Maintenance Contracts	LTC	Leave Travel Concession
ARF	Annual Recovery Factor	MO	Market Operation
ARR	Annual Revenue Requirement	NER	North Eastern Region
BBMB	Bhakra Beas Management Board	NLDC	National Load Despatch Centre
CAPEX	Capital Expenditure	NMS	Network Management System
CEA	Central Electricity Authority	NPTI	National Power Training Institute
CERC	Central Electricity Regulatory Commission	NR	Northern Region
CIGRE	International Council on Large Electric Systems Conseil International Des Grands Reseaux Electriques	O & M	Operation & Maintenance
		PFC	Power Finance Corporation Limited
CPRI	Central Power Research Institute	PMS	Performance Management System
CPSU	Central Public Sector Undertaking	PMU	Phasor Measurement Unit
		POWERGRID	Power Grid Corporation of India Limited
CTU	Central Transmission Utility	PRC	Pay Revision Committee
DA	Dearness Allowance	PRP	Performance Related Pay
DG	Diesel Generator	PX	Power Exchange
DOCO	Date of Commercial Operation	REBs	Regional Electricity Boards
DVC	Damodar Valley Corporation	RLDC	Regional Load Despatch Centre
EMS	Energy Management System	RTU	Remote Terminal Unit
EMTP	Electro Magnetic Transient Program	SCADA	Supervisory Control and Data Acquisition System
ER	Eastern Region	SEB	State Electricity Board
ERCs	Electricity Regulatory Commissions	SERCs	State Electricity Board
ERP	Enterprise Resource Planning	SL	System Logistics
FERV	Foreign Exchange Rate Variation	SLDC	State Load Despatch Centre
FOLD	Forum of Load Despatchers	SO	System Operation
HRA	House Rent Allowance	SR	Southern Region
IEE	Institute of Electrical and Electronic Engineers	STU	State Transmission Utility
		ULDC	Unified Load Despatch and Communication Project
IT	Information Technology	UPS	Uninterrupted Power Supply
IWC	Interest on Working Capital	VSAT	Very Small Aperture Terminal
KMS	Knowledge Management System	WAM	Wide Area Measurements
KRA	Key Result Area	WR	Western Region
LDCs	Load Despatch Centres		

Executive Summary

The Task Force was constituted by Ministry of Power, Government of India vide order dated 13th October 2008, “*to look into the financial aspects for augmentation and up gradation of State Load Despatch Centres and issues related to emoluments (compensation structure, incentives etc.) for the personnel engaged in System Operation and give its recommendations.*” Terms of reference of the Task Force is enclosed as Annex-I. This Task Force was constituted to facilitate implementation of the recommendations of the “Report of the Committee of Manpower, Certification and Incentives for System Operation and ring-fencing Load Despatch Centres” chaired by Shri Gireesh Pradhan, Additional Secretary, Ministry of Power (hereinafter referred to as the Gireesh Pradhan Committee throughout this report).

The Task Force had two meetings held on 17th December 2008 and 27th February 2009 in New Delhi. The recommendations of the Task Force have been compiled in the form of a report that comprises of two parts. Part-I covers financial aspects of augmentation and up-gradation of Load Despatch Centres. Part-II covers issues related to emoluments for personnel engaged in Load Despatch Centres. The salient features of the findings of the Task Force and its recommendations are placed ahead.

Salient points of Part-I: Financial aspects for augmentation and up gradation

1. Augmentation of the RLDCs and SLDCs was taken up as a unified project by POWERGRID under the Unified Load Despatch and Communication (ULDC) project. Under this project Remote Terminal Units (RTUs) and associated equipment were installed at the substations, hardware and software systems were installed at control centres. Communication network system was laid for data/speech communication between substations and control centres and between control centres.

The recommendations of the Task Force regarding ownership of the assets are 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.
 - d) The recovery of tariff in respect of the assets to be retained or created in future by CTU/STUs/SEBs, as per the methodology suggested above, could be appropriately charged as per norms prevailing from time-to-time.
2. The initial investment by POWERGRID in the ULDC project for central sector and State sector was Rs. 1826.09 crore, comprising of Rs. 1386.77 crore from loan, Rs. 264.07 crore from equity and Rs. 175.25 crore (for NER) from grant in aid. Of this total initial investment of Rs. 1826.09 crore, the investment on Central Sector portion was Rs. 754.56 crore and on

State Sector portion was 1071.53 crore. The recovery of investment by POWERGRID for this project is through a levelized tariff approved by the CERC.

After taking into account the recovery made so far, the total outstanding amount (as on 31st December 2008) to be recovered by POWERGRID (excluding grant of Rs. 147.36 crore) is to the tune of Rs. 1230.61 crore; consisting of Rs. 1035.81 crore of outstanding loan (against initial loan of Rs. 1386.77 crore) and Rs. 194.80 crore of outstanding equity (against initial equity of Rs. 264.07 crore). Out of this outstanding amount of Rs. 1230.61 crore the total amount to be recovered in respect of the Central Sector portion as on 31st December 2008 is Rs 452.75 crore, comprising of Rs 409.76 crore as the outstanding loan and Rs 42.99 crore, as the outstanding equity. Similarly the total outstanding amount to be recovered in respect of the State Sector portion as on 31st December 2008 is Rs. 777.86 crore, comprising of Rs. 626.05 crore as the outstanding loan and Rs.151.81 crore as the outstanding equity. The break up of the outstanding assets and liabilities in respect of the investments made by POWERGRID under ULDC project apportioned to CTU, NLDC/RLDCs, STUs and SLDCs (with further segregation into Control Centres, RTUs and Communication categories) is enclosed as Annex-III. Similarly an investment of Rs. 219 crore was made by States under the ULDC project and this amount also needs to be apportioned to STUs/SLDCs.

3. Section 6.1 (b) of the Gireesh Pradhan committee recommends that the financial accounts for all LDCs need to be separated by 31st March 2009. Considering the intricacies involved in separation of accounts, the Task Force recommends that the transfer of assets from CTU to NLDC/RLDCs or to SEBs/STUs/SLDCs and/or from SEBs/STUs to respective SLDCs, as the case may be, should be completed by 30th June 2009. In respect of the buildings/parts of buildings where these load dispatch centres are operational and other associated facilities like staff quarters etc., including

assets from CEA, the identification and transfer of such assets to the respective LDCs be also effected by 30th June 2009. Simultaneously any old/unused/condemned/unserviceable items also need to be identified and written off/disposed off and/or transferred at nil value to LDCs.

4. In order to continuously upgrade and strengthen the load despatch centres to meet the growing requirements, each LDC would further augment and upgrade the online, offline and civil infrastructure at its own level. The Task Force recommends that the recovery period of LDC assets, particularly in respect of IT infrastructure characterized by high obsolescence such as computer hardware/software etc. may be worked out considering a life of 3 to 7 years. The salvage value of such assets may also be considered as nil. However for other infrastructure facilities such as building, DG set etc. the life span as per the conventional method can be considered. A typical CAPEX for a typical Load Despatch Centre is enclosed as Annex-IV.
5. The Task Force recommends that the LDCs could finance their assets by raising funds from financial institutions. Any margin money required for such schemes could flow from the surplus funds accumulated through revenue streams approved by the Electricity Regulatory Commissions (ERCs).
6. The Task Force recommends that the regulations on LDC fees and charges to be specified by the ERCs should have three separate components - one for recovery of Capital investments, second for employee related expenses in Load Despatch Centre and the third for O&M and other general expenses related to equipment and other civic services. The fees and charges should be recovered from the generators and licensees availing the services of LDCs as specified by the respective ERCs in the form of System Operation Charge and Market Operation Charge.

7. The NLDC charges, the corporate office expenses and any other common expenses of the new entity (subsidiary company of POWERGRID being created by Government of India to look after the national and regional grid operation functions) may be apportioned to the five RLDCs and recovered as a part of the RLDC charges.

Salient points of Part-II: Emoluments for personnel

1. In order to give its recommendations on the issue related to emoluments (compensation structure and incentive etc.), the Task Force examined the data pertaining to the existing emoluments of the personnel employed at various Load Despatch Centres viz. by the CTU at RLDCs and by some of the STUs in different regions. viz. at Delhi, Haryana and Himachal Pradesh in Northern Region, Assam and Meghalaya in North-eastern Region, West Bengal in Eastern Region, Andhra Pradesh in Southern Region and Gujarat and Maharashtra in Western Region. The data sheets are enclosed as Annex-V. As a common finding it has been observed that the LDCs are in general experiencing problems in attracting and retaining talent and the task force is of the opinion that one possible reason for this could be the not so attractive compensation structure in force and this problem needs to be addressed in right earnest. The Task Force has also found that there is a considerable variance in the emoluments of the personnel at various Load Despatch Centres due to the difference in pay structure, pay scales and perquisites offered by the parent organizations of LDCs.
2. In line with the recommendations of the Gireesh Pradhan Committee report, the Task Force reiterates the need for a suitable compensation structure in LDCs and also opines that a uniform pay structure for personnel across all LDCs would have been an ideal situation. However the varying paying capacity of the parent organizations of LDCs and the need to honour local imperatives such as maintaining parity amongst the different employees working within the same organization, irrespective of their functional deployment, shall also have

to be kept into consideration. Taking into account these factors and to have a practicable approach, the Task Force recommends that the basic pay and perquisites of the LDC personnel should be based on the pay scale of the respective organizations and the Performance Related Pay and other incentives should be based on a standard criteria as suggested in this report. The Task Force also recommends that the total emoluments of the LDC personnel may be limited to 150 % of the total emoluments of similarly placed personnel in the respective transmission utility. For this purpose emoluments would include the basic pay and perquisites, performance related pay and the certification linked incentives but excluding the contingency duty allowance.

3. The Task Force recommends that the emoluments of the personnel at LDCs may comprise of five parts-
 - a. Basic Pay and perquisites derived from parent organization
 - b. Performance Related Pay (PRP) based on the performance of the respective Load Despatch Centres and that of the individual employee.
 - c. Incentive linked to acquisition of basic, specialist and management level certificates by the LDC personnel. A lump sum amount indexed to the ceiling value of the basic pay at the middle management level could be made available to all the eligible executives during the entire validity period of the Certificate. Minimum monthly amount for Basic, Specialist and Management level certificates should be Rs. 5000, Rs. 7500 and Rs. 5000 respectively.
 - d. Contingency duty allowance equal to 50 % of the per day basic pay for contingency duty / night shift.
 - e. Special awards for recognition of exceptional performance. This could be based on the credit point earned during the year by the LDC

personnel for contributions such as training/mentoring subordinates, writing technical papers etc.

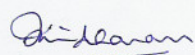
4. An illustration of calculation of Performance Related Pay at various levels in a typical LDC and a comparison of the existing and proposed emoluments at various levels in a typical LDC is attached as Annex-VI and VII respectively. Brief details of the suggested Key Result Areas (KRAs) for assessment of the performance of LDC and the Performance Management System (PMS) for measuring the performance of individuals are suggested in Annex-VIII and Annex-IX respectively.

Acknowledgement

The Task Force is grateful to the Ministry of Power- Government of India and Central Electricity Regulatory Commission for the motivation and guidance provided to the Task Force for accomplishing the given assignment.

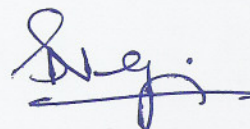
The Task Force acknowledges the extensive support provided by the Central Transmission Utility, State Transmission Utilities, Regional Load Despatch Centres, State Load Despatch Centres and Power Finance Corporation in the form of input data and other logistics.

Special thanks to the Sh K. Biswal, Chief (Finance), Central Electricity Regulatory Commission; Sh. Niraj Gulati, Chief Engineer, Haryana Vidyut Prasaran Nigam Limited; Sh. M. M. Chaudhari, Dy. Executive Engineer, Gujarat Energy Transmission Corporation Limited; Sh. D. Ravi, General Manager, Power Finance Corporation and Sh. S. K. Soonee, Executive Director (System Operation), POWERGRID, Sh. V.K. Agrawal, General Manager (NRLDC), Sh. J.S. Gulati, Deputy General Manager (Corporate Finance), POWERGRID for their suggestions and contribution in preparation of this report.



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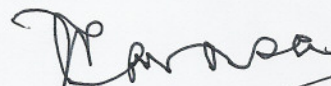
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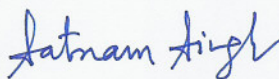
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March 2009

New Delhi

Introduction

A committee on “Manpower, Certification and Incentives for System Operation and Ring-fencing of Load Despatch Centres” was set up under the chairmanship of Shri Gireesh B. Pradhan, Additional Secretary, Ministry of Power on 04th February 2008 (herein after referred to as the Gireesh Pradhan committee). The committee submitted its report to the Government on 18th August 2008. Subsequently a Task Force was constituted by Ministry of Power Government of India vide order dated 13th October 2008, “to look into the financial aspects for augmentation and up gradation of State Load Despatch Centres and issues related to emoluments (compensation structure, incentives etc.) for the personnel engaged in System Operation and give its recommendations.” The Government of India order for creation of the Task Force is enclosed as Annex-I. CMD, Power Finance Corporation was the Chairman of the Task Force while Secretary, CERC was the Member Secretary of the Task Force. The other members in the Task Force were Director (Finance), Power Grid Corporation of India Limited, Secretary (Power), Haryana and Managing Director, Gujarat Electricity Transmission Corporation. The Task Force had two meetings held on 17th December 2008 and 27th February 2009 in New Delhi.

Data with regard to the investments done by POWERGRID under the Unified Load Despatch and Communication (ULDC) project in the RLDCs/ SLDCs was provided by POWERGRID. Relevant tariff orders by CERC were also referred. The issues discussed during the meeting on 23rd January 2009 between CERC staff and POWERGRID regarding segregation of assets created through the ULDC project were also considered. Typical data on present emoluments of personnel in various Load Despatch Centres and Transmission Utilities was also obtained from the POWERGRID and a few State Transmission Utilities in every region. Based on the above input data, literature survey and

the discussion in the two meetings, a report containing the recommendations of the Task Force has been prepared.

The report comprises of two parts. Part-I covers financial aspects of augmentation and up-gradation of Load Despatch Centres. Part-II covers issues related to emoluments for personnel engaged in Load Despatch Centres.

PART-I

FINANCIAL ASPECTS OF AUGMENTATION AND UP-GRADATION OF LOAD DESPATCH CENTRES

1 Functional autonomy of Load Despatch Centres

All the Load Despatch Centres (LDCs) are similar in functioning. The relevant extracts from the Recommendations of the Gireesh Pradhan committee for functional autonomy of the LDCs are quoted below

Quote

“6.1 Recommendation 1

The Committee recommends that the LDCs should be ring-fenced suitably to ensure their functional autonomy by taking the following steps:

- a) The Appropriate Government should take suitable steps to facilitate independent functioning of the Load Despatch Centres in line with the Electricity Act 2003 and National Electricity Policy. To begin with, the State Governments are urged to create a separate representative board structure for governance of LDCs on the lines of wholly owned subsidiary being created for the independent System Operation of RLDCs and NLDC.
- b) The financial accounts should be separated for all LDCs by 31st March 2009 with the appropriate Electricity Regulatory Commissions (ERC) specifying the fees and charges payable.

- c) Capital Expenditure (CAPEX) plans for modernization of all LDCs during 2009-12 should be submitted and the approval of the respective Electricity Regulatory Commission (ERC) should be obtained by 31st March 2009. The Central Transmission Utility (CTU) and Regional Load Despatch Centres (RLDCs) should extend the necessary assistance to SLDCs in this area.
- d) In the next stage, rolling 5-year CAPEX plans should be prepared by each LDC and got approved by the respective ERCs to take care of the system expansion, associated real-time data requirements as well as technological innovations and obsolescence of control centre equipment. ERCs may examine CAPEX proposal considering a shorter life cycle of 7-10 years for such equipment.

6.2 Recommendation 2

For making LDCs financially self-reliant, the Electricity Regulatory Commissions (ERCs) should recognize the three distinct revenue streams:

- a) Fees and charges for system operation
- b) Tariff for decision support system and IT infrastructure (currently only ULDC tariff)
- c) Operating charges for scheduling, metering and settlement for market players.

All Generating Companies and licensees using the services of the LDCs would make all the above payments. In addition the LDCs could provide value added services (studies, manpower development, reports, access to data archives etc), on chargeable basis.”

Unquote

The issues related to implementation of the above recommendations are discussed in the subsequent sections below.

2 Past CAPEX on Load Despatch and Communication facilities

The five RLDCs were transferred to POWERGRID between 1994-96. At this point of time, the SLDCs continued to be part of the bundled SEB. Earlier when the RLDCs were being operated by CEA, the funding for any capital expenditure and the subsequent Operation and Maintenance (O & M) expenses used to come from the budgetary support provided by the Central Government. This budgetary support got discontinued after the transfer of RLDCs to POWERGRID. Marginal improvements in RLDCs such as mini-SCADA, VSAT communication links etc. were taken up by POWERGRID on a reimbursement basis after discussion in the erstwhile Regional Electricity Boards (REBs).

2.1 Investment by POWERGRID under the unified project

Augmentation of the Control Centres at RLDCs/SLDCs level was taken up as a unified project by POWERGRID under the Unified Load Despatch and Communication (ULDC) project. The award for Northern Region and Southern region Control centres were placed sometime in January 1998 and these control centres were declared under commercial operation in mid-2002. Subsequently, the other control centres viz. in North Eastern, Eastern and Western Regions were commissioned by 2006. All the five regional control centres commissioned by POWERGRID had a total outlay of close to Rs. 1826 crore. The region wise break up is given in **Table-1**.

Table 1: Investment in ULDC project by POWERGRID

S. No.	Region	Gross block Central Portion (Rs. Crore)	Gross block State Portion (Rs. Crore)	Gross block Total (Rs. Crore)	Commercial Operation Date
1	Southern	127.74	417.35	545.08	1 st July 2002
2	Northern	260.31	311.04	571.34	1 st Aug 2002
3	North Eastern	119.16 (includes 104.85 crore grant)	78.25 (includes Rs. 70.40 crore grant)	197.41 (includes Rs. 175.25 crore grant)	1 st Aug 2003
4	Eastern	141.59	193.63	335.23	1 st Sep 2005
5	Western	105.76	71.26	177.03	1 st Feb 2006
	Total	754.56	1071.53	1826.09	

Note:

- a) The above investment details as given by POWERGRID include the expenditure on end-equipments (Remote Terminal Units etc.) at the respective substations, the communication equipment from the end-equipment to the control centres as well as between control centres and the SCDA/EMS equipment at the control centres both under Central Sector and State Sector.
- b) The above figures are provisional and subject to year end accounting adjustments on account of FERV etc. Taxes and duties payable on transfer of assets from POWERGRID to the LDCs/STUs/SEBs shall be as applicable on the basis of the nature of assets i.e., movable or immovable. Such taxes and duties shall be included in the capital cost for recovery of tariff by the LDCs/STUs/SEBs.

- c) Tariff orders for certain additional capitalization expenditure is yet to be notified. On notification, tariff for the period up to the date of transfer shall be payable to POWERGRID.
- d) Table-1 does not include the investment made by POWERGRID towards the National Load Despatch Centre project, approved by the Government of India for Rs. 44.96 crore vide Ministry of Power's approval dated 12th May 2005.

2.2 Investment by SEBs/STUs in SLDCs

In addition to the investments made by POWERGRID, investments were also made by the SEBs/STUs in basic infrastructure at SLDCs. The approved costs of these were of the order of Rs. 219 crore and the investments were made by the respective states. The region wise details are given in **Table-2** below.

Table 2: Expenditure in SLDCs by States

Region	Investment by SEBs/ STUs in SLDCs (in Rs. Crore)	Funded by
Northern Region	64.34	State Government
Eastern Region	9.10	State Government
Western Region	7.37	State Government
Southern Region	124.75	State Government
Sub-total	205.56	
North Eastern Region	13.44	100% grant-in-aid by Central Government
Grand-total	219.00	

3 Recovery of past CAPEX and O & M Expenses

In July 1998, an adhoc arrangement to recover the Operation and Maintenance (O & M) expenses by POWERGRID in RLDCs was made in consultation with CEA. POWERGRID started billing the constituent states of each region accordingly.

The amendment to the Electricity Supply Act 1948 w.e.f. 11th August 1998 through Section 55 (10) provided for the Appropriate Electricity Regulatory Commissions (ERCs) or the Appropriate Government to specify the fees and charges payable to LDCs. Therefore subsequent to the formation of CERC, POWERGRID approached CERC for reimbursement of actual RLDCs' expenditure w.e.f. 1998-99. The CERC ordered that the charges for 1998-99 and 1999-2000 would continue to be at the level fixed by CEA and for the period 2000-01 and onward, the CERC sought the advise of CEA. Based on CEA's study and subsequent hearings including appeals by POWERGRID, the CERC specified the fees and charges payable to each RLDC w.e.f. 2000-01.

In May 2003, CERC specified the fees and charges payable to RLDCs with effect from 1st April 2000 as per the erstwhile Section 55 of the Electricity Supply Act, 1948. Simultaneously, the Unified Load Despatch and Communication (ULDC) project of POWERGRID got commissioned and tariff petitions were filed gradually by POWERGRID before the CERC starting mid-2002 for recovery of initial investments made by POWERGRID.

3.1 Present methodology for recovery of CAPEX & O&M expenses by POWERGRID

As evident from Table-1 the total capital investment by POWERGRID under the ULDC project was Rs. 1826.09 crore (which includes Rs. 175.25 crore as grant to NER). A concept of 15-years levelised tariff was introduced by CERC for recovery of equity and loan in this project.

Annual Recovery Factor (ARF) was worked out as:

$$\frac{i(1+i)^n}{(1+i)^n - 1}$$

Where “i” = weighted average rate of interest and Return on Equity
“n” = no. of years or period

ARF as worked out for the debt portion and equity portion separately was multiplied by the absolute value of equity and debt to get the equated annual installments for recovery of debt and equity respectively. It was assumed that the assets would have a useful life of only fifteen (15) years.

Even as these petitions were being addressed by the CERC, the Electricity Act 2003 came into existence and these tariff petitions were treated as petition for fees and charges under section 28(4) of the Electricity Act 2003. These replaced the fees and charges ordered by the Commission in May 2003. The charges for recovery of the initial expenditure comprises of following components:

- Annual Recovery Charge-Loan
- Annual Recovery Charge-Equity
- O & M expenses @ 7.5% of the capital cost for the first two years subject to submission of actual expenses
- Interest on Working Capital (IWC) at a rate of interest corresponding to the Prime Lending Rate (PLR) of State Bank of India as on 1st April of the year in which the project is declared under commercial operation. IWC applicable on the following components:
 - o Maintenance spares @1% of the historical cost
 - o O & M expenses for one month
 - o Two months receivables

3.2 Recovery of CAPEX and O & M by SEBs/STUs in SLDCs

After the enactment of the Electricity Act 2003, the SERCs started specifying the fees and charges for SLDCs. As mentioned in the Gireesh Pradhan committee report, seven (7) states have already specified the SLDC fees and charges.

4 Transfer of assets and liabilities to LDCs

It is understood that as per the Government of India directive, formation of 100% subsidiary company of POWERGRID is already under consideration in respect of RLDCs and NLDC. Similar arrangement has been recommended by the Gireesh Pradhan Committee for the SLDCs as well. For this purpose, the segregation of assets/liabilities between CTU & RLDCs/NLDC and between SEBs/STUs & SLDC would be required. Section 6.1 (b) of the Gireesh Pradhan Committee

recommends that the financial accounts for all LDCs need to be separated by 31st March 2009. Considering the intricacies involved in separation of accounts, the Task Force recommends that the transfer of assets from CTU to NLDC/RLDCs or to SEBs/STUs/SLDCs and/or from SEBs/STUs to respective SLDCs, as the case may be, should be completed by 30th June 2009. In order to implement this, first of all the segregation of assets and liabilities would be required.

4.1 Segregation of assets and liabilities

The issues of segregation of assets and liabilities (with regards to the ULDC project) from POWERGRID to the LDCs were discussed in a meeting held on 23rd January 2009 where representatives from CERC staff and POWERGRID were present. The summary of discussion held in this meeting is enclosed as Annex-II. The matter was further discussed in the second meeting of the Task Force held on 27th February 2009. The recommendations of the Task Force regarding ownership of the assets are 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.
- d) The recovery of tariff in respect of the assets to be retained or created in future by CTU/STUs/SEBs, as per the methodology suggested above, could be appropriately charged as per norms prevailing from time to time.

Based on the above methodology, the break-up of assets, outstanding equity and loan for Central sector and state sector is enclosed at Annex-III. The Annex-III also indicates the segregation of assets under RTU, communication and control centre categories for all states and on the basis of these details the assets between CTU, RLDCs, STUs and SLDCs can be easily segregated.

4.2 POWERGRID's outstanding liabilities in ULDC project

Currently the investment of POWERGRID in SLDCs (State portion of ULDC scheme) is being treated by POWERGRID as lease income and the net outstanding on this account is being shown under 'Loans and Advances'. The outstanding amount (as on 31st December 2008) to be recovered in respect of the Central Sector portion comes out to be Rs 452.75 crore. Out of this Rs 409.76 crore is the outstanding loan and Rs 42.99 crore is the outstanding equity. Similarly the outstanding amount as on 31st December 2008 to be recovered in respect of the State Sector portion comes out to be Rs. 777.86 crore,

out of which Rs. 626.05 crore is the outstanding loan and Rs.151.81 crore is the outstanding equity.

4.3 Transfer of assets and liabilities from POWERGRID to NLDC / RLDCs

Subsequent to creation of wholly owned subsidiary of POWERGRID the assets and liabilities for NLDC/RLDCs portion could be transferred to the books of account of the new subsidiary.

4.4 Transfer of assets and liabilities from POWERGRID to STUs / SLDCs

The various alternatives for transfer of assets and liabilities from POWERGRID to different STUs and SLDCs are as under:

4.4.1 Alternative-1

The outstanding equity of POWERGRID as on the date of transfer could be liquidated by the concerned STU / SLDC. The outstanding loan could be transferred from POWERGRID to the concerned STU / SLDC as it is, subject to the agreement by the lender for such transfer. The STUs and SLDCs would then be entitled for Capital Recovery Charge for the debt and equity portion as specified by the SERCs for these ULDC assets.

4.4.2 Alternative-2

The outstanding equity of POWERGRID as on the date of transfer could be liquidated by the concerned STU / SLDC as in Alternative-1. The existing loan could be swapped with a fresh loan taken by the concerned

STU / SLDC against the intended assets. The STUs and SLDCs would then be entitled for Capital Recovery Charge for the debt and equity portion as specified by the SERCs for these ULDC assets.

4.4.3 Alternative-3

Presently the ULDC assets are on lease to the states by POWERGRID for a total period of 15 years out of which a period ranging from around 6 years (in case of SR and NR Regions) to 2 years (in case of WR Region) have already elapsed. For these assets POWERGRID has been charging tariff (treated as a lease rental) based on the concept of Annual Recovery Factor (ARF) as described in previous sections. For the balance period of the life of these old assets, they continue to remain on lease by POWERGRID to the States and POWERGRID may continue to get the tariff as decided by CERC. Under such a situation, the STUs/SLDCs shall make the provision of the actual tariff or lease rentals they have to pay to POWERGRID in their Annual Revenue Requirements (ARRs) in the form of additional Operation and Maintenance charges. After the due period the assets may be transferred to the concerned STU/SLDC at nil value.

4.5 Transfer of assets and liabilities from STU to SLDCs

As stated earlier, at the time of implementation of the ULDC scheme, in addition to the investments made by POWERGRID, certain investments were also made by the SEBs/STUs in basic infrastructure in bringing out the SLDCs and the region wise details of the same are given in **Table-2** earlier. Gireesh Pradhan committee has urged the State Governments to create a separate representative board structure for governance of LDCs on the lines of wholly owned subsidiary being

created for NLDC/RLDCs. The assets, liabilities, rights and obligations of STUs and SLDCs could be segregated and transferred to the subsidiary or the Successor Company as the case may be.

4.6 Transfer of Load Despatch Centre buildings and associated facilities

As per the Recommendations of the Gireesh Pradhan committee report, the load despatch functions are to be ring-fenced and separate representative board structure for governance of LDCs need to be formed, In order to have effective and efficient operation of the LDCs so formed, it is essential that all the LDCs are adequately equipped with the requisite manpower and the infrastructure facilities and are having financial sustainability. In this respect it is important that the buildings/parts of buildings which were exclusively created for functioning of the above LDCs are also transferred to the respective LDCs so that the LDC functions may be carried out smoothly. In most of the cases these were created long back on the land originally allotted for the purpose of creating load despatch centres and these transfers could be effected at the book value. Furthermore in the cases where such exclusive buildings/parts of buildings are not existing, immediate action must be initiated for making such infrastructure facilities. Along with the main buildings, other associated facilities such as staff quarters may also be transferred in the interest of smooth functioning of the control centre and its ability to respond in case of emergencies.

4.7 Transfer of old/unused/condemned unserviceable items

Simultaneously, in order to streamline the books of accounts, any old/ unused/ condemned/unserviceable item(s) also need to be written off/disposed off and/or to be transferred to respective LDCs at nil value.

4.8 Transfer of Assets & Liabilities: Recommendations of the Task Force

- i) The Task Force suggests that in case of transfer of assets and liabilities from POWERGRID to the SEBs/STUs and LDCs, POWERGRID's investments in the ULDC project at the state level be bought out by the state utilities. This would be through State Government funding (for the equity portion) and through loans from either PFC or any other financial institution (for the debt portion). The State Sector ULDC assets would then be transferred to the SLDCs/STUs/SEBs after such liquidation. Subject to agreement by the lenders, Alternative-1 may be given preference over the others and in case of difficulty in Alternative-1, the Alternative-2 and 3 should be explored. Similarly in case of transfer of assets and liabilities from SEBs/STUs to SLDCs, various alternatives may be considered.
- ii) Considering the intricacies involved in separation of accounts, the Task Force recommends that the transfer of assets from CTU to NLDC/RLDCs or to SEBs/STUs/SLDCs and/or from SEBs/STUs to respective SLDCs, as the case may be, should be completed by 30th June 2009.
- iii) In respect of the buildings/parts of buildings where these load despatch centres are operational and other associated facilities like staff quarters etc., including assets from CEA, the identification and transfer of such assets to the respective LDCs also be effected by 30th June 2009.
- iv) The Task Force also recommends that any old/unused/condemned/unserviceable items also need to be written off/disposed off and/or transferred to respective LDCs at nil value by 30th June 2009.

5 Future Capital Expenditure plans for LDCs

Equipments used in LDCs have a lower life on account of technological obsolescence. It is therefore important that the rolling five year CAPEX plans of LDCs are designed using a life cycle approach as recommended by the Gireesh Pradhan Committee. Preparation of rolling plans would require continuous exercise by the LDCs for technological advancements in the hardware and software required for improving performance of Load Despatch Centres. This would require effective technology management.

In respect of real time data, the field level equipment such as Remote Terminal Units (RTUs) and weather stations installed at sub-stations, power stations etc. has to be provided either by the Generating Company or the transmission licensee involved. The relevant provisions from the Central Electricity Authority (Technical Standards for Connectivity to the Grid) Regulations 2007 in respect of real time data and communication are indicated below.

Quote

“6. General Connectivity Conditions

(3) The requester and user shall provide necessary facilities for voice and data communication and transfer of on-line operational data, such as voltage, frequency, line flows, and status of breaker and isolator position and other parameters as prescribed by the Appropriate Load Despatch Centre.”

Unquote

In line with the spirit of the above provisions the LDCs need to specify the interface requirements and other guidelines for speech and data communication between the agency and the LDCs. The CTU/STUs need to identify the appropriate collection point for data and the agencies need to provide communication up to this point as specified in the respective connection agreements. The CTU/STUs are expected to provide the communication from that collection point onward to the LDCs

Keeping into consideration the above philosophy, the areas requiring CAPEX might be tabulated under the following heads.

5.1 Communication System for data transfer

Reliable and fast communication system is required for data transfer to LDCs. This will have to be normally planned by the respective transmission utility in consultation with concerned LDCs. Likewise for synchrophasor technology, the high speed communication links would be set up by the CTU/STU from the Phasor Measurement Unit (PMU) locations to the control centre. However, if required, back up or other communication system could be assessed, planned and taken on lease from other telecom service providers by the LDCs also. The expenses on such communication system could be included in the O & M expenses of LDCs.

5.2 Control Centre augmentation

Control Centre augmentation could comprise of following:

- Hardware for SCADA/EMS system
- Any local Control Centre level monitoring equipment

- Software for SCADA/EMS
- Wide Area Measurement and Protection System employing synchrophasor technology (control centre component)
- Weather Stations (Control Centre component)
- Auxiliary services like Uninterrupted Power Supply (UPS), DG set
- Providing back-up control centre as part of Disaster Management Plans
- Merging of control centres viz. sub-LDCs, if considered necessary.
- Cyber Security
- Pilot projects in emerging technologies related to load dispatching
- Forecasting system for renewable energy

5.3 Off-line Software

Specialized software may be required for smooth functioning of activities in a LDC. These applications comprise of the following:

- Scheduling of transactions
- Open Access transactions: receipt of requests & processing the same
- Power Exchange (PX) transactions
- Metering and settlement system
- Accounting and billing system
- Data warehousing and mining facilities
- Enterprise Resource Planning (ERP) solutions for integration of offline and on line systems

- Website hosting along with IT, Network Management System (NMS) and perimeter security
- Knowledge Management System (KMS)
- System studies
 - o Power flow, Stability, Short-circuit, EMTP
 - o Relay co-ordination
 - o Transmission charges and loss apportionment

5.4 Infrastructure facilities

Augmentation of infrastructure in an LDC could be in following areas:

- Conference Room
- Video-conferencing
- Housing for employees, wherever required
- Building renovation and expansion
- Creation of Knowledge Centre
- Energy efficient building & conversion to renewable energy.
- Office equipment
- Staff recreation facilities

The CAPEX plans for SLDCs have to be structured on the basis of a standard template so as to ensure technological and operational compatibility between the RLDCs and SLDCs. Template of CAPEX plan for a typical SLDC is placed at Annex-IV.

5.5 Execution of CAPEX plans in LDCs

The evolving changes in power system operational needs require a distributed control center that is based on decentralized, integrated, flexible and open system approach. The LDCs have the option to execute their CAPEX plans independently or outsource the same. The Task Force feels that independent execution of the CAPEX plans by the LDCs themselves would help in capacity building at the LDCs, foster greater competition among vendors (may bring down the investment costs) and prevent any single vendor from exercising a monopoly. The LDCs may collaborate through the Forum of Load Despatchers (FOLD) for standardization and harmonization of the technical specifications.

6 Financing CAPEX in LDCs

The past projects have been funded through a mixture of debt and equity ranging from nil equity in respect of NER to 75:25 in respect of Western Region. In NER, 90% grant-in-aid (Rs. 175.25 crore) has been received for expenditure in NER indicated in **Table-1** above. The overall debt-equity ratio is of the order of 85:15 approximately.

Barring North Eastern region where the entire State portion of Rs. 13.44 crore has been funded through 100% grant-in-aid by the Central Government, the respective State Governments have funded the State portion in all the other cases.

The subsequent CAPEX of all control centres would be of moderate range. The financial institutions could work out a reasonable package for these projects. The CAPEX plans of LDCs can be funded provided the recovery aspect is suitably taken care of by the appropriate Electricity Regulatory Commission.

In the meeting of the Task Force held on 17th November 2008, PFC offered to finance investments in LDCs (with only 10% margin money provided by the states) if the tariff structure ensured sufficient recovery to service the loans and such revenues for debt servicing are placed in a secured fund. PFC even offered to provide loans for the margin money in case requested for by the State Governments.

7 Expenses in LDCs

The expenses in LDCs would broadly comprise of the following components:

- Servicing of capital investments
- Employee cost
- Equipment related O & M expenses and general administrative expenses

These are discussed ahead.

7.1 Servicing of capital investments

The equity and loan used for funding capital investments would be serviced through return on equity, depreciation and interest on loan.

7.2 Employee Cost

The Gireesh Pradhan Committee has recognized the functions discharged by Load Despatch Centres as highly specialized and technical. Thus the services provided by the Load Despatch Centres are in the nature of knowledge services to be delivered by human beings having the required skills and capabilities. Even the best of technological tools provided in the form of SCADA/EMS and other offline support

systems in the LDCs would require human skills and motivation for the tools to be utilized in the best manner.

The Task Force recognizes that with the technological advancement the cost of load despatch technology would come down substantially and the cost of human resource would increase. Therefore the Task Force recommends that the employee cost should be considered independent of equipment related O & M and other administrative expenses as elaborated ahead.

Gireesh Pradhan Committee report gives a broad outline of the manpower requirement for a typical LDC estimated to be in the range of 60-70 with the break up under different functional departments as follows:

Table 3: Number of executives in typical Load Despatch Centre

S No.	Functional Area	Number of executives
1	System Operation	22
2	Market Operation	22
3	System Logistics	12
4	Sub-total	56
5	Services and RLDC head	13
6	Grand total	69

In addition to the employee's cost towards salary and other benefits, the following expenses shall also be incurred towards employees.

- Training and certification expenses
- Incentives
- Traveling expenses

The incentives to the LDC employees could be based on the performance of LDC on certain Key Results Areas assessed by appropriate Regulatory Commission and the performance of individuals assessed through internal Performance Appraisal System of LDCs. Unlike generating companies and transmission utilities whose tariffs have an element of incentive for better performance and the employee incentive program is funded through this mode, for service organizations like LDCs, the employee incentives needs to be a pass through. The Appropriate ERCs would exercise oversight and ensure that the LDCs meet the appropriate benchmark of performance.

7.3 Equipment related O & M and general expenses

Operation and maintenance expenses would basically comprise of general repair and maintenance expenses and Annual Maintenance Contracts (AMC) for SCADA/EMS systems, IT infrastructure, auxiliary services such as DG set air conditioning etc. The charges approved by ERCs should consider the fact that the services are of a specialized nature and should reflect the market trends.

The administrative and general expenses would comprise of the interest on working capital, building rentals, statutory duties and taxes including electricity and water charges. The other charges such as those for infrastructure and human security, statutory charges such as taxes and municipality charges, control centre communication expenses etc may also placed under this head.

8 Methodology for recovery of fees and charges of LDCs

Recovery of investments and expenses would be the key to funding of any CAPEX plan of LDCs. The fees and charges structure for RLDCs

and SLDCs has to be designed in such a way that it not only generates revenue for operating expenses and capital servicing requirement but also surplus towards margin money for future investments.

The Task Force suggests the following structure for consideration in the design of regulation of fees and charges by the appropriate Electricity Regulatory Commission:

- a) Charges for Servicing of CAPEX
 - i. Return on equity
 - ii. Interest on loan capital
 - iii. Depreciation

- b) Charges for Human resources (Employee Cost)
 - i. Salary and perquisites
 - ii. Incentives
 - iii. Training and certification expenses
 - iv. Traveling expenses

- c) O&M and General Expenses
 - i. Operation and maintenance
 - ii. Repair & maintenance expenses
 - iii. Communication expenses
 - iv. Administrative & general expenses
 - v. Interest on working capital
 - vi. Statutory duties and taxes
 - vii. NLDC charges & Corporate Office expenses as in Section 10 below

The incentives indicated in employee cost above would be a separate pass through and allowed by the Appropriate Commission after due oversight and evaluation of performance by the LDCs against the Key Result Areas listed in Part-II of this Report.

Unlike the ULDC scheme where Annual Recovery Charge for loan and equity has been prescribed, the formula for recovery of new investments could be through return on equity, interest on loan and depreciation.

The Task Force recommends that the following specific points are worth consideration by the respective ERCs while permitting LDC CAPEX and O & M charges.

- i. The depreciation factor for new assets may be worked out considering a life of 3-7 years particularly in respect of IT infrastructure characterized by high obsolescence. The salvage value of such assets may also be considered as nil. However for other infrastructure facilities building, DG sets etc. the depreciation factor as per the conventional method can be made applicable.
- ii. O & M costs could be approved by the ERCs on yearly basis on certain norms at the beginning of the year with the provision to approach the respective ERCs in case of unforeseen expenses or expenses exceeding beyond a certain percentage, say 5%.
- iii. Currently O & M cost @7.5% of the Capital cost is being allowed by CERC in respect of ULDC equipment and the entire RLDC O & M activities are expected to be funded out of this. This amount needs to be reviewed afresh by the CERC.
- iv. The charges from Open Access customers (short term bilateral and collective transactions through PX) charged on a per

transaction basis as per the Regulations framed by ERCs would be in addition to the above charges. This revenue stream would add to the surplus and reserves of LDCs which would help in providing the margin money for further CAPEX. ERCs can decide the modus operandi of utilization of such reserves and surpluses, in case they exceed a certain limit to be specified by the respective ERC.

9 Revenue streams for meeting LDC expenses

In the Gireesh Pradhan Committee Report under Recommendation 2 (para 6.2), the identified three distinct revenue streams are System Operation, Market Operation and System Logistics.

The Task Force is of the opinion that in the beginning, a tight allocation of costs to the three functions viz. System Operation, Market Operation and System Logistics would be difficult. There is a growing convergence between system operation and market operation with the latter increasingly complementing reliability of system operation. However, LDCs might keep a separate account internally of the O & M expenses incurred for these functions and employee cost related to Services and LDC head can be apportioned between System Operation and Market Operation. Similarly, the cost towards infrastructure, taxes, electricity and water can be apportioned between these functions.

Interest on Working Capital might continue to be charged as per the Terms and conditions of tariff regulations.

10 NLDC charges and Corporate expenses

As per Section 28(4) and 32(3) of the Electricity Act 2003, the RLDCs/SLDCs may levy and collect such fees and charges from the generating

companies or licensees engaged in inter-state/intra-state transmission of electricity as may be specified the Central/State Commissions. There is no mention of NLDC fees and charges in the EA 2003. However, the resolution dated 2nd March 2005 on NLDC states that the NLDC may collect such fees and charges as may be specified by the Central Commission. It is recommended that the NLDC charges may be apportioned to the five RLDCs for the purpose of recovery. Likewise the corporate expenses and any other common expenses of the new entity (subsidiary company of POWERGRID being created by Government of India to look after the national and regional grid operation functions) may be apportioned to the five RLDCs for the purpose of recovery.

11 Sharing of LDC charges

As suggested by the Gireesh Pradhan Committee, the LDC fees and charges are to be recovered from all Generating Companies and licensees availing the services of the Load Despatch Centres. The modus operandi of sharing of LDC charges may be determined by the respective Electricity Regulatory Commissions. At a minimum, it is suggested that the LDC charges can be recovered in the form of System Operation Charge and Market Operation Charges.

PART-II

ISSUES RELATED TO EMOLUMENTS FOR PERSONNEL IN LOAD DESPATCH CENTRES

12 Objectives of the monetary compensation for LDC personnel

The task force studied the Committee report on “Manpower, Certification and Incentives for System Operation and Ring-fencing of Load Despatch Centres” with respect to the job content of Load Despatch Centres (LDCs) and the recommendations of the committee on compensation and benefits of personnel at LDCs. The recommendations were used to define the objectives of compensation design for personnel at LDCs.

The Task Force compiled and examined the present emoluments in few of the State Sector and Central Sector Utilities. These are enclosed as Annex-V. Additionally the Task Force studied the report of the second Pay Revision Committee [Justice (Retired) M. Jagannadha Rao Committee] for Central Public Sector Enterprises and other material available on the Internet to propose a compensation structure for the LDC personnel.

The Committee report “Manpower, Certification and Incentives for System Operation and Ring-fencing of Load Despatch Centres” has dealt elaborately on the nature and importance of the functions discharged by the Load Despatch Centres and the desired objectives of the monetary compensation for LDC personnel. The relevant extracts from the report in this context are quoted below:

“The committee views the functions discharged by Load Despatch Centres as highly specialized and technical. System Operation is a crucial and vital function in the power sector and the force-multiplier effect of this activity must be realized and encouraged by all the stakeholders. “(Chapter 6, page 35, para 1)

“The System Operators are subjected to immense physiological and mental stress. Physiological stress arises from the need to continuously adjust their circadian rhythms to their work schedules. Mental stress in the LDC results primarily from the need to respond to the unforeseen and random events.” (Chapter 3, page 16, Section 3.4 last para)

“System Operation is an area where long-term commitment is required because substantial time, efforts and resources are required to develop fresh entrant into a productive asset.” (Chapter 3, section 3.3, page 15)

“Compensation, services conditions, work environment and the perceived value of the experience gained at the LDCs would greatly influence the availability and retention of talent at the LDCs.” (Chapter 3, section 3.3, page 15)

“The services offered by professionals in LDC are in the nature of knowledge services that demands continuous learning with evolving system and market design. The compensation structure available to the System Operators at LDCs therefore should encourage specialization and professionalism.” (Chapter 3, Section 3.4, page 15)

“...The monetary incentives should be linked to the job performance and to the up-gradation of skills by way of acquiring of suitable “operator certificates...” (Chapter 3, section 3.4, page 16)

“The other incentives could include sponsored membership to professional bodies, access to relevant periodicals/ reports, sabbaticals for higher studies and opportunities for Professional Engagement such as attending workshops, conferences both within the country and abroad.” (Chapter 3, section 3.4, page 16)

“The committee recommends that the monetary compensation, incentives and other benefits available to the LDC personnel are kept significantly higher than the compensation and benefits available to other power industry professionals in the public or private sector.” (Chapter 3, Section 3.4, page 16)

“6.4 Recommendation 4

The highly specialized and technical nature of LDC function necessitates a suitable compensation structure to attract and retain talent. The Committee recommends

- a) The compensation structure for LDC personnel should be substantially higher than comparable companies in the power sector both in the public as well as private.
- b) Apart from the compensation structure, innovative incentive schemes, such as sabbaticals for higher learning and opportunities for Professional Engagement (PE) in the form of attending seminars/workshops and conferences both in India and abroad must be provided.
- c) Once the certification system is introduced, monetary incentives similar to Air Traffic Controllers can be provided to the System Operators based on their ratings.”

Thus it could be inferred from the above that the compensation package for LDC personnel is expected to achieve the following objectives:

- i. Be commensurate with strategic importance of the delivered services
- ii. Attract and retain talent
- iii. Align individual performance towards organization's mission
- iv. Suitably compensate for the physiological and mental stress
- v. Reward competencies, skills and long-term commitment
- vi. Motivate towards Knowledge Management and Capacity building

13 Existing compensation structure in various LDCs in India

The State Load Despatch Centres (SLDCs) are presently being managed by the respective State Transmission Utilities or State Electricity Boards while the Regional Load Despatch Centres (RLDCs) and the National Load Despatch Centre (NLDC) is being managed by Central Transmission Utility. The Task Force compiled the data regarding emoluments of personnel in various LDCs. Data in respect of the pay structure of the personnel in SLDCs of Assam, Meghalaya, West Bengal, Delhi, Himachal Pradesh, Haryana, Gujarat, Maharashtra, Andhra Pradesh and POWERGRID-RLDCs is enclosed as Annex-V.

A study of Annex-V would reveal that there is a considerable variance in the emoluments received by the personnel working at various Load Despatch Centres. This is due to the difference in the pay structure, pay scales and the perquisites offered by the respective parent organizations. The survey of various Load Despatch Centres carried out by the Pradhan Committee indicates that there is a large variance

in the infrastructure, work culture, management policy and available talent at different Load Despatch Centres. Both these aspects could be the underlying cause of the difference in the performance of the different Load Despatch Centres.

14 Approach adopted by Task Force for designing compensation structure

The Task Force is of the view that the nature of work in all the Load Despatch Centres is similar, they require similar skill sets and hence the emoluments received by the personnel should be similar irrespective of the Load Despatch Centre where they are working. This parity would facilitate movement of personnel across different LDCs and help in raising the performance of LDCs across the country to an acceptable level.

Gireesh Pradhan Committee had urged the State Governments to create a separate representative board structure for governance of LDCs on the lines of wholly owned subsidiary being created for the independent System Operation of RLDCs and NLDC and suggested an umbrella structure of SLDCs integrated with RLDCs and NLDC. Implementation of these recommendations would facilitate harmonization of the emoluments of personnel across all LDCs. However the Task Force recognizes that creation of such a structure and implementation of uniform pay structure across all LDCs would require a wider discussion among stakeholders particularly due to varying paying capacity of the parent organizations of LDCs and the need to honour local imperatives such as maintaining parity among all employees within the same organization irrespective of their functional deployment. Moreover the concurrence of the appropriate Electricity Regulatory Commissions would also be required on this issue because employee cost constitutes a significant portion of the O & M expenses of the LDCs. In view of the above issues

the Task Force has adopted an alternate approach in designing the compensation structure of LDC personnel.

15 Proposed compensation structure for LDC personnel

The Task Force recommends that the compensation of the LDC personnel could comprise of two parts- fixed compensation and variable compensation.

The first part called the “fixed compensation” would be derived from the pay structure of the parent organization of the respective LDC. This would address the concern of maintaining parity in the pay structure of LDC personnel with the peers within the same organization.

The second part would be the “variable compensation” in the form of Performance Related Pay and incentives. The criteria for Performance Related Pay and incentives proposed in this report could be applicable to all the LDC personnel regardless of their posting at SLDC, RLDC or NLDC. Provision of incentives for LDC personnel proposed by the Task Force would also be in line with the consensus arrived during the interactive session convened by the Ministry of Power on 05th November 2007 with the Forum of Regulators and the State Governments. Section 10.4 of the Minutes of the above meeting states- “Summarizing the discussion on SLDCs, Secretary (Power) said that the system operation was a specialized function and accordingly cadre building was required. Monitoring of SLDCs by SERC would be useful to check whether they are functioning independently. NPTI could arrange training for qualified system operators. Special pay and financial incentives based on open access facilitation were also required to have adequate attraction for personnel in SLDCs.”

Based on Annex-IX of the report of the Gireesh Pradhan Committee, the functions of LDCs could be demarcated into three broad areas viz- System Operation, Market Operation and Logistics. The Performance Related Pay could be linked to the performance of the Load Despatch Centres under the above heads as well as to the Performance of the individual as evaluated through the Performance Management System of the respective LDC.

Further in line with the recommendations of the Gireesh Pradhan Committee the LDC personnel may also be encouraged to continuously update themselves and hone their skills. This encouragement could be given by introducing the concept of certification-linked incentive.

The Load Despatch Centres function round the clock and on all days in the year. Therefore availability of personnel at Load Despatch Centres on night hours, weekends and holidays is as important as availability on normal business hours and days. To compensate for this, a special allowance is required to be given. As per the prevalent practice in most of the LDCs, a provision for such an allowance already exists in the form of night shift allowance. However the quantum at most of the places is not adequate, the Task Force recommends that the quantum should be substantial to fulfill the given objective.

In addition to the monetary compensation, special awards for exceptional performance, outstanding contribution and long-term commitment could also be given in recognition of exemplary contribution and to motivate the LDC personnel towards capacity building and knowledge management in LDCs. These awards could be based on accumulated credits earned by an individual during a certain period of time.

Thus the monetary compensation of the personnel involved in System Operation may comprise of following distinct components:

- a. Basic Pay and perquisites derived from Pay Structure of the parent organization
- b. Performance Related Pay (Incentives) for the personnel at SLDCs, RLDCs and NLDC based on the performance of the respective Load Despatch Centres as well as the individual
- c. Certification linked Incentive
- d. Special Allowance for contingency duty/night shift at LDCs
- e. Awards for exceptional performance on the basis of accumulated credits earned during predetermined period of time

Each of the above components is further elaborated ahead.

15.1 Basic Pay and Perquisites

It is proposed that the Salary structure of the parent organization be retained to maintain parity with other employees within that organization. It would comprise of Basic Pay along with yearly increment rate, Dearness Allowance (DA), rank pay and other perquisites such as House Rent Allowance (HRA) or leased accommodation, Leave Travel Concession (LTC), annual ex-gratia/bonus, conveyance subsidy/reimbursement, canteen subsidy/reimbursement, washing allowance, children education allowance, tour allowance, medical benefits, entitlement for recoverable loans/advances, family benefits, superannuation benefits and other generic service benefits as being received in the parent organization. The personnel employed at Load Despatch Centres could continue to be entitled to the above components as per the service rules of the parent organization and they would remain eligible for housing facility of the parent company.

Besides, the LDC personnel could be offered the following benefits based on the cafeteria approach. Payments for many of the services could be made directly by the employer to the service provider based on the employee's certification of the bills raised:

- a. Membership fee for reputed professional bodies such as IEEE, CIGRE, Institution of Engineers including digital library subscription
- b. Subscription charges of Newspaper / Periodicals / Journals
- c. Membership fees for reputed library in the city
- d. Laptop and Internet access charges through broad band
- e. Landline/ mobile usage charges
- f. Pick up and drop facility for shift personnel
- g. Comprehensive health check up at regular intervals
- h. Paid membership to health club for yoga, meditation, physical fitness
- i. Crèche/ Child care arrangements or suitable reimbursements

15.2 Performance Related Pay (Incentives)

Section 4.4.1 of the report of the second Pay Revision Committee (PRC) for CPSUs has recommended introduction of variable compensation along with fixed compensation. Section 6.2.3 (I) of the report of the 2nd PRC states, "The committee recommends that Variable Pay or Performance Related Pay (PRP) be made an integral part of the compensation package and should progressively become a major component of the executive compensation." In line with the above, compensation in the form the Performance Related Pay may be made available to LDC personnel. This pay could be linked to the performance of the respective LDC as well as to the performance of the individual.

The criteria for Performance Related Pay for the personnel working at SLDCs, RLDCs and NLDC could be kept uniform.

The performance of LDC could be evaluated against Key Result Areas in System Operation, Market Operation and Logistics while the performance of the individual could be assessed with the help of a Performance Management System (PMS) or Performance Appraisal System. The Key Result Areas for evaluation of performance of LDCs in System Operation, Market Operation and Logistics must be clearly defined and consist of parameters (Performance Indicators) on which LDCs have a fair degree of control. Likewise the elements in the Performance Management System should suitably capture the attributes, competencies and skills required for the position of the individual and the individual's performance on the assigned responsibilities during the evaluation period. The parameters for performance evaluation of the LDCs and individuals can be expressed in physical, monetary or qualitative terms and they must be measurable, comparable and consistent.

The suggested Key Result Areas and the Performance Indicators for measuring the performance of LDC and the broad elements of the Performance Management System for measuring the performance of individuals on which the Performance Related Pay (Incentives) could depend are suggested in Annex-VIII and Annex-IX. These performance indicators can be modified from time to time depending upon the requirements and prevailing conditions in the respective organizations. The calculation of LDC score based on the typical performance in the six Key Result Areas (enclosed as Annex-VIII) is illustrated in Table 4.

The score of an individual based on his / her performance assessed through the Performance Management System (enclosed as Annex-IX) is illustrated in Table-5.

Table 4: LDC Performance: (Multiplying Factor-1) for calculating PRP

S No.	Key Result Areas	Maximum Score	Score obtained
1	System Operation	20	17
2	Market Operation	20	17
3	System Logistics	20	15
4	Documentation	10	8
5	Learning & Growth perspective	20	15
6	Financial	10	8
7	Cumulative Score	100	80
8	Multiplying Factor-1 (MF1) for calculating PRP	1	0.8

Table 5: Individual Performance: (Multiplying Factor-2) for calculating PRP

S No.	Assessment Area	Maximum score	Total Score by the reviewing officer/ committee
1	Performance of the individual on the KRAs	70	60
2	General competencies, skills & personal traits	30	20
3	Cumulative Score	100	80
4	Multiplying Factor-2 (MF-2) for calculating PRP	1	0.8

The multiplying factor for calculating the Performance Related Pay (PRP) would be a product of the multiplying factor MF-1 (obtained from Table-4) and MF-2 (obtained from Table-5). Thus the multiplying factor for the above illustration would come out to be $0.8 \times 0.8 = 0.64$ as illustrated in Table-7.

15.2.1 Scaling of Performance Related Pay

The variable pay or performance-linked incentives of the LDC personnel would be a function of the overall performance of the concerned LDC. In order to ensure long-term commitment of employees and to encourage employees to take up additional responsibilities associated with senior hierarchical position the ceiling value of the Performance Related Pay may be scaled up on the basis of the position of the personnel in the organizational hierarchy. The various hierarchical positions in the organization could be segregated into the following five levels for the purpose calculations:

- a. Top management (LDC head and second in command)
- b. Middle management (Division heads and Shift In-charge)
- c. Senior executives (more than 10 years of relevant experience)
- d. Junior executives (up to ten years of relevant experience)
- e. New recruits (up to one year of relevant experience)

The total ceiling value of the Performance Related Pay (Variable Incentive) could be derived from the average basic pay at the management levels mentioned above. Recommended figures for RLDCs/NLDC as taken from the recommendations of the 2nd Pay Revision Committee for CPSEs are in Table 6.

Table 6: Ceiling limits for Performance Related Pay

S No.	Position in Hierarchy	Grade	Ceiling Limit as % of average basic pay
1	CMD		200 %
2	Director		150 %
3	Top Management	E8 & E9	70 %
4	Middle Management	E6 & E7	60 %
5	Senior executive	E4 & E5	50 %
6	Junior executive	E3 and below	40 %

The State Government may decide the ceiling value of Performance Related Pay for respective SLDC executives. The performance Related Pay for non-executive staff could also be decided by the respective Board of Directors of the LDCs.

The value of the Performance Related Pay (Incentive) assuming average Basic Pay of Rs. 25500 at the level of Junior Executive could be calculated as in Table 7.

Table 7: Illustration of PRP Calculation

S No.	Particulars	Value
1	Monthly Average Basic Pay	Rs. 25500
2	Ceiling percentage (taken from 2 nd PRC for CPSEs) for Performance Related Pay/Incentive	40 %
3	Monthly Ceiling Value of Performance Related Pay/Incentive	Rs. 10200
4	LDC performance multiplying factor	0.8
5	Individual performance multiplying factor	0.8
6	Cumulative Multiplying factor	0.64
7	Monthly Performance Related Pay/Incentive payable	Rs. 6528

An illustration of calculation of Performance Related Pay at various levels in a typical LDC is enclosed as Annex-VI.

15.3 Certification linked Incentive

The system operators are required to ensure operation of the power system with security, economy and efficiency in a transparent and non-discriminatory manner under extreme pressure of time and multiple stakeholders with conflicting interests. This demands technical skills, physiological/mental stress taking ability, personal integrity and ethical standards of highest order from the System Operators. Therefore the incentive for encouraging continuous learning, up-gradation of skills, taking up challenges and discharging of duty without bias or prejudice is essential and can be given after the LDC personnel has passed the prescribed exams. It is recommended that monetary incentive could be linked to acquisition of relevant Certificates as stated in the Report of the Gireesh Pradhan Committee. Subsequent to submission of the above report two other task forces besides this one were constituted. One of them would look into the certification issues under the Chairmanship of Chairperson-Central Electricity Authority. The recommendations of that Task Force may be considered for the other modalities of the Certification System. This particular Task Force (for CAPEX and emoluments) recommends that the incentives subsequent to acquisition of Certificates can be in three levels- Basic, Specialist and Management. A lump sum amount indexed to the ceiling value of the basic pay at the middle management level could be made available to the executives during the entire validity period of the Certificate.

15.3.1 Basic Level

The Task Force recommends that an LDC personnel shall be entitled to a lump sum monthly incentive subsequent to acquisition of the “Basic

level” certificate. The qualifying requirements and the validity of the Basic level certificate would as recommended by appropriate task force. The incentive linked to basic level of certification would be available to the individual only during the validity period of the certificate.

15.3.2 Specialist Level

The Task Force recommends that an LDC personnel shall be entitled to a lump sum monthly incentive subsequent to acquisition of the “Specialist level” certificate. The qualifying requirements and the validity of the Specialist level certificate would be as recommended by appropriate task force. The incentive linked to Specialist level of certification would be available to the individual only during the validity period of the certificate and it would be in addition to the incentive for “Basic level” certificate.

15.3.3 Management Level

The Task Force recommends that an LDC personnel shall be entitled to a lump sum monthly incentive subsequent to acquisition of the “Management level” certificate. The qualifying requirements and the validity of the Management level certificate would be as recommended by the appropriate task force. The incentive linked to Management level of certification would be available to the individual only during the validity period of the certificate and it would be in addition to the incentive for “Basic level” and “Specialist level” certificate.

15.3.4 Value of Certification linked Incentive

The Task Force recommends that a lump sum monthly amount indexed to the ceiling value of the monthly basic pay at the middle management level subject to a minimum amount per month should be made available

to the LDC personnel during the validity period of the appropriate certificate.

The recommended percentage and the typical values assuming a ceiling basic pay at the middle management level as Rs. 50,000 are tabulated below.

Table 8: Certification linked Incentive

S No.	Certification level	Percentage of ceiling basic pay at the middle management (basic pay assumed Rs. 50000)	IncentiveAmount (Monthly)
1	Basic level	10 %	Rs. 5000
2	Specialist level	15%	Rs. 7500
3	Management level	10%	Rs. 5000

Based on the suggestions in this report, a comparison of the existing and proposed emoluments at various levels in a typical LDC for a hypothetical case is attached as Annex-VII. While implementation it may be ensured that the total emoluments (Pay + Perquisites + PRP+ Certification linked incentive) of an LDC employee may be limited to 150 % of a similarly placed employee in the respective Transmission Utility. For this purpose emoluments would include the basic pay and perquisites, performance related pay and the certification linked incentives but excluding the contingency duty allowance.

15.4 Special Contingency Allowance

The System Operators are subjected to immense physiological and mental stress arising from the need to continuously adjust their circadian

rhythms to their work schedules and respond to the unforeseen and random events under extreme time pressures. The other sources of stress could be system alarms, non-compliance of System Operator's instructions by the utilities, shifting quickly from periods of little activity to periods of peak activity, operational protocols and work schedules. These work conditions are unique to the Load Despatch Centres and it is essential that the personnel employed at Load Despatch Centres are suitably compensated through a contingency duty/ night shift allowance.

The quantum of assistance under contingency duty/ night shift allowance should be substantially high to minimize problems in Crew Resource Management, which is an important issue in Control Centre functioning round the clock. This can be appreciated from the fact that even on an optimistic basis; the probability of simultaneous presence of all the executives out of the designated number at an LDC control room is only 66% in a year. This would further reduce if mandatory training of one week to every executive were also taken into account (as notified by National Training Policy). In this context it is interesting to note that in National Grid Company, United Kingdom, 26 % salary enhancement is offered for control room shift personnel to ensure availability of adequate manpower.

The Task Force recommends that the contingency duty/night shift allowance should be at least 50 % of the per day basic pay of the individual. The recommended allowance for various hierarchy levels are given in Table 9.

Table 9: Contingency duty Allowance

Hierarchy level	E8 –E9	E6-E7	E4-E5	E2-E3	E0-E1
Average Basic Pay as recommended in 2 nd PRC (Rs.)	66,575	51,950	43,625	35,625	25,500
Per day Basic Pay (Rs.)	2,219	1,732	1,454	1,188	850
Suggested Contingency Duty/ Night shift allowance as 50 % of per day Basic Pay (Rs.)	1,110	866	727	594	425

15.5 Special Awards for recognition of exceptional performance/ contribution

Apart from the certification-linked incentives, the LDC personnel could be given special awards for recognition for exceptional performance or contribution to Load Despatching. Evaluation could be based on the accumulated credits earned by the personnel in designated activities during the assessment period. The award could comprise of citations and token cash amount. The achievements/contributions meriting special awards could be drawn up by a separate Committee within each LDC. Credits could be given for achievements such as training / mentoring subordinates, developing content and presentation delivery on topics relevant to LDC operation, publishing technical papers/ articles/ books/ documents, representing LDC in national, international forums of repute and exceptional performance / contribution in load despatching. Credits could be given for each achievement and the same added up at the end of each year to decide the Special Awards.

Besides these loyalty awards could be given in recognition of completion of 5 years, 10 years, 20 years, 25 years and 30 years of service in Load Despatch Centre. The reward could be in the form of appreciation letter from the LDC-Head and any other non-monetary benefit.

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11. 'Working at National Grid' downloaded from the Careers link on the website of National Grid Company, UK, www.nationalgrid.com as seen on 25th November 2008
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ANNEXES

No. 6/2/2008- Trans
Government of India
Ministry of Power

Shram Shakti Bhawan, Rafi Marg.
New Delhi, the 13th October, 2008

ORDER

Sub : Creation of Task Force to consider Financial aspects for augmentation and upgradation of State Load Despatch Centres and issues related to emoluments for personnel.

A Committee on "Manpower, Certification and Incentives for System Operation and Ring Fencing Load Despatch Centres" was set up under the chairmanship of Shri Gireesh B. Pradhan, Additional Secretary, Ministry of Power on 4th February, 2008. The Committee submitted its report to the Government on 18th August, 2008. Secretary, Ministry of Power, chaired a meeting of State Regulators, State Power Secretaries, State Utilities and representatives from CPRI and NPTI to consider the implementation of the Report of the Committee on 7th October, 2008. Based on the discussions in this meeting, it has been decided to constitute the following Task Force under the chairmanship of CMD, Power Finance Corporation to look into the financial aspects for augmentation and upgradation of State Load Despatch Centres and issues related to emoluments (compensation structure, incentives etc.) for the personnel engaged in System Operation and give its recommendations:

- | | | | |
|----|--------------------------------|-------|------------------|
| 1. | CMD, Power Finance Corporation | ----- | Chairman |
| 2. | Director (Fin), PGCIL | ----- | Member |
| 3. | Secretary (Power), Haryana | ----- | Member |
| 4. | MD, Transco, Gujarat | ----- | Member |
| 5. | Secretary, CERC | ----- | Member Secretary |
2. The Chairman of the Task Force may co-opt any expert/person on the Task Force as and when required, depending on the issue under consideration. The Task Force may meet as often as required.
3. Task Force will submit its report within two months.


(Lokesh Chandra)
Director
Tel : 23715250

Central Electricity Regulatory Commission
3rd Floor, Chanderlok Building, 36, Janpath, New Delhi - 110 001
Tel : 23353503, Fax: 23753923

Ref No. 20/4(26)/2009-CERC

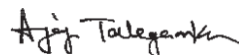
February 4, 2009

Subject : Separation of accounts of RLDCs and identification of assets to be transferred from POWERGRID to new entities.

Sir,

Please find enclosed record of discussions held in the meeting held on 23.01.2009 at POWERGRID'S Corporate Office Office on the above subject.

This issues with the approval of Chief (Fin.) CERC.



(Ajay Talegaonkar)
Dy Chief (Engg.)

1. Director (Finance),
Power Grid Corporation of India Ltd.
Plot No. 02, Sector 29, Near IFFCO Chowk,
Gurgaon, (Haryana) - 121 001
2. Executive Director (SO),
Power Grid Corporation of India Ltd.,
B-9, Qutab Institutional Area,
Katwaria Sarai, New Delhi - 110 016

Summary of record of discussions in the meeting held on 23rd January, 2009 at POWERGRID's Corporate Office on Separation of accounts of RLDCs and identification of assets to be transferred from POWERGRID to new entities

1. It was generally agreed that the communication system should continue to be under the ownership of CTU/STU. The ownership of Remote Terminal Unit (RTUs) in line with the provisions as stated under IEGC and Grid Standards should rest with the entities in whose premises these RTUs are located i.e. generating stations or sub stations as the case may be and the modalities for the transfer of the existing RTUs would be worked out. The computer system along with software and peripherals located in the control room building of NLDC/RLDC and SLDC shall be transferred to new entities.
2. POWERGRID expressed that the gross block of the assets along with accumulated depreciation and balance debt and equities shall be transferred to books of accounts of the new entity. POWERGRID shall initiate action for taking permission of the lender for transfer of the loans. If lenders do not agree to transfer the loans, POWERGRID undertook to continue repayment on the basis of back to back recovery from the new entity. POWERGRID would hold entire equity of new entity created to take over functions of the NLDC and RLDCs. However, it was expressed that assets created under ULDC scheme which are physically located at SLDCs should not remain in the books of POWERGRID. In stead, all the States and UTs should be asked to take over these assets at their book value.
3. ED (SO), POWERGRID, expressed that the fees and charges to be specified by CERC should have two separate components – one for recovery of investment and O&M expenses related to equipment and other for employee related expenses in System operation.
4. There was general agreement that unlike ULDC scheme, the assets for the newly created entity such as building, DG sets, computer hardware, computer software etc., will have divergent fair life. So, the levelised tariff method applied for ULDC scheme can not be applied for new entity. However, assets having shorter life span and subjected to obsolescence due to technological innovations may be depreciated at a higher rate.

5. On the issue as to who will share fees and charges of new entities, it was felt that users should bear charges. The users of the system operator's services are generators, distribution licensees and transmission licensees. However, Appropriate Commission will decide on this issue based on provisions of the Act. It was also agreed that fees and charges have to be decided regionwise but Corporate Offices expenses of new entity and expenses on NLDC will have to be allocated to all RLDCs.

Following were present in the meeting:

CERC

- Shri K. Biswal, Chief (Fin.)
- Shri Ajay Talegaonkar, Dy Chief (Engg.)

POWERGRID

- Shri J. Shridharan, Director (Fin.)
- Shri R.G. Yadav, Executive Director (OS)
- Shri S.K. Soonee, Executive Director (SO)
- Shri R.T. Agarwal, Executive Director (Fin)
- Shri V.K. Agarwal, General manager (NRLDC)
- Shri U.K. Tyagi, Addl. General manager (Comml)
- Shri Rakesh Prasad, Dy General manager (Comml)
- Shri J.S. Gulati, Dy General manager (Fin)
- Shri M.M. Mondal, Chief Manager (Comml)

**All India level summary of assets, outstanding loan and equity in respect of the
Unified Load Despatch and Communication (ULDC) project by POWERGRID**

All figures are in Rs. Crore

GROSS BLOCK AS ON 31.12.2008

	Central Sector	State Sector	Total
Gross Block	754.56	1071.53	1826.09
Equity			264.07
Grant			175.25
Loans			1386.77
Total			1826.09

NET BLOCK AS ON 31.12.2008

	Central Sector	State Sector	Total
Loan Outstanding	409.76	626.05	1035.81
Grant Outstanding	76.96	70.40	147.36
Equity Outstanding	42.99	151.81	194.80
Total Outstanding	529.71	848.26	1377.97

Notes

- 1 Grant in Central Sector is adjusted to the extent of Depreciation.
- 2 Foreign loans taken in Gross Block are taken at exchange rates as on Date Of Commercial Operation (DOCO).
- 3 Foreign Exchange Rate Variation (FERV) Charged to Profit & Loss Account shall be recoverable.
- 4 Above figures includes cost of RLDC assets purchased by POWERGRID.
- 5 Book Value of Assets transferred from CEA has not yet been determined.
- 6 NLDC figures are not included.
- 7 The above working is provisional and subject to audit and adjustments.

Region wise break-up of assets, outstanding loan and equity in respect of the Unified Load Despatch and Communication (ULDC) project by POWERGRID

All figures are in Rs. Crore and as on 31st Dec 2008

		Central Sector	State Sector	Total
Northern Region	Gross Block	260.31	311.04	571.34
	Net Block	163.98	232.08	396.06
	Loan Outstanding	155.97	186.36	342.33
	Equity Outstanding	8.01	45.72	53.73
	Total Outstanding	163.98	232.08	396.06

		Central Sector	State Sector	Total
Southern Region	Gross Block	127.74	417.35	545.08
	Net Block	82.27	305.44	387.72
	Loan Outstanding	72.40	236.55	308.95
	Equity Outstanding	9.87	68.89	78.77
	Total Outstanding	82.27	305.44	387.72

		Central Sector	State Sector	Total
Eastern Region	Gross Block	141.59	193.63	335.23
	Net Block	118.77	170.36	289.13
	Loan Outstanding	111.00	151.79	262.79
	Equity Outstanding	7.77	18.57	26.34
	Total Outstanding	118.77	170.36	289.13

		Central Sector	State Sector	Total
Western Region	Gross Block	105.76	71.26	177.03
	Net Block	86.08	64.94	151.02
	Loan Outstanding	68.74	46.31	115.05
	Equity Outstanding	17.34	18.63	35.97
	Total Outstanding	86.08	64.94	151.02

		Central Sector	State Sector	Total
North- Eastern Region	Gross Block	119.16	78.25	197.41
	Net Block	78.61	75.44	154.05
	Loan Outstanding	1.65	5.04	6.70
	Grant	76.96	70.40	147.36
	Total Outstanding	78.61	75.44	154.05

		Central Sector	State Sector	Total
Total	Gross Block	754.56	1071.53	1826.09
	Net Block	529.71	848.26	1377.97
	Loan Outstanding	409.76	626.05	1035.81
	Equity Outstanding	42.99	151.81	194.80
	Grant	76.96	70.40	147.36
	Total Outstanding	529.71	848.26	1377.97

Segregation of Central Sector assets installed under the Unified Load Despatch and Communication (ULDC) project by POWERGRID

All figures are in Rs. Crore as on 31.12.2008

Central Sector portion	Book Value of Assets				Outstanding Capital		
	Control Centre Assets	RTU	Communication Assets	Total Assets	Equity	Loan	Grant
	A	B	C	D=A+B+C	E	F	G
NR	78.15	3.46	82.38	163.98	8.01	155.97	0
SR	21.99	12.01	48.28	82.27	9.87	72.40	0
ER	44.95	3.41	70.41	118.77	7.77	111.00	0
WR	28.58	1.39	56.11	86.08	17.34	68.74	0
NER	30.26	6.77	41.58	78.61	0.00	1.65	76.96
Total	203.92	27.03	298.76	529.71	42.99	409.76	76.96

Note

Total Assets have been apportioned in Control Centre Assets , RTU & Communication Assets in the ratio of Gross Assets.

Apportioned Outstanding Liabilities- Central Sector

1. Control Centre Assets

Outstanding		NR	SR	ER	WR	NER	Total
Equity	$H = (E/D) \times A$	3.82	2.64	2.94	5.76	0.00	15.15
Loan	$I = (F/D) \times A$	74.33	19.35	42.01	22.82	0.64	159.14
Grant	$J = (G/D) \times A$	0.00	0.00	0.00	0.00	29.62	29.62

2. Remote Terminal Units

Outstanding		NR	SR	ER	WR	NER	Total
Equity	$K = (E/D) \times B$	0.17	1.44	0.22	0.28	0.00	2.11
Loan	$L = (F/D) \times B$	3.29	10.57	3.18	1.11	0.14	18.29
Grant	$M = (G/D) \times B$	0.00	0.00	0.00	0.00	6.63	6.63

3. Communication Assets

Outstanding		NR	SR	ER	WR	NER	Total
Equity	$N = (E/D) \times C$	4.02	5.79	4.61	11.30	0.00	25.73
Loan	$O = (F/D) \times C$	78.35	42.49	65.81	44.81	0.87	232.33
Grant	$P = (G/D) \times C$	0.00	0.00	0.00	0.00	40.71	40.71

**Segregation of assets under State Sector in Northern Region
installed under the Unified Load Despatch and Communication
project by POWERGRID**

Northern Region-State Sector

Outstanding Equity	Outstanding Loan	Outstanding Total
P	Q	R = P + Q
45.72	186.36	232.08

All figures are in Rs. Crore and as on 31st Dec 2008

Book value of Assets - Northern Region

Constituent	Control Centre	RTU	Communication	Total Assets
	A	B	C	D=A+B+C
Punjab	7.59	1.71	9.15	18.45
Haryana	9.37	2.11	11.30	22.79
Rajasthan	14.47	3.26	17.45	35.18
Delhi	13.65	3.07	16.46	33.19
Uttar Pradesh	28.44	6.40	34.29	69.13
Himachal Pradesh	7.72	1.74	9.31	18.78
Jammu & Kashmir	6.01	1.35	7.25	14.62
BBMB	8.21	1.85	9.90	19.96
Total	95.48	21.48	115.12	232.08

Note: Total Assets have been apportioned into Control Centre Assets , RTU & Communication Assets in the ratio of Gross Assets.

Apportioned Outstanding Liabilities - Northern Region

Constituent	Control Centre		RTU		Communication		Total	
	Equity	Loan	Equity	Loan	Equity	Loan	Equity	Loan
	E= (P/R)xA	F= (Q/R)xA	G= (P/R)xB	H= (Q/R)xB	I= (P/R)xC	J= (Q/R)xC	K= E+G+I	L= F+H+J
Punjab	1.50	6.10	0.34	1.37	1.80	7.35	3.64	14.82
Haryana	1.85	7.53	0.42	1.69	2.23	9.08	4.49	18.30
Rajasthan	2.85	11.62	0.64	2.61	3.44	14.01	6.93	28.25
Delhi	2.69	10.96	0.60	2.47	3.24	13.22	6.54	26.65
Uttar Pradesh	5.60	22.84	1.26	5.14	6.76	27.54	13.62	55.51
Himachal Pradesh	1.52	6.20	0.34	1.40	1.83	7.48	3.70	15.08
Jammu & Kashmir	1.18	4.83	0.27	1.09	1.43	5.82	2.88	11.74
BBMB	1.62	6.59	0.36	1.48	1.95	7.95	3.93	16.03
Total	18.81	76.67	4.23	17.25	22.68	92.44	45.72	186.36

**Segregation of assets under State Sector in Southern Region installed
under the Unified Load Despatch and Communication project by POWERGRID**

Southern Region-State Sector

Outstanding Equity	Outstanding Loan	Outstanding Total
P	Q	R = P + Q
68.89	236.55	305.44

All figures are in Rs. Crore and as on 31st Dec 2008

Book value of Assets - Southern Region

		Andhra Pradesh	Tamil Nadu	Karnataka	Kerala	UT Puducherry	Total
Control Centre	A	20.66	15.97	13.41	18.61	11.83	80.49
RTU	B	20.36	8.36	4.91	7.14	1.00	41.76
Communication	C	95.31	47.85	0.00	35.87	4.16	183.19
Total	D= A + B +C	136.33	72.18	18.31	61.62	16.99	305.44

Note :

Total Assets have been apportioned in Control Centre Assets , RTU & Communication Assets in the ratio of Gross Assets.

Apportioned Outstanding Liabilities - Southern Region

			Andhra Pradesh	Tamil Nadu	Kar-nataka	Kerala	UT Pudu-cherry	Total
Control Centre	Equity	$E = (P/R) \times A$	4.66	3.60	3.02	4.20	2.67	18.15
	Loan	$F = (Q/R) \times A$	16.00	12.37	10.38	14.42	9.17	62.34
RTU	Equity	$G = (P/R) \times B$	4.59	1.89	1.11	1.61	0.23	9.42
	Loan	$H = (Q/R) \times B$	15.77	6.47	3.80	5.53	0.78	32.34
Comm-unication	Equity	$I = (P/R) \times C$	21.50	10.79	0.00	8.09	0.94	41.32
	Loan	$J = (Q/R) \times C$	73.81	37.06	0.00	27.78	3.22	141.87
Total	Equity	$K = E + G + I$	30.75	16.28	4.13	13.90	3.83	68.89
	Loan	$L = F + H + J$	105.58	55.90	14.18	47.72	13.16	236.55

Segregation of assets under State Sector in Eastern Region installed under the Unified Load Despatch and Communication project by POWERGRID

Eastern Region-State Sector

Outstanding Equity	Outstanding Loan	Outstanding Total
P	Q	R = P + Q
18.57	151.79	170.36

All figures are in Rs. Crore and as on 31st Dec 2008

Book Value of Assets - Eastern Region

		West Bengal	Jharkhand	Orissa	Bihar	DVC	Sikkim	Total
Control Centre	A	17.85	9.12	24.67	12.02	10.38	0.69	74.74
RTU	B	0.10	0.44	3.09	0.97	0.77	0.01	5.37
Communication	C	1.63	7.37	51.96	16.24	12.90	0.14	90.25
Total Assets	D= A + B +C	19.58	16.93	79.73	29.23	24.05	0.84	170.36

Note:

Total Assets have been apportioned in Control Centre Assets , RTU & Communication Assets in the ratio of Gross Assets.

Apportioned Outstanding Liabilities - Eastern Region

			West Bengal	Jharkhand	Orissa	Bihar	DVC	Sikkim	Total
Control Centre	Equity	$E = (P/R) \times A$	1.95	0.99	2.69	1.31	1.13	0.08	8.15
	Loan	$F = (Q/R) \times A$	15.90	8.13	21.98	10.71	9.25	0.62	66.59
RTU	Equity	$G = (P/R) \times B$	0.01	0.05	0.34	0.11	0.08	0.00	0.58
	Loan	$H = (Q/R) \times B$	0.09	0.39	2.75	0.86	0.68	0.01	4.78
Communication	Equity	$I = (P/R) \times C$	0.18	0.80	5.66	1.77	1.41	0.02	9.84
	Loan	$J = (Q/R) \times C$	1.45	6.57	46.30	14.47	11.50	0.12	80.42
Total	Equity	$K = E + G + I$	2.13	1.85	8.69	3.19	2.62	0.09	18.57
	Loan	$L = F + H + J$	17.44	15.09	71.04	26.04	21.43	0.75	151.79

Segregation of assets under State Sector in Western Region installed under the Unified Load Despatch and Communication project by POWERGRID

Western Region-State Sector

Outstanding Equity	Outstanding Loan	Outstanding Total
P	Q	R = P + Q
18.63	46.31	64.94

All figures are in Rs. Crore and as on 31st Dec 2008

Book Value of Assets - Western Region

		Chattisgarh Pradesh	Madhya	Gujarat	Goa	Total
Control Centre	A	4.47	9.20	9.74	4.04	27.45
RTU	B	0.04	21.45	4.36	0.35	26.20
Communication	C	3.88	4.45	2.03	0.93	11.29
Total Assets	D= A + B +C	8.39	35.11	16.13	5.32	64.94

Note

Total Assets have been apportioned in Control Centre Assets , RTU & Communication Assets in the ratio of Gross Assets.

Apportioned Outstanding Liabilities - Western Region

			Chattisgarh	Madhya Pradesh	Gujarat	Goa	Total
Control Centre	Equity	$E = (P/R) \times A$	1.28	2.64	2.79	1.16	7.88
	Loan	$F = (Q/R) \times A$	3.19	6.56	6.94	2.88	19.58
RTU	Equity	$G = (P/R) \times B$	0.01	6.15	1.25	0.10	7.52
	Loan	$H = (Q/R) \times B$	0.03	15.30	3.11	0.25	18.68
Communication	Equity	$I = (P/R) \times C$	1.11	1.28	0.58	0.27	3.24
	Loan	$J = (Q/R) \times C$	2.76	3.18	1.45	0.66	8.05
Total	Equity	$K = E + G + I$	2.41	10.07	4.63	1.53	18.63
	Loan	$L = F + H + J$	5.98	25.04	11.50	3.79	46.31

Segregation of assets under State Sector in North Eastern Region installed under the Unified Load Despatch and Communication project by POWERGRID

North-eastern Region- State Sector

Outstanding Loan	Outstanding Grant	Outstanding Total
P	Q	R= P + Q
5.04	70.40	75.44

All figures are in Rs. Crore and as on 31st Dec 2008

Book Value of Assets - North-eastern Region

		Manipur	Meghalaya	Mizoram	Nagaland	Assam	Tripura	Arunachal Pradesh	Total
Control Centre	A	1.57	4.44	1.33	1.48	15.46	4.61	0.92	29.81
RTU	B	0.74	2.09	0.63	0.70	7.26	2.17	0.43	14.00
Communication	C	1.66	4.71	1.42	1.57	16.40	4.89	0.97	31.62
Total	D=A+B+C	3.97	11.23	3.38	3.75	39.12	11.67	2.32	75.44

Note

Total Assets have been apportioned in Control Centre Assets , RTU & Communication Assets in the ratio of Gross Assets.

Apportioned Outstanding Liabilities - North-eastern Region

			Manipur	Meghalaya	Mizoram	Nagaland	Assam	Tripura	Arunachal Pradesh	Total
Control Centre	Loan	$E = (P/R) \times A$	0.10	0.30	0.09	0.10	1.03	0.31	0.06	1.99
	Grant	$F = (Q/R) \times A$	1.46	4.14	1.25	1.38	14.43	4.30	0.86	27.82
RTU	Loan	$G = (P/R) \times B$	0.05	0.14	0.04	0.05	0.49	0.14	0.03	0.94
	Grant	$H = (Q/R) \times B$	0.69	1.95	0.59	0.65	6.78	2.02	0.40	13.07
Communi-cation	Loan	$I = (P/R) \times C$	0.11	0.31	0.09	0.10	1.10	0.33	0.07	2.11
	Grant	$J = (Q/R) \times C$	1.55	4.39	1.32	1.47	15.30	4.56	0.91	29.51
Total	Loan	$K = E + G + I$	0.27	0.75	0.23	0.25	2.61	0.78	0.16	5.04
	Grant	$L = F + H + J$	3.70	10.48	3.15	3.50	36.51	10.89	2.17	70.40

CAPEX FOR A TYPICAL LOAD DESPATCH CENTRE

S. No.	Item	CAPEX Rs(Crore)					
		2009-10	2010-11	2011-12	2012-13	2013-14	Total
A	Control Centre Upgradation						
1	Hardware/Software for SCADA System	4.00	4.00	12.00	2.00	2.00	24.00
2	Common Database Tools	0.00	0.00	2.00	0.00	0.00	2.00
3	WAM/PMU based System	0.00	3.00	2.00	0.00	0.00	5.00
4	Protection System for Using Synchrophasor technology	0.20	0.20	0.20	0.20	0.20	1.00
5	Back Up Control Centre	4.00	4.00	8.00	0.50	0.50	17.00
6	Cyber Security & Data Security	0.40	0.20	0.20	0.20	0.20	1.20
7	Weather Stations	0.10	0.10	0.10	0.10	0.10	0.50
8	Implementation of 61850/104 Protocol	0.50	0.50	2.00	0.50	0.50	4.00
	Sub Total of A	9.20	12.00	26.50	3.50	3.50	54.70
S. No.	Item	CAPEX Rs(Crore)					
		2009-10	2010-11	2011-12	2012-13	2013-14	Total
B	Off-line Systems						
1	Scheduling Application	0.30	0.05	0.05	0.20	0.05	0.65
2	Open Access Application	0.30	0.05	0.05	0.20	0.05	0.65
3	PX Transaction Application	0.10	0.05	0.05	0.10	0.05	0.35
4	Metering & Settlement System	0.60	0.10	0.10	0.10	0.10	1.00
5	Interfaces for above Applications	0.10	0.10	0.10	0.10	0.10	0.50
6	Data Warehousing & Mining Facility	0.60	0.00	0.00	0.20	0.20	1.00
7	Website, NMS & Perimeter Security	0.30	0.05	0.05	0.05	0.05	0.50
8	System Studies	0.60	0.00	0.00	0.20	0.20	1.00
9	Other Misc. Requirements	0.50	0.50	0.50	0.50	0.50	2.50
	Sub Total of B	3.10	0.85	0.85	1.45	1.25	7.50

S.	Item	CAPEX Rs(Crore)No.					
		2009-10	2010-11	2011-12	2012-13	2013-14	Total
C	Infrastructure						
1	Conference Room	1.00	0.10	0.10	0.50	0.10	1.80
2	Video Conferencing	0.40	0.00	0.00	0.00	0.10	0.50
3	Building Renovation	2.00	0.50	0.50	0.50	0.50	4.00
4	Energy Efficient Buildings-upgradation	0.10	0.20	0.10	0.10	0.10	0.60
5	Office Equipment	0.50	1.50	0.50	0.50	0.50	3.50
6	Staff Recreation & Rejuvenation Facilities	0.50	0.50	0.25	0.25	0.25	1.75
	Sub Total of C	4.50	2.80	1.45	1.85	1.55	12.15
	TOTAL	16.80	15.65	28.80	6.80	6.30	74.35

Notes :

1. Hardware/Software cost has been taken considering the replacement/back up of major expenditure in 2011-12.
2. Expenditure on offline applications has been kept in view of dynamic requirements.
3. Common database tools will coincide with replacement of existing SCADA/EMS system.
4. Expenditure on cyber security and data security is high in the initial phase as these features are not available in the existing SCADA/EMS systems.

DETAILS OF EMPLOYEE COMPENSATION

AS ON 23.12.2008

Delhi SLDC

A. Basic Pay and Perquisites (on initial scale)

(Rs.)

Component		Member / Director	Chief Engineer	Superintending Engineer	Executive Engineer	Assistant Engineer
1	Pay scale	75500	54890	48030	32920	26570
2	Average Basic Pay	0	0	0	0	0
3	Cadre pay / Special Duty Allowance	3000	3000	2000	1500	1200
4	Stagnation pay/benefit	0	0	0	0	0
5	Dearness Allowance	0	8782	7685	5267	4251
6	Dearness pay	0	0	0	0	0
7	Personal pay	0	0	0		0
8	House Rent Allowance	22650	16467	14409	9876	7971
9	City Compensatory Allowance	0	0	0	0	0
10	Conveyance Allowance	Govt.vehicle	Govt.vehicle	Govt.vehicle	Hired vehicle	2690
11	Vehicle Maintenance Allowance(per annum)	0	0	0	0	5380
12	Child Transport Subsidy	0	0	0	0	0
13	Chauffer driven car	0	0	0	0	0
14	Leave Travel Concession	AS PER ACTUAL	AS PER ACTUAL	AS PER ACTUAL	AS PER ACTUAL	AS PER ACTUAL
15	Medical Allowance	AS PER ACTUAL	AS PER ACTUAL	AS PER ACTUAL	AS PER ACTUAL	AS PER ACTUAL
16	Internet charges reimbursement	AS PER ACTUAL	AS PER ACTUAL	0	0	0
17	Landline charges reimbursement	AS PER ACTUAL	AS PER ACTUAL	3200	2400	1200
18	Mobile phone reimbursement	AS PER ACTUAL	AS PER ACTUAL	0	0	0
19	Technical Allowance	0	0	0	0	0
20	Literature Allowance	0	0	0	0	0
21	Newspaper Allowance	600	400	250	150	100
22	Child Tution fees reimbursement	1000	1000	1000	1000	1000
23	Canteen Subsidy	1000	1000	1000	1000	1000
24	Liveries/Uniform reimbursement	0	0	0	0	0
25	Washing Allowance	0	0	0	0	0
26	Home Furnishing Allowance	0	0	0	0	0
27	Paid Helper at residence	3683	3683	0	0	0
28	Club Membership (one time)	for 2 clubs	for single club	0	0	0

B. Performance linked Pay / Incentives**Delhi SLDC**

Component		Member / Director(Rs)	Chief Engineer (Rs)	Superintending Engineer(Rs)	Executive Engineer(Rs)	Assistant Engineer(Rs)
1	ExGratia/Special Incentive (per Annum)	5100	5100	5100	5100	5100
2	Transmission linked incentive	0	0	0	0	0
3	Generation linked Incentive	0	0	0	0	0
4	Performance linked incentive	0	0	0	0	0
5	Consultancy incentive	0	0	0	0	0
6	Consultancy Allowance	0	0	0	0	0
7	Project Allowance / Incentive	0	0	0	0	0

C. Shift Duty / Hardship Duty Allowance**Delhi SLDC**

Component		Member / Director(Rs)	Chief Engineer (Rs)	Superintending Engineer(Rs)	Executive Engineer(Rs)	Assistant Engineer(Rs)
1	Shift duty allowance	0	4500	4500	4500	3600
2	Night shift allowance	0	0	0	0	0
3	Special duty allowance	0	0	0	0	0
4	Occupational stress allowance	0	0	0	0	0
5	Hardship allowance	0	0	0	0	0
6	Hill tract allowance	0	0	0	0	0

Notes

- a The pay and allowances in respect of IPGCL/PPCL are same

Name: V. VENUGOPAL
Designation: DY. GENERAL MANAGER (SYSTEM OPERATION)

Organisation: SLDC, DELHI
Contact No.: 9871093902

DETAILS OF EMPLOYEE COMPENSATION (EXISTING)

Haryana SLDC

(Rs.)

A. Basic Pay and Perquisites

	Component	Member (Director)	Chief Engineer	Superintending Engineer	Executive	Assistant
1	Pay scale (BP)	22400-24400	18400-22400	15950-20000	14700-18700	8000-13500
2	Average Basic Pay	23400	20400	17975	16700	10750
3	Dearness pay 50%(BP)	11700	10200	8987.5	8350	5375
4	Cadre pay/Special Pay (Head Office)	0	0	400	300	200
5	Stagnation pay/benefit	0	0	0	0	0
6	Dearness Allowance @54% of (BP+DP)	18954	16524	14559.75	13527	8707.5
7	Net Pay	54054	47124	41922.25	38877	25032.5
8	Personal pay	0	0	0	0	0
9	House Rent Allowance in Class "A" City	0	1260	1260	1260	1260
10	City Compensatory Allowance in Class "A" City	200	200	200	200	200
11	Conveyance Allowance	0	0	800	800	800
12	Vehicle Maintenance Allowance	0	0	0	0	0
13	Child Transport Subsidy	0	0	0	0	0
14	Chauffer driven car	0	0	0	0	0
15	Leave Travel Concession	0	0	0	0	0
16	Medical Allowance	250	250	250	250	250
17	Internet charges reimbursement	0	0	0	0	0
18	Landline charges reimbursement (Residence)	Actual	1250 Call	1000 Calls	665 Calls	Nil
19	Mobile phone reimbursement	Actual	500+rental	300 + rental	300 + rental	200+rental
20	Technical Allowance	0	0	0	0	0
21	Literature Allowance	0	0	0	0	0
22	Newspaper Allowance	0	0	0	0	0
23	Child Tution fees reimbursement	0	0	0	0	0
24	Canteen Subsidy	0	0	0	0	0
25	Liveries/Uniform reimbursement	0	0	0	0	0
26	Washing Allowance	0	0	0	0	0
27	Home Furnishing Allowance	0	0	0	0	0
28	Paid Helper at residence	0	0	0	0	0
29	Electricity Allowance	100 units	100 units	100 units	100 units	90 units

Note:-

1. For Director, House is being provided by the Nigam as per actuals on lease & in lieu of that 5% of the basic Pay drawn is deducted.
2. For Director and Chief Engineer, where Nigam vehicle is attached to the officer, the conveyance allowance is zero.

B. Performance linked Pay / Incentives**Haryana SLDC**

(Rs)

	Component	Member (Director)	Chief Engineer	Superintending	Executive	Assistant Engineer
1	ExGratia/Special Incentive	0	0	0	0	0
2	Transmission linked incentive	0	0	0	0	0
3	Generation linked Incentive	0	0	0	0	0
4	Performance linked incentive	0	0	0	0	0
5	Consultancy incentive	0	0	0	0	0
6	Consultancy Allowance	0	0	0	0	0
7	Project Allowance / Incentive	0	0	0	0	0
8	Other incentives	0	0	0	0	0

C. Shift Duty / Hardship Duty Allowance**Haryana SLDC**

(Rs)

	Component	Member (Director)	Chief Engineer	Superintending	Executive	Assistant Engineer
1	Shift duty allowance	0	0	0	200	200
2	Night shift allowance	0	0	0	0	0
3	Special duty allowance	0	0	0	0	0
4	Occupational stress allowance	0	0	0	0	0
5	Hardship allowance	0	0	0	0	0
6	Hill tract allowance	0	0	0	0	0

Name: Er. Kulbushan Kumar
Designation : Superintending Engineer

Organisation: Haryana Vidyut Prasaran Nigam Ltd.
Contact No.: 0180-2662770

DETAILS OF EMPLOYEE COMPENSATION (EXISTING)

Himachal Pradesh SLDC

A. Basic Pay and Perquisites

(Rs)

	Component	Member	Chief Engineer	Superintending Engineer	Executive Engineer	Assistant Engineer
1	Pay scale	18600-23100	18600-23100	15800-21100	12500-19100	7750-14500
2	Average Basic Pay	20850	20850	18450	15800	11125
3	Cadre pay	0	0	0	0	0
4	Stagnation pay/benefit @ 10% of(2+6)(IR)	3128	3128	2768	2370	1669
5	Dearness Allowance @54% of(2+6)	16889	16889	14945	12798	9011
6	Dearness pay @50%	10425	10425	9225	7900	5563
7	Personal pay	0	0	0	0	0
8	House Rent Allowance	1000	1000	1000	1000	1000
9	City Compensatory Allowance	175	175	175	175	175
10	Conveyance Allowance	700	700	700	700	480
11	Vehicle Maintenance Allowance	0	0	0	0	0
12	Child Transport Subsidy	0	0	0	0	0
13	Chauffer driven car	0	0	0	0	0
14	Leave Travel Concession	0	0	0	0	0
15	Medical Allowance	100	100	100	100	100
16	Internet charges reimbursement	0	0	0	0	0
17	Landline charges reimbursement	1200	1200	1200	1200	800
18	Mobile phone reimbursement	600	600	600	600	400
19	Technical Allowance	0	0	0	0	0
20	Literature Allowance	0	0	0	0	0
21	Newspaper Allowance	0	0	0	0	0
22	Child Tution fees reimbursement	0	0	0	0	0
23	Canteen Subsidy	0	0	0	0	0
24	Liveries/Uniform reimbursement	0	0	0	0	0
25	Washing Allowance	0	0	0	0	0
26	Home Furnishing Allowance	0	0	0	0	0
27	Paid Helper at residence	0	0	0	0	0
28	Total Pay Min	55066	55066	49162	42643	30322.5
29	Maximum	60601	60601	55681	50761	38625

B. Performance linked Pay / Incentives**Himachal Pradesh SLDC**

(Rs)

	Component	Member	Chief Engineer	Superintending Engineer	Executive Engineer	Assistant Engineer
1	ExGratia/Special Incentive	0	0	0	0	0
2	Transmission linked incentive	0	0	0	0	0
3	Generation linked Incentive	0	0	0	0	0
4	Performance linked incentive	0	0	0	0	0
5	Consultancy incentive	0	0	0	0	0
6	Consultancy Allowance	0	0	0	0	0
7	Project Allowance / Incentive	0	0	0	0	0
8	Other incentives	0	0	0	0	0

C. Shift Duty / Hardship Duty Allowance**Himachal Pradesh SLDC**

(Rs)

	Component	Member	Chief Engineer	Superintending Engineer	Executive Engineer	Assistant Engineer
1	Shift duty allowance	0	0	0	0	0
2	Night shift allowance	0	0	0	0	0
3	Special duty allowance	0	0	0	0	0
4	Occupational stress allowance	0	0	0	0	0
5	Hardship allowance	0	0	0	0	0
6	Hill tract allowance	250	250	200	200	200

DETAILS OF EMPLOYEE COMPENSATION (EXISTING)

Assam SLDC

A. Basic Pay and Perquisites

(Rs)

	Component	Chief General Manager	General Manager	Dy. General Manager	Senior Manager	AE / Asstt. Manager
1	Pay scale	12300-17500	11000-16900	9950-16000	8800-14750	6200-12600
2	Average Basic Pay	14900	13950	12975	11775	9400
3	Interim Relief (15% of basic pay)	2235	2093	1946	1766	1410
4	Stagnation pay/benefit	500	450	450	400	350
5	Dearness pay (50% of basic pay)	7450	6975	6488	5888	4700
6	Dearness Allowance (38% of row 2 to 5)	9532	8918	8306	7535	6027
7	Personal pay	0	0	0	0	0
8	House Rent Allowance (33.3% of basic, max 1200)	1200	1200	1200	1200	1200
9	City Compensatory Allowance	120	120	120	120	120
10	Conveyance Allowance (33 litres of Petrol/month)	1650	1650	1650	1650	0
11	Vehicle Maintenance Allowance	0	0	0	0	0
12	Child Transport Subsidy	0	0	0	0	0
13	Chauffer driven car	0	0	0	0	0
14	Leave Travel Concession	0	0	0	0	0
15	Medical Allowance	350	350	350	350	350
16	Internet charges reimbursement	0	0	0	0	0
17	Landline charges reimbursement	1000	1000	1000	1000	0
18	Mobile phone reimbursement	500	500	500	500	0
19	Technical Allowance	0	0	0	0	0
20	Literature Allowance	0	0	0	0	0
21	Newspaper Allowance	0	0	0	0	0
22	Child Tution fees reimbursement	0	0	0	0	0
23	Canteen Subsidy	0	0	0	0	0
24	Liveries/Uniform reimbursement	0	0	0	0	0
25	Washing Allowance	0	0	0	0	0
26	Home Furnishing Allowance	0	0	0	0	0
27	Paid Helper at residence	0	0	0	0	0

B. Performance linked Pay / Incentives**Assam SLDC**

(Rs)

	Component	Chief General Manager	General Manager	Dy. General Manager	Senior Manager	AE / Asstt. Manager
1	ExGratia/Special Incentive	0	0	0	0	0
2	Transmission linked incentive	0	0	0	0	0
3	Generation linked Incentive	0	0	0	0	0
4	Performance linked incentive	0	0	0	0	0
5	Consultancy incentive	0	0	0	0	0
6	Consultancy Allowance	0	0	0	0	0
7	Project Allowance / Incentive	0	0	0	0	0
8	Other incentives	0	0	0	0	0

C. Shift Duty / Hardship Duty Allowance**Assam SLDC**

(Rs)

	Component	Chief General Manager	General Manager	Dy. General Manager	Senior Manager	AE / Asstt. Manager
1	Shift duty allowance (Rs. 15/- morning and Rs.30/- for each evening shift)	0	0	0	0	345
2	Night shift allowance (Rs. 45/- per night)	0	0	0	0	360
3	Special duty allowance	0	0	0	0	0
4	Occupational stress allowance	0	0	0	0	0
5	Hardship allowance	0	0	0	0	0
6	Hill tract allowance	0	0	0	0	0
	Grand Total	39437	37206	34985	32184	24262

Notes

The pay Scale as shown above is due for revision wef 01.04.2007. Process for evaluation of new pay scale is under progress.

Name: S. K. Handique
Designation: Chief General manager (LDC)

Organisation: Assam Electricity Grid Corporation Ltd.
Contact No.: 0361-2380537

DETAILS OF EMPLOYEE COMPENSATION (EXISTING)

Meghalaya SLDC

A. Basic Pay and Perquisites

(Rs.)

	Component	Member	Chief Engineer	Superintending Engineer	Executive Engineer	Assistant Executive Engineer	Assistant Engineer
1	Basic Pay	28000	26975	23525	20735	19130	18090
2	Cadre Pay	-	0	0	0	0	0
3	Stagnation Pay/benefit	0	0	0	0	0	0
4	Dearness Allowance	7560	7283	6352	5598	5165	4884
5	Dearness Pay	3080	2967	2588	2281	2104	1990
6	Personal Pay	0	0	0	0	0	0
7	House Rent Allowance	2080	1900	1700	1500	1400	1098
8	City Compensatory Allowance (Hill Allowance)	200	200	200	200	200	200
9	Conveyance Allowance	90 Ltrs/PM	75 Ltrs/PM	50 Ltrs/PM	50 Ltrs/PM	0	0
10	Vehicle Maintenance Allowance	0	0	0	0	0	0
11	Child Transport Subsidy	0	0	0	0	0	0
12	Chauffer driven car	0	0	0	0	0	0
13	Leave Travel Allowance	0	0	0	0	0	0
14	Medical Allowance	400	400	400	400	400	400
15	Internet Charges reimbursement	0	0	0	0	0	0
16	Landline charges reimbursement	0	0	0	0	0	0
17	Mobile phone reimbursement	0	0	0	0	0	0
18	Technical Allowance (Special Pay)	600	500	500	400	375	350
19	Literature Allowance	0	0	0	0	0	0
20	Newspaper Allowance	0	0	0	0	0	0
21	Child Tution Fees Reimbursement	0	0	0	0	0	0
22	Canteen Subsidy	0	0	0	0	0	0
23	Liveries/Uniform Reimbursement	0	0	0	0	0	0
24	Washing Allowance	0	0	0	0	0	0
25	Home Furnishing Allowance	0	0	0	0	0	0
26	Paid Helper At residence	0	0	0	0	0	0

B. Performance Related Pay (Incentives)**Meghalaya SLDC**

	Component	Member	Chief Engineer	Superintending Engineer	Executive Engineer	Assistant Executive Engineer	Assistant Engineer
1	ExGratia/Special Incentive	n.a.	0	0	0	0	0
2	Transmission linked incentive	0	0	0	0	0	0
3	Generation linked Incentive	0	0	0	0	0	0
4	Performance linked incentive	0	0	0	0	0	0
5	Consultancy incentive	0	0	0	0	0	0
6	Consultancy Allowance	0	0	0	0	0	0
7	Project Allowance / Incentive	0	0	0	0	0	0
8	Other incentives	0	0	0	0	0	0

C. Shift Duty/Hardship Allowance**Meghalaya SLDC**

	Component	Member	Chief Engineer	Superintending Engineer	Executive Engineer	Assistant Executive Engineer	Assistant Engineer
1	Shift Duty Allowance	0	0	0	0	40/per shift	40/per shift
2	Night Shift Allowance	0	0	0	0	40/per shift	40/per shift
3	Special Duty Allowance	0	0	0	0	510/Per shift	476/per shift
4	Occupational stress allowance	0	0	0	0	0	0
5	Hardship Allowance	0	0	0	0	0	0
6	Hill Tract Allowance	0	0	0	0	0	0

DETAILS OF EMPLOYEE COMPENSATION (EXISTING)

West Bengal SLDC

A. Basic Pay and Perquisites

(Rs)

	Component	Member	Chief Engineer	Superintending Engineer	Executive Engineer	Assistant Engineer	
1	Pay scale	18400 500-22400	16400-20450	12000-18000	10000-15200	8000-13500	
2	Average Basic Pay		18650	16125	12275	8825	
3	Cadre pay	45000/- CONSOLIDATED PAY IS PAID TO THE DIRECTOR (TRANS), WBSETCL	0	0	0	0	
4	Stagnation pay/benefit		0	0	0	0	
5	Dearness Allowance		11470	9917	7549	5428	
6	Dearness pay		9325	8063	6138	4413	
7	Personal pay		0	0	0	0	
8	House Rent Allowance		2000	2000	1841	1324	
9	City Compensatory Allowance		0	0	0	0	
10	Conveyance Allowance		0	0	0	0	
11	Vehicle Maintenance Allowance		0	0	0	0	
12	Child Transport Subsidy		0	0	0	0	
13	Chauffer driven car		0	0	0	0	
14	Leave Travel Concession		A/C II train fare for family for shortest distance in India, once in 4 years				
15	Medical Allowance		100	100	100	100	
16	Internet charges reimbursement		0	0	0	0	
17	Landline charges reimbursement		0	0	0	0	
18	Mobile phone reimbursement		0	0	0	0	
19	Technical Allowance		0	0	0	0	
20	Literature Allowance		0	0	0	0	
21	Newspaper Allowance		0	0	0	0	
22	Child Tution fees reimbursement		0	0	0	0	
23	Canteen Subsidy		0	0	0	0	
24	Liveries/Uniform reimbursement		0	0	0	0	
25	Washing Allowance		0	0	0	0	
26	Home Furnishing Allowance		0	0	0	0	
27	Paid Helper at residence		0	0	0	0	
28	Electricity Allowance		100 UNITS	100 UNITS	100 UNITS	100 UNITS	

B. Performance linked Pay / Incentives**West Bengal SLDC**

(Rs)

	Component	Member	Chief Engineer	Superintending Engineer	Executive Engineer	Assistant Engineer
1	ExGratia/Special Incentive		5000	5000	5000	5000
2	Transmission linked incentive		0	0	0	0
3	Generation linked Incentive		0	0	0	0
4	Performance linked incentive		85-95 % of basic+DA+DP of Mar'08 subject to actual days present			
5	Consultancy incentive		0	0	0	0
6	Consultancy Allowance		0	0	0	0
7	Project Allowance / Incentive		0	0	0	0
8	Other incentives		0	0	0	0

C. Shift Duty / Hardship Duty Allowance**West Bengal SLDC**

(Rs)

	Component	Member	Chief Engineer	Superintending Engineer	Executive Engineer	Assistant Engineer
1	Shift duty allowance		0	60-130 P.M.	60-130 P.M.	60-130 P.M.
2	Night shift allowance		0	24 PER NIGHT	24 PER NIGHT	24 PER NIGHT
3	Special duty allowance		0	0	0	0
4	Occupational stress allowance		0	0	0	0
5	Hardship allowance		0	0	0	
6	Hill tract allowance		0	0	0	0

Notes

- a The currently applicable compensation values , only, is filled.
- b Due to paucity of time exact median value of average basic pay can not be determined
- c Electricity Allowances is shown as extra
- d The information for WBPDC (A GENERATING COMPANY) is given separately.

E & O E

Name : NAVONIL DATTA
 Designation : MANAGER (F&A)

Organisation: SLDC, WB
 Contact No.: 9434384942, (033)26416571

DETAILS OF EMPLOYEE COMPENSATION (EXISTING)

Andhra Pradesh SLDC

A. Basic Pay and Perquisites

Rs.

	Component	Member	Chief Engineer	Superintending Engineer	Divisional Engineer	Executive Engineer	Assistant Engineer
1	Pay scale		23975-860 -26555-955- 31330	19945-770 -22255-860 -26555-955 -31330	18405-770 -22255-860 -26555-955 -27510	16395-670 -18405-770 -22255-860- 24835	13905-575- 15055-670- 18405-770- 21485
2	Average Basic Pay	n.a.	27653	25638	22958	20665	17695
3	Cadre pay	n.a.	0	0	0	0	0
4	Stagnation pay/benefit	n.a.	0	0	0	0	0
5	Dearness Allowance (16.843% of Basic)	n.a.	4658	4318	3867	3481	2980
6	Dearness pay	n.a.	0	0	0	0	0
7	Personal pay	n.a.	0	0	0	0	0
8	House Rent Allowance: min of (30% of Basic, 6000)	n.a.	6000	6000	6000	6000	5309
9	City Compensatory Allowance	n.a.	300	300	300	300	300
10	Conveyance Allowance	n.a.	0	2590	0	0	0
11	Vehicle Maintenance Allowance	n.a.	0	0	0	0	0
12	Child Transport Subsidy	n.a.	0	0	0	0	0
13	Chauffer driven car	n.a.	0	0	0	0	0
14	Leave Travel Concession	n.a.	0	0	0	0	0
15	Medical Allowance	n.a.	200	200	200	200	200
16	Internet charges reimbursement	n.a.	0	0	0	0	0
17	Landline charges reimbursement	n.a.	0	0	0	0	0
18	Mobile phone reimbursement	n.a.	1275	1275	875	625	500
19	Technical Allowance	n.a.	0	0	0	0	0
20	Literature Allowance	n.a.	0	0	0	0	0
21	Newspaper Allowance	n.a.	235	235	0	0	0
22	Child Tution fees reimbursement	n.a.	0	0	0	0	0
23	Canteen Subsidy	n.a.	0	0	0	0	0
24	Liveries/Uniform reimbursement	n.a.	0	0	0	0	0
25	Washing Allowance	n.a.	0	0	0	0	0
26	Home Furnishing Allowance	n.a.	0	0	0	0	0
27	Paid Helper at residence	n.a.	0	0	0	0	0

B. Performance linked Pay / Incentives**Andhra Pradesh SLDC**

Rs.

Component	Member	Chief Engineer	Superintending Engineer	Divisional Engineer	Executive Engineer	Assistant Engineer
1 ExGratia/Special Incentive	n.a.	0	0	0	0	0
2 Transmission linked incentive	n.a.	0	0	0	0	0
3 Generation linked Incentive	n.a.	0	0	0	0	0
4 Performance linked incentive	n.a.	0	0	0	0	0
5 Consultancy incentive	n.a.	0	0	0	0	0
6 Consultancy Allowance	n.a.	0	0	0	0	0
7 Project Allowance / Incentive	n.a.	0	0	0	0	0

C. Shift Duty / Hardship Duty Allowance**Andhra Pradesh SLDC**

Rs.

Component	Member	Chief Engineer	Superintending Engineer	Divisional Engineer	Executive Engineer	Assistant Engineer
1 Shift duty allowance	n.a.	0	0	1841	1640	1391
2 Night shift allowance	n.a.	0	0	0	0	0
3 Special duty allowance	n.a.	0	0	0	0	0
4 Occupational stress allowance	n.a.	0	0	0	0	0
5 Hardship allowance	n.a.	0	0	0	0	0
6 Hill tract allowance	n.a.	0	0	0	0	0

DETAILS OF EMPLOYEE COMPENSATION (EXISTING)

Gujarat- SLDC

A. Basic Pay and Perquisites

	Component	Chief Engineer (Rs)	Additional Chief Engineer (Rs.)	Superintending Engineer (Rs)	Executive Engineer (Rs)	Deputy Engineer (Rs)	Junior Engineer (Rs.)
1	Pay scale	18400-22400	16000-20050	13400-18600	10400-15525	8000-13600	6500-11750
2	Average Basic Pay	20400	18025	16000	12963	10800	9125
3	Dearness Allowance (54 % of Basic + DP)	16524	14600	12960	10500	8748	7391
4	Dearness pay (D.P.) (50 % of Basic Pay)	10200	9013	8000	6481	5400	4563
5	House Rent Allowance (15 % of Basic + DP)	4590	4056	3600	2917	2430	2053
6	City Compensatory Allowance	180	180	180	180	180	180
7	Conveyance Allowance (10 % of basic + DP)	3060	2704	2400	1944	1620	1369
8	Vehicle Maintenance Allowance	0	0	0	0	0	0
9	Child Transport Subsidy	0	0	0	0	0	0
10	Chauffer driven car	Hiring Car upto Rs. 25,000	Hiring Car upto Rs. 15,000	Company Vehicle	0	0	0
11	Leave Travel Concession	1st AC	1st AC	1st AC	1st AC	2nd AC/2 tier-sleeper	1st class/ - AC/3 tier sleeper/ AC CC
12	Medical Allowance	100 + Actual	100 + Actual	100 + Actual	100 + Actual	100 + Actual	100 + Actual
13	Internet charges reimbursement	Actual	Actual	Actual	0	0	0
14	Landline charges reimbursement	Actual	Actual	Actual	0	0	0
15	Mobile phone reimbursement	2000	1500	1000	500	300	300
16	Technical Allowance - 1. Sub Station Allowance 2. Field allowance 3. Sp.Com. Allowance	3672	3245	2880	3111	3078	2601
17	Special / Generation Allowance (8% of BP +DP)	2448	2163	1920	1556	1296	1095
18	Literature Allowance	Actual	0	0	0	0	0
19	Newspaper Allowance	Actual	0	0	0	0	0
20	Quarter Facility	A Type	A Type	A Type	B Type	C Type	D Type
21	Child Tution fees reimbursement (up to 2 children)	500	500	500	500	500	500
22	Canteen Subsidy	0	0	0	0	0	0
23	Liveries/Uniform reimbursement	0	0	0	0	0	0
24	Shoes & Shocks reimbursement	880	880	880	880	880	880
25	Washing Allowance	0	0	0	0	0	0
26	Home Furnishing Allowance	0	0	0	0	0	0
27	Paid Helper at residence	0	0	0	0	0	0

Notes

- 1 Apart from above, CPF (Contributory Provident Fund) from employer, Gratuity and leave encashment on separation are paid.
- 2 Three pairs of uniform provided by the company along with Rs. 750 as stitching charges.
- 3 Rs. 100 per month as medical benefit is in addition to the dispensary facility and reimbursement of actual medical bill

B. Performance linked Pay / Incentives

Gujarat- SLDC

	Component	Chief Engineer (Rs)	Additional Chief Engineer (Rs.)	Superintending Engineer (Rs)	Executive Engineer (Rs)	Deputy Engineer (Rs)	Junior Engineer (Rs.)
1	ExGratia/Special Incentive	0	0	0	0	0	0
2	Transmission linked incentive	0	0	0	0	0	0
3	Generation linked Incentive	0	0	0	0	0	0
4	Performance linked incentive	0	0	0	0	0	0
5	Consultancy incentive	0	0	0	0	0	0
6	Consultancy Allowance	0	0	0	0	0	0
7	Project Allowance / Incentive	0	0	0	0	0	0

C. Shift Duty / Hardship Duty Allowance

Gujarat- SLDC

	Component	Chief Engineer (Rs)	Additional Chief Engineer (Rs.)	Superintending Engineer (Rs)	Executive Engineer (Rs)	Deputy Engineer (Rs)	Junior Engineer (Rs.)
1	Shift duty allowance	-	-	-	972	-	-
2	Night shift allowance	0	0	0	0	0	0
3	Special duty allowance	0	0	0	0	0	0
4	Occupational stress allowance	0	0	0	0	0	0
5	Hardship allowance	0	0	0	0	0	0
6	Hill tract allowance	0	0	0	0	0	0
7	Overtime Allowance (Generation & Transmission)	0	0	0	0	Up to 20 hrs	Up to 20 hrs

DETAILS OF EMPLOYEE COMPENSATION (EXISTING)

Maharashtra SLDC

A. Basic Pay and Perquisites

All figures in Rs.

Sl. no	Component	Member (Rs.)	Chief Manager (Rs.)	Superintending Engineer (Rs.)	Executive Engineer (Rs.)	Dy. Executive Engineer	Assistant Engineer (Rs.)	Junior Engineer (Rs.)
1	Basic Pay	N.A.	17000	13285	11750	9890	8890	7075
2	Cadre pay		17000 -720- 32840	13285 -570-16135 -630-29365	11750 -450-14000 -510-25220	9890 -390-11840 -415-22215	8890 -360-10690 -390-20050	7075 -310-8625 -325-17075
3	Stagnation pay/ benefit 2 G.O. 111 (P)		18105 -795 -34800	18105 -795 -34800	17000 -720 -32840	13285 -570-16135 -630-29365	11750 -450-14000 -510-25220	9890 -390-11840 -415-22215
4	Dearness Allowance		104% of BP	104% of BP	104% of BP	104% of BP	104% of BP	104% of BP
5	Dearness pay		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6	Personal pay		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
7	House Rent Allowance		30 % of BP	30 % of BP	30 % of BP	30 % of BP	30 % of BP	30 % of BP
8	City Compensatory Allowance		300	300	300	300	300	300
9	Conveyance Allowance TA		n.a.	85	85	45	45	45
10	Vehicle Maintenance Allowance		17439*	1725	1725	676	676	676
11	Child Transport Subsidy		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
12	Chauffer driven car		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
13	Leave Travel Concession		yes	yes	yes	yes	yes	yes
14	Medical Allowance		230	230	230	230	230	230
15	Landline charges reimbursement		yes	yes	yes	n.a.	n.a.	n.a.
16	Internet charges reimbursement		yes	yes	yes	n.a.	n.a.	n.a.
17	Mobile phone reimbursement		yes	1500	700	500	500	500
18	Technical Allowance		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
19	Literature Allowance		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
20	Newspaper Allowance		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
21	Child Tution fees reimbursement		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
22	Canteen Subsidy		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
23	Liveries/Uniform reimbursement		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
24	Washing Allowance		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
25	Home Furnishing Allowance		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
26	Paid Helper at residence		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
27	Orderly Allowance		3135	2835	2635	510	510	510
28	Fringe Benefits		655	599	525	465	425	375
29	E.C.A.		220	220	120	105	105	105

benefit 2 G.O. 111 (P)* Vehicle Maintenance allowed only in case an own vehicle is used for official purpose, when official vehicle is not provided

B. Performance linked Pay / Incentives**Maharashtra SLDC**

Sl. no	Component	Member (Rs.)	Chief Manager (Rs.)	Superint -ending Engineer (Rs.)	Executive Engineer (Rs.)	Dy. Executive Engineer	Assistant Engineer (Rs.)	Junior Enginner (Rs.)
1	ExGratia/Special Incentive		YES**	YES**	YES**	YES**	YES**	YES**
2	Transmission linked incentive		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	Generation linked Incentive		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	Performance linked incentive		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	Consultancy incentive		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6	Consultancy Allowance		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
7	Project Allowance / Incentive		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
8	Other incentives		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

C. Shift Duty / Hardship Duty Allowance**Maharashtra SLDC**

Sl. no	Component	Member (Rs.)	Chief Manager (Rs.)	Superint -ending Engineer (Rs.)	Executive Engineer (Rs.)	Dy. Executive Engineer	Assistant Engineer (Rs.)	Junior Enginner (Rs.)
1	Shift duty allowance		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	Night shift allowance		n.a.	n.a.	145	115	90	60
3	Special duty allowance		n.a.	n.a.	290	n.a.	n.a.	n.a.
4	Occupational stress allowance		n.a.	n.a.	165	130	130	
5	Hardship allowance		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6	Hill tract allowance		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Notes

** Ex Gratia paid year to year basis when company decides

Name : S. G. Kelkar
Designation : Chief Manager

Organisation : MSLDC/MSETCL Airoli
Contact No .: 022-27601762

DETAILS OF EMPLOYEE COMPENSATION (EXISTING)

RLDCs/NLDC

A. Basic Pay and Perquisites

All figures in Rs.

	Component		E8/E9	E6/E7	E4/E5	E2/E3	E0/E1
1	Scale (as per Office Memorandum No. 2(70)/08-DPE (WC) dated 26/11/2008		51300-73000	36600-62000	29100-54500	20600-46500	12600-32500
			62000-80000	43200-66000	32900-58000	24900-50500	16400-40500
2	Average Basic Pay		66575	51925	43625	35625	25500
3	Cadre pay		0	0	0	0	0
4	Stagnation pay/benefit		0	0	0	0	0
5	Dearness Allowance	12.9% OF BASIC	8588	6698	5628	4596	3290
6	Dearness pay		0	0	0	0	0
7	Personal pay		0	0	0	0	0
8	House Rent Allowance	30% OF BASIC	19973	15578	13088	10688	7650
9	City Compensatory Allowance		0	0	0	0	0
10	Conveyance Allowance		5175	4710	4250	4250	3295
11	Vehicle Maintenance Allowance		863	785	708	708	549
12	Child Transport Subsidy	2 CHILDREN	750	750	750	750	750
13	Chauffer driven car		0	0	0	0	0
14	Leave Travel Concession	4 YR. SLAB	9844	6904	870	8970	870
15	Medical Allowance	ONACTUALS	0	0	0	0	0
16	Internet charges reimbursement		2000	2000	2000	2000	2000
17	Landline charges reimbursement						
18	Mobile phone reimbursement		4000	1550	600	600	600
19	Technical Allowance						
20	Literature Allowance		559	559	334	334	334
21	Newspaper Allowance						
22	Child Tution fees reimbursement	2 CHILDREN	4000	4000	4000	4000	4000
23	Canteen Subsidy		909	909	909	909	909
24	Liveries/Uniform reimbursement		324	324	324	324	324
25	Washing Allowance		214	214	214	214	214
26	Home Furnishing Allowance		1250	0	0	0	0
27	Paid Helper at residence		3633	0	0	0	0

B. Performance linked Pay / Incentives**RLDCs/NLDC**

	Component		E8/E9	E6/E7	E4/E5	E2/E3	E0/E1
1	ExGratia/Special Incentive		1000	1000	1000	1000	1000
2	Transmission linked incentive		8180	6848	5845	5197	4642
3	Generation linked Incentive		0	0	0	0	0
4	Performance linked incentive		0	0	0	0	0
5	Consultancy incentive		0	0	0	0	0
6	Consultancy Allowance		5000	5000	3000	3000	3000
7	Project Allowance / Incentive		0	0	0	0	0
8	Other incentives		0	0	0	0	0
9	ANNUAL INCENTIVE		4505	3649	3090	2886	2454

C. Shift Duty / Hardship Duty Allowance**RLDCs/NLDC**

	Component		E8/E9	E6/E7	E4/E5	E2/E3	E0/E1
1	Shift duty allowance		0	1500	1200	1200	900
2	Night shift allowance		0	0	0	0	0
3	Special duty allowance		0	0	0	0	0
4	Occupational stress allowance		0	0	0	0	0
5	Hardship allowance		0	0	0	0	0
6	Hill tract allowance		0	0	0	0	0

NOTE:

- A) INCENTIVE TAKEN ON AVERAGE BASIS
- B) TR. SETTLEMENT BENEFIT: RS. 75.00 FOR NTPC BASIS EMP., RS. 50.00 FOR NHPC BASIS EMP.
- C) HR PERKS BEING BORNE BY CORPORATION
- D) STEG. INCREMENT @ 3% ON ALTERNATIVE YR. AFTER MAX. OF SCALE.

ILLUSTRATION FOR CALCULATING PERFORMANCE RELATED PAY (PRP)

A. LDC Performance: (Multiplying Factor-1) for calculating PRP

S. no		System Operation	Market Operation	System Logistics	Documentation	Learning & Growth perspective	Financial	Total
1	Max. Score	20	20	20	10	20	10	100
2	Score obtained	17	17	15	8	15	8	80
3	Multiplying Factor 1 (MF1) to be used in Performance Related Pay (PRP) calculation							0.80

B. Individual Performance: (Multiplying Factor-2) for calculating PRP

S. No.	Components	Max. Score	Score Obtained				
			Member/ Director	Top Mgmt.	Middle Mgmt.	Senior Executive	Junior Executive
1	Score based on performance vis-à-vis KRAs	70	62	58	63	67	68
2	Score based on competencies and personal traits	30	18	22	17	26	28
3	Cumulative PMS Score	100	80	80	80	93	96
4	Multiplying Factor 2 (MF2) for PRP (Score obtained/ Max. score)		0.80	0.80	0.80	0.93	0.96

C. Performance Related Pay based on Overall LDC performance and Individual performance

S. no	Components	Member/ Director	Top Mgmt.	Middle Mgmt.	Senior Executive	Junior Executive
1	MF1 based on overall LDC Score from A. above	0.80	0.80	0.80	0.80	0.80
2	MF2 based on Individual Score from B above	0.80	0.80	0.80	0.93	0.96
3	MF3 based on Grade as recommended by 2nd PRC	1.50	0.70	0.60	0.50	0.40
4	Cumulative Multiplying Factor for PRP (1 x 2 x 3)	0.96	0.45	0.38	0.37	0.31
5	Average Basic Pay in a typical SLDC	23400	20400	17975	16700	10750
6	Proposed Performance Related Pay (Rs.) (4 x 5)	22464	9139	6902	6212	3302

Notes

1. Performance taken in the above tables are for a hypothetical case
2. Average basic pay for various levels have been taken from the pay scale of Haryana SLDC for the purpose of illustration
3. Multiplying Factor 3(MF3) has been taken from the grade ceiling given in the 2nd Pay Revision Committee (PRC) for CPSUs. This could vary for different state utilities in case any separate PRC is constituted at state level.

**COMPARISON OF EXISTING AND PROPOSED
EMOLUMENTS AT ALL LEVELS IN A TYPICAL SLDC**

EXISTING EMOLUMENTS

All figures in Rs.

S. no	Components	Member/ Director	Top Management	Middle Management	Senior Executive	Junior Executive
1	Average Basic Pay	23400	20400	17975	16700	10750
2	Certificates taken	n.a.	n.a.	n.a.	n.a.	n.a.
3	Basic+ Perquisites	68254	54884	46432	43052	28213
4	Performance Related Pay	0	0	0	0	0
5	Certification linked Incentive	0	0	0	0	0
6	Contingency duty	0	0	0	0	200
7	Sub Total A	68254	54884	46432	43052	28413

PROPOSED EMOLUMENTS

S. no.	Components	Member/ Director	Top Management	Middle Management	Senior Executive	Junior Executive
1	Average Basic Pay	23400	20400	17975	16700	10750
2	Per day average basic	780	680	599	557	358
3	Certificates taken (assumed)	Basic + Specialist + Management	Basic + Specialist + Management	Basic + Specialist + Management	Basic Specialist	Basic
4	Fixed Compensation	68254	54884	46432	43052	28213
5	Performance Related Pay	22464	9139	6902	6212	3302
6	Certification- linked Incentive	17500	17500	17500	12500	5000
7	Contingency duty linked incentive	0	0	2097	1948	1254
8	Sub Total B	108218	81523	72932	63713	37769
9	Sub Total C (excluding contingency duty incentive)	108218	81523	70835	61764	36515
10	Proposed pay (excluding contingency duty incentive) as a % of existing pay Sub Total (C/ A)	159%	149%	153%	143%	129%
11	Ceiling % as proposed by the Task Force	150%	150%	150%	150%	150%
12	Payable amount (Fixed Pay + PRP) excluding contingency pay	102381	81523	69648	61764	36515

Notes

1. Fixed Compensation in the proposed pay has been assumed to be equal to the existing basic pay plus the perquisites. Perquisites include all benefits including monetised value of company accommodation @30% of basic pay less 5% deduction ; official vehicle @Rs. 10 per km less Rs. 400/- deduction; landline & mobile telephone expenses @Rs.1 per call plus Rs. 200/- per month rental each; free electricity@ Rs. 3 per unit as per base values at Annex-V for Haryana SLDC.
2. The certification linked incentive would be payable only when the individual has acquired the relevant certificates
3. Contingency duty linked incentive has been taken assuming seven such duties in a month
4. Contingency duty linked incentive for one day has been take as half of the average per-day basic pay
5. Certification-linked incentive payable after acquisition of relevant certificate has been taken as follows :

Basic level: 10 % of ceiling basic pay at the middle management level or Rs. 5000 whichever is higher.

Specialist level: 15 % of ceiling basic pay at the middle management level or Rs. 7500 whichever is higher.

Management level: 10 % of ceiling basic pay at the middle management level or Rs. 5000 whichever is higher.
6. As recommended in Section 15 of the report during implementation the total of Fixed Compensation plus performance related pay (excluding contingency pay) has been limited to 150 % of that received by a similarly placed executive in the respective transmission utility

**KEY RESULT AREAS AND PERFORMANCE INDICATORS
FOR ASSESSMENT OF LDC PERFORMANCE**

S No.	Performance Indicator	Score Range	Frequency of calculation	Weight
A.	System Operation			
1	Number of months in a year for which the Available Transfer Capability (of power system within the jurisdiction of LDC) is assessed and declared by 28 th of every month for next three months on the LDC website	0 : 0 1-6 : 2.5 7-10 : 7.5 11-12 : 10	Yearly	1
2A	{Tripping of transmission lines on over-voltage (excluding consequential trippings)} / {Number of manual interventions to control voltage}	>0.3 : 0 0.1-0.3 : 5 < 0.1 : 10	Yearly	0.5
2B	(No. of preliminary reports issued on grid incidents and disturbances) / (No. of incidents and disturbances)	<0.75 : 0 0.75-0.98 : 5 >0.98 : 10	Yearly	0.5
B.	Market Operation			
3A	Availability of average transmission losses of the last 52 weeks on the LDC website [To be updated every week on LDC website]	No : 0 Yes : 10	Weekly data aggregated over year and averaged	0.5
3B	Availability of open access transactions approved or rejected by the LDC in last one year [To be updated daily on the LDC website]	No : 0 Yes : 10	Daily	0.5
4A	Validated meter data posted on the LDC website every week within the time frame given in the grid code	Avg delay > 2 days : 0 Avg delay 2 days : 5 Avg delay 1 day : 9 No delay : 10	Weekly data aggregated over year and averaged	0.5
4B	Reconciliation of UI Account once in every six months	No : 0 Yes : 10	Half yearly	0.5
C.	System Logistics			
5A	% time non-availability of SCADA system excluding communication failure [Daily report to be updated on the LDC website]	> 4% : 0 2 to 4 % : 5 <2% : 10	Daily data aggregated and averaged over the year	0.5

S No.	Performance Indicator	Score Range	Frequency of calculation	Weight
5B	(Number of times SCADA database was updated within 2 days) / (Total number of new elements commissioned in the year)	0 : 0 0-0.5 : 5 0.5-0.75 : 7.5 0.75- 1.0 : 10	Yearly	0.25
5C	(Number of RTUs reporting the LDC) / (Total number of RTUs directly reporting to that LDC) [Daily report to be updated on the LDC website]	< 0.9 : 0 0.9-0.96 : 5 >0.96 : 10	Daily data aggregated and averaged over the year	0.25
6A	(Number of desktop PCs or Laptop for offline work in the LDC) / (Number of executives in the LDC)	<0.75 : 0 0.75-1.0 : 5.0 >1.0 : 10	Yearly	0.25
6B	(Number of Daily Reports on website) / (Number of days in the year) [To be updated daily on the LDC website]	0 : 0 0-0.75 : 5 0.75-0.9 : 7.5 0.9-1.0 : 10	Daily data aggregated and averaged over the year	0.25
6C	IMS certification and continuation	No : 0 Yes : 10	Yearly	0.5
D	Documentation			
7A	List of important transmission elements updated annually	No : 0 Yes : 10	Yearly	0.25
7B	State Grid Maps updated annually	No : 0 Yes : 10	Yearly	0.25
7C	Operating Procedures updated annually	No : 0 Yes : 10	Yearly	0.25
7D	Black Start Procedures updated annually	No : 0 Yes : 10	Yearly	0.25
E	Learning and growth perspective			
8A	(Mandays of training programmes attended by executives in the LDC) / (Total number of executives in the LDC)	0 : 0 3-5 : 5.0 ≥ 6 : 10	Yearly	1
9A	Percentage of certified personnel in the LDC	0-25 % : 2.5 25 - 50% : 5.0 50- 75% : 7.5 75 - 100% : 10	Yearly	0.5

S No.	Performance Indicator	Score Range	Frequency of calculation	Weight
9B	(Papers published in journal or workshop by executives in the LDC) / (Number of executives in the LDC)	<0.05 : 0 0.05 – 0.10 : 2.5 0.10-0.20 : 5.0 >0.20 : 10	Yearly	0.5
F	Financial			
10A	Submission of petition for approval of LDC CAPEX	No : 0 Yes : 2.5	Yearly	0.5
10B	Utilization of funds approved for CAPEX in that year	<60% : 0 60-90% : 5.0 >90% : 10	Yearly	0.5

Maximum Weighted Score : 100

Score	Performance Rating
>80	Excellent
60-80	Very Good
40-60	Good
20-40	Average
≤ 20	Poor

Notes :

The above is only an indicative list. It may be periodically reviewed by Electricity Regulatory Commissions. ERC may take suggestions from the Forum of Load Despatchers with regards to the relevant parameters and appropriate weights from year to year.

**PERFORMANCE MANAGEMENT SYSTEM FOR
ASSESSMENT OF PERFORMANCE OF LDC PERSONNEL**

The Performance Assessment of the Load Despatch Centre (LDC) personnel could comprise of following two parts:

1. Performance of the individual on the Key Result Areas (KRAs)

- Self-appraisal by the concerned individual and assessment by reviewing officer/ committee on the KRAs given by the management
- The Key Result Areas and the performance level expected from the LDC personnel should be defined by the management after appropriate discussion with the concerned person (appraisee). It should be communicated to the concerned person in the beginning of the assessment period.

2. General Competencies, skills and personal traits of the individual

- Assessment by reviewing officer/committee
- General competencies, skills and traits to be evaluated based on the judgment spread over the whole year and due weightage to be given for the consistent performance.

Table A: Performance of the individual on the KRAs given by the management

S No.	Key Result Areas	Target completion date or Expected performance level	Self- appraisal by individual	Assessment by the reviewing officer/ committee
	(To defined in the beginning of the assessment period after appropriate discussion with the Appraisee)		Rating on a scale of 1 (Poor) to 10 (Excellent)	Rating on scale of 1 (Poor) to 10 (Excellent) Least count: 0.5
1				
2				
3				
4				
5				
6				
7				
	Total Score out of 70			

Table B: General competencies, skills and personal traits of the individual

S No.	Competencies, skills, and personal traits	Description	Assessment by the reviewing officer/ committee
			Rating on a scale of 1 (Poor) to 5 (Excellent) Least Count: 0.5
1	Business Environment Knowledge	Knowledge and understanding of Indian and International Energy Sector; Government Policies & guidelines, Legislation and Regulation related to energy sector in India	
2	Profession Specific Knowledge	Validity, level and appropriateness of Certificates (System Operation/Market Operation/Logistics); Published Papers, articles in national/ international journals/ periodicals /magazines	
3	Communication skills	Written and Verbal	
4	Analytical skills	Situational awareness and Problem Solving ability	
5	Ability to take higher responsibilities	Ability to organize resources, Delegation skills and Mentoring skills	
6	Personal traits	Integrity, Discipline, Trustworthiness, Behaviour with colleagues, Willingness to learn and share information	
	Total Score out of 30		

Table C: Cumulative performance of the individual

S No.	Assessment Area	Maximum score	Total Score by the reviewing officer/ committee
1	Performance of the individual on the KRAs	70	
2	General competencies, skills & personal traits	30	
3	Cumulative Score	100	
4	Multiplying Factor ² (MF-2) for calculating PRP	1	

Note:

1. It is desirable that a 360 degree feedback be employed for assessment of performance of the LDC-Head and the divisional heads in the LDC.
2. Forum of Load Despatchers (FOLD) could carry out further work on Performance Management System for LDC personnel.

