## **CHAPTER V**

## **GOVERNMENT COMMERCIAL AND TRADING ACTIVITIES**

5.1 Overview of Government Companies and Statutory Corporations

## Introduction

**5.1.1** The State Public Sector Undertakings (PSUs) consist of State Government Companies and Statutory Corporations. The State PSUs are established to carry out activities of commercial nature while keeping in view welfare of the people. In Manipur there are fourteen PSUs (all Companies including six non working) as on 31st March 2011. None of the Companies was listed on the stock exchange(s). The State PSUs play a minor role in the state economy. The State working PSUs registered a turnover of ₹ 5.71 crore for 2010-11 as per their latest finalized accounts as of September 2011. This turnover was equal to 0.06 *per cent* of State Gross Domestic Product (GDP) for 2010-11. The State PSUs incurred a loss of ₹ 1.87 crore in the aggregate for 2010-11 as per their latest finalized accounts.

## **Audit Mandate**

**5.1.2** Audit of Government Companies is governed by Section 619 of the Companies Act, 1956. According to Section 617, a Government company is one in which not less than 51 *per cent* of the Paid up capital is held by Government(s). A Government Company includes a subsidiary of a Government Company. Further, a Company in which 51 *per cent* of the paid up capital is held in any combination by Government(s), Government Companies and Corporations controlled by Government(s) treated as if it were a Government Company (deemed Government Company) as per Section 619-B of the Companies Act.

**5.1.3** The accounts of the State Government Companies (as defined in Section 617 of the Companies Act, 1956) are audited by Statutory Auditors, who are appointed by the CAG as per the provisions of Section 619(2) of the Companies Act, 1956. These accounts are also subject to supplementary audit conducted by the CAG as per the provisions of Section 619 of the Companies Act, 1956.

**Investment in State PSUs** 

**5.1.4** As on 31 March 2011, the Investment (Capital and Long-Term Loans) in 14 PSUs was ₹ 111.48 crore as per details given below.

			(₹ in crore)		
Turne of DSUs	Government Companies				
Type of PSUs	Capital	Long Term Loans	Total		
Working PSUs	29.34	21.86	51.20		
Non-working PSUs	51.08	9.20	60.28		
Total:	80.42	31.06	111.48		

A summarised position of Government Investment in State PSUs is detailed in **Appendix-5.1**.

As on 31 March 2011, of the total Investment in State PSUs, 45.93 *per cent* was in working PSUs and the remaining 54.07 *per cent* in non-working PSUs. This total Investment consisted of 72.14 *per cent* towards Capital and 27.86 *per cent* in Long-Term Loans.

**5.1.5** The Investment in various important sectors and percentage thereof at the end of 31 March 2006 and 31 March 2011 are indicated below in the chart.



The total Investment in financing sector decreased from ₹ 30.35 crore in

Budgetary outgo, grants/subsidies, guarantees and loans

2005-06 to ₹ 17.14 crore in 2010-11.

**5.1.6** There was no budgetary outgo towards Equity, Loans, Guarantees issued, Loans written off, Loans converted into Equity and Interest waived in respect of State PSUs during the year 2010-11. The budgetary outgo towards Grants/Subsidy was  $\gtrless$  8.16 lakh in favour of Manipur Film Development Corporation Limited.

**Reconciliation with Finance Accounts** 

**5.1.7** The figures in respect of Equity and Loans outstanding as per records of State PSUs should agree with that of the figures appearing in the Finance Accounts of the State. In case the figures do not agree, the concerned PSUs and the Finance Department should carry out reconciliation of differences. The position in this regard as at 31 March 2011 is stated below.

			(₹in crore)
Outstanding in respect of	Amount as per Finance Accounts	Amount as per records of PSUs	Difference
Equity	84.16	75.04	9.12
Loan	-	1.19	1.19

**5.1.8** Audit observed that the differences occurred in respect of 12 PSUs and some of the differences were pending reconciliation over a period of more than 14 years. The matter has been taken up with the Administrative Department of respective PSUs and the Managing Directors of PSUs periodically to reconcile figures. The Government and the PSUs should take concrete steps to reconcile the differences in a time-bound manner.

**Performance of PSUs** 

**5.1.9** The financial results of PSUs are detailed in **Appendix-5.2.** A ratio of PSU turnover to State GDP shows the insignificant activities in the State economy. Table below provides the details of working PSUs' turnover and State GDP for the period 2005-06 to 2010-11.

					(	₹ in crore)
Particulars	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
Turnover <sup>1</sup>	6.42	6.39	6.75	6.77	6.51	5.71
State GDP	4693	6501	5704	6344	8687	9198
Percentage of Turnover to State GDP	0.14	0.09	0.12	0.10	0.07	0.06

The turnover of working PSUs decreased from  $\gtrless$  6.42 crore in 2005-06 to  $\end{Bmatrix}$  5.71 crore in 2010-11. The percentage of turnover to State GDP decreased from 0.14 in 2005-06 to 0.06 in 2010-11.

**5.1.10** Profits earned by State working PSUs during 2005-06 to 2010-11 are given below in a bar chart.

<sup>&</sup>lt;sup>1</sup>Turnover as per the latest finalised accounts as of 30 September



Figures in brackets show the number of working PSUs in respective years

During the year 2010-11, out of eight working PSUs, two PSUs earned profit of ₹ 1.03 crore and four PSUs incurred loss of ₹ 1.05 crore. Two working PSUs have not started commercial activities. The major contributor to profit was Manipur Industrial Development Corporation Ltd. (₹ 1 crore). The heavy losses were incurred by Manipur Handloom & Handicrafts Development Corporation Ltd. (₹ 0.52 crore) and Manipur Electronics Development Corporation Ltd. (₹ 0.50 crore).

**5.1.11** The losses of PSUs are mainly attributable to deficiencies in financial management, planning and inefficient running of their operations and lack of proper monitoring. A review of three latest Audit Reports of CAG shows that the State PSUs incurred losses to the tune of  $\gtrless$  19.64 crore which was controllable with better management. Year wise details from Audit Reports are stated below.

				(₹ in crore)
Particulars	2008-09	2009-10	2010-11	Total
Net Loss	0.22	0.43	1.87	2.52
Controllable losses as per CAG's Audit Report	0.67	3.75	15.22	19.64

**5.1.12** The above losses pointed out by Audit Reports of CAG are based on test check of records of PSUs. The actual controllable losses would be much more. The above table shows that with better management, the losses can be minimized. The PSUs can discharge their role efficiently only if they are financially self-reliant. The above situation points towards a need for professionalism and accountability in the functioning of PSUs.

**5.1.13** Some other key parameters pertaining to State PSUs are given below:

						(₹ in crore)
Particulars	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
Return on Capital Employed ( <i>Per cent</i> )	Nil	2.83	2.52	2.66	2.08	(-)2.23
Debt	34.37	26.79	30.91	19.50	30.73	31.06
Turnover <sup>2</sup>	6.42	6.39	6.75	6.77	6.51	5.71
Debt/ Turnover Ratio	5.35	4.19	4.58	2.88	4.72	5.44
Accumulated losses	5.55	7.17	7.17	5.22	5.18	6.94

As per latest finalized accounts of eight working Companies, the Capital Employed worked out to  $\gtrless$  25.11 crore and total return thereon amounted to  $\gtrless$  0.89 crore in 2010-11 as compared to Capital Employed of  $\gtrless$  16.70 crore and total return on Capital Employed of  $\gtrless$  1.51 crore in 2005-06.

**5.1.14** The State Government has not formulated (September 2011) any dividend policy.

**Arrears in finalization of accounts** 

**5.1.15** The accounts of the Companies for every financial year are required to be finalized within six months from the end of the relevant financial year under Sections 166, 210, 230, 619 and 619-B of the Companies Act, 1956. The table below provides the details of progress made by working PSUs in finalization of accounts by September 2011.

Sl. No.	Particulars	2006-07	2007-08	2008-09	2009-10	2010-11
1.	Number of Working PSUs	8	8	8	8	8
2.	Number of accounts finalised during the year	1	2	2	2	23 <sup>3</sup>
3.	Number of accounts in arrears	117	123	129	135	142
4.	Average arrears <i>per</i> PSU (3/1)	14.62	15.37	16.12	16.87	15.00
5.	Number of Working PSUs with arrears in accounts	8	8	8	8	8
6.	Extent of arrears (in years)	10 to 24	10 to 25	10 to 26	10 to 27	11 to 28

The reasons for delay in finalization of accounts are attributable to:

- Lack of required control over the Companies by Government;
- Abnormal delay in compilation and approval of the accounts and delayed submission of the same to the Statutory Auditors by the management; and
- > Delay in adoption of accounts in Annual General Meeting.

<sup>&</sup>lt;sup>2</sup> Turnover of working PSUs as per the latest finalised accounts as of 30 September<sup>-</sup>

<sup>&</sup>lt;sup>3</sup> Three working Companies (Manipur Industrial Development. Corporation Ltd., Manipur Electronics Development. Corporation Ltd. and Manipur Food Industries Corporation Ltd.) submitted 22 accounts during the year audit of which is under finalisation.

**5.1.16** In addition to above, there were also arrears in finalisation of accounts by non-working PSUs. Six non-working PSUs, had arrears of accounts for 14 to 27 years.

**5.1.17** The State Government had invested ₹ 58.65 crore (Equity: ₹ 58.65 crore), in eleven PSUs during the years for which accounts have not been finalized as detailed in **Appendix-5.3**. In the absence of accounts and their subsequent audit, it cannot be ensured whether the investments and expenditure incurred have been properly accounted for and the purpose for which the amount was invested has been achieved or not and thus Government's investment in such PSUs remain outside the scrutiny of the State Legislature. Further, delay in finalization of accounts may also result in risk of fraud and leakage of public money apart from violation of the provisions of the Companies Act, 1956.

**5.1.18** The administrative departments have the responsibility to oversee the activities of these entities and to ensure that the accounts are finalized and adopted by these PSUs within the prescribed period. Though the concerned administrative departments and officials of the Government were informed every quarter by Audit of the arrears in finalization of accounts, no remedial measures were taken. As a result of this the net worth of these PSUs could not be assessed in audit. The matter relating to arrears in accounts was also taken up with the Chief Secretary/ Finance Secretary to expedite the backlog of arrears in a time bound manner.

5.1.19 In view of above state of arrears, it is recommended that-the Government monitor and ensure timely finalization of accounts with special focus on liquidation of arrears and compliance with the provisions of Companies Act, 1956.

Winding up of non-working PSUs

**5.1.20** There were six non-working PSUs (all Companies) as on 31 March 2011. None of these PSUs have commenced liquidation process.

The non-working PSUs may be considered for closure as their existence is not serving any purpose. Although instructions for closing down the six non-working PSUs have been issued, the liquidation process has not yet started.

**5.1.21** The process of voluntary winding up under the Companies Act is much faster and needs to be adopted vigorously. The Government may also consider setting up a cell to expedite closing down its non-working Companies.

**Accounts Comments and Internal Audit** 

**5.1.22** Three working Companies<sup>4</sup> forwarded their audited accounts (twenty two) to Accountant General (Audit) during the year 2010-11. The audit reports of Statutory Auditors appointed by CAG and the supplementary audit of CAG indicate that the quality of maintenance of accounts needs to be improved substantially.

**5.1.23** Some of the important comments in respect of accounts of Companies are stated below.

#### **Manipur Electronics Development Corporation Ltd.**

No provision has been made for doubtful debts amounting to  $\gtrless$  27.37 lakh shown as receivable from Uptron Installation and Maintenance (CVC).

Bank accounts which were found inoperative since long time have not been reconciled, adjusted and closed.

₹ Six lakh has been transferred to General Reserve without proper approval of the Board of Directors.

**5.1.24** The Statutory Auditors (Chartered Accountants) are required to furnish a detailed report upon various aspects including internal control/ internal audit systems in the Companies audited in accordance with the directions issued by the CAG to them under Section 619 (3) (a) of the Companies Act, 1956 and to identify areas which needed improvement. An illustrative resume of major comments made by the Statutory Auditors on possible improvement in the internal audit/ internal control system in respect two Companies<sup>5</sup> for the year 2009-10 and another three Companies<sup>8</sup> for the year 2010-11 are given below.

<sup>&</sup>lt;sup>4</sup> Manipur Food Industries Corporation Ltd., Manipur Industrial Development Corporation Ltd., and Manipur Electronics Development Corporation Ltd.

<sup>&</sup>lt;sup>5</sup> Sr. No. A-5, B-6 in **Appendix-5.2.** 

<sup>&</sup>lt;sup>8</sup> Sr. No. A-1, A-5, A-6.

Sl. No.	Nature of comments made by Statutory Auditors	Number of Companies where recommendations were made	Reference to serial number of the Companies as <i>per</i> Appendix 5.2
1.	Absence of internal audit system commensurate with the nature and size of business of the company	2	A-5, B-6
2.	Non maintenance of proper records showing full particulars including quantitative details, situations, identity number, date of acquisitions, depreciated value of fixed assets and their locations	3	A-1, A-5, A-6

**Disinvestment, Privatization and Restructuring of PSUs** 

5.1.25 There are no cases of disinvestment/privatization of PSUs in the State.

**Reforms in Power Sector** 

**5.1.26** Joint Electricity Regulatory Commission (JERC) for the states of Manipur and Mizoram was formed (January 2005) under Section 83(5) of the Electricity Act, 2003 with the objective of rationalization of electricity tariff, advising in matters relating to electricity generation, transmission and distribution in the State and issue of licenses.

The JERC (Manipur and Mizoram) became operational in January 2008. The tariff approved by the Commission on 15 March 2011 became effective from 21 March 2011.

**5.1.27** Memorandum of Understanding (MoU) was signed in July, 2004 between the Union Ministry of Power and the State Government as a joint commitment for implementation of reforms programme in power sector with identified milestones. One of the objectives of reforms was to set up Corporation for generation, transmission and distribution of electricity in the State by August 2004 and made fully functional by July 2005. However, State Government although has formed a Company (Manipur State Power Development Corporation Ltd) in March 1997 but it was not made functional even after 14 years. The Electricity Department Manipur (EDM) being an integrated utility is responsible for distribution and trading functions of electricity in the State.

Sl. No.	Milestone	Achievement as at September 2011
1.	For generation, transmission and	The progress of implementing power
	distribution of electricity in the	sector reforms was slow and the
	State, Corporation to be set up by	Corporation has not become operational
	August 2004 and made fully	as of September 2011.
	functional by July 2005.	
2.	State Government will set up State	The JERC (Manipur and Mizoram)
	Electricity Regulatory Commission	constituted in January 2005 became
	(SERC)/Joint Electricity Regulatory	operational in January 2008. The tariff
	Commission (JERC) by November	approved by the Commission on 15
	2004 and file tariff petition	March 2011 became effective from 21
	immediately thereafter.	March 2011.
3.	State Government will provide full	Tariff orders are implemented.
	support to the SERC/JERC to	
	enable it to discharge its statutory	
	responsibilities. The tariff orders	
	issued by SERC/JERC will be	
	implemented fully unless stayed or	
4	State Covernment will ensure	The demonstrate has not married any
4	timely payment of subsidios	information as to release of subsidy by
	required in pursuance of orders on	Government
	the tariff determined by the	Government.
	SERC/IERC	
5	State Government would achieve	The State Government was to complete
5	100 per cent electrification of	100 per cent metering and billing of all
	villages by 2007 subject to adequate	consumers by March 2003 but only
	funds being provided by the GOL	166709 consumers (out of 1.93.661)
	under PMGY or any other relevant	were provided with energy meters.
	scheme.	
6	State Government would install	Out of 105 numbers of 11 KV outgoing
	meters on all 11 KV feeders by	feeders, 91 feeders are provided with
	31.12.2004.	energy meters as of September 2010.
		The present status, though called for,
		has not yet been received from the State
		Government.

The progress achieved so far in respect of important milestones is stated below:

#### **PERFORMANCE REVIEW (COMMERCIAL)**

#### **POWER (ELECTRICITY) DEPARTMENT**

5.2 Performance Audit Report on Power Distribution Activities of Electricity Department, Government of Manipur

#### **Executive Summary**

A Performance Audit on Power Distribution Activities of Electricity Department of Government of Manipur was conducted for the period 2006-07 to 2010-11 to ascertain whether the Department achieved the aims and objectives of the National Electricity Plan (NEP) and to examine how far the distribution reforms have been achieved.

#### **Distribution Network Planning**

The Department did not prepare long term plan and fix any target for addition of substations, high tension lines lines. low tension and transformers and therefore. performance of the Department with reference to the targets could not be assessed in audit. The Department added 1013 substations, 895.57 CKM of high tension lines, 973.83 CKM of low tension lines and 83.64 MVA of transformers.

#### Implementation of Centrally Sponsored Schemes

Under Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY), the Department targeted 462 villages for electrification during 2007-11. Against this target, the achievement till March 2011 was 289 villages (63 per cent) The execution of the programme was delayed resulting in non-achievement of target of 100 per cent electrification of villages before 31 March 2010 as envisaged in NEP.

#### **Operational Efficiency**

Despite shortage of power in the State, the Department sold power outside the State, leading to increase in power deficit from 104.91 MU in 2006-07 to 308.56 MU in *2010-11*. The Department purchased tri-vector meters, Kiosks, and static meters in excess of immediate requirement leading to blocking up of funds to the tune of ₹ 10.85 crore. There were energy losses ranging from 46.6 to 59.84 per cent during 2006-11 due to unmetered supplies, defective meters, and theft of electricity bv unauthorised consumers.

#### **Financial Management**

Department exhibited poor The financial management bv not maintaining pro-forma accounts, profit and loss accounts, balance sheet etc. There were cases of non-surrender of anticipated savings in time and incurring of expenditure in excess of budget provisions.

The assessed sales ranged from 34 to 51 per cent of the total sales during 2006-11.

#### **Conclusions and Recommendations**

This performance audit revealed that the efforts made by the Department to provide access to electricity for all households were inadequate. The performance audit contains four recommendations aimed at improving the operational efficiency of the Department.

## 5.2.1 Introduction

Electricity is an essential requirement for all facets of our life. It has been recognized as a basic human need. It is a critical infrastructure on which the socio-economic development of the country depends. Supply of electricity at reasonable rate to rural India is essential for its overall development. Equally important is availability of reliable and quality power at competitive rates to Indian industry to make it globally competitive and to enable it to exploit the tremendous potential of employment generation. Service sector has made significant contribution to the growth of our economy. Availability of quality power is very crucial to sustained growth of this segment.

Recognizing that electricity is one of the key drivers for rapid economic growth and poverty alleviation, the nation has set itself the target of providing access to electricity for all households in next five years.

Major responsibility for achieving the key parameters of the above said importance of electricity devolves on the distribution sector. Distribution sector is very near to people. It is the first point of contact in the electricity sector for millions of Indians. This is the sector which provides electricity to the door step of every household. It serves various objectives of electricity sector such as access to electricity for all households, supply of reliable and quality power of specified standards in an efficient manner and at reasonable rates and at the same time protects the consumer interest. To achieve the above objectives, Distribution sector needs to make a financial turnaround and it should be commercially viable.

The Electricity Department, Manipur (Department) being an integrated utility is responsible for distribution and trading functions of electricity in the State. Principal Secretary (Power) is the overall in charge of the Department. Chief Engineer (Power) is the Head of the Department.

## Vital parameters of electricity supply in Manipur

During 2006-07, 227.44 MUs of energy was sold by the Department which increased to 381.58 MUs (an increase of 67.77 *per cent*) during 2006-11. As on 31 March 2011, the State had distribution network of 7685 CKM, 46 substations and 3732 transformers of various categories. The number of consumers was 1,93,661 and the turnover of the Department was ₹ 109.67 crore in 2010-11, which was equal to 1.26 *per cent* of State Gross Domestic Product (2009-10: ₹ 8687 crore). It employed 3,190 employees as on 31 March 2011.

## Performance Audit of electricity sector:

National Electricity Plan aims to bring out reforms in the Power Distribution sector with focus on system up-gradation, controlling and reduction of T&D losses and power thefts and making the sector commercially viable besides evolving strategy to generate adequate resources. It further aims to bring out conservation strategy to optimize utilisation of electricity with focus on demand side management and load management. In view of the above, it was proposed to conduct a performance audit on the working of the Power Distribution Utilities in the State Sector to ascertain whether they were able to adhere to the aims and objectives stated in the National Electricity Plan and how far the distribution reforms have been achieved.

Audit findings relating to Power Generation in Manipur were included in the Report of the Comptroller and Auditor General of India, Government of Manipur for the year ended 31 March 2010.

### 5.2.2 Scope of Audit

The present performance audit conducted during April 2011 to July 2011 covers the performance of the Department during the period from 2006-07 to 2010-11. The performance audit mainly deals with network planning and execution, implementation of Central schemes, operational efficiency, billing and collection efficiency, financial management, consumer satisfaction, energy conservation and monitoring. The audit examination involved scrutiny of records at the Head Office and five<sup>6</sup> out of 14 revenue collecting divisions<sup>7</sup>. The selection of units/schemes was based on Simple Random Sampling without Replacement method.

### 5.2.3 Audit methodology

The methodology included briefing the management about the objectives of the performance audit through an Entry Conference (March 2011), scrutiny of records at Head Office and selected units, interaction with the Management, analysis of data with reference to audit criteria, raising of audit queries, discussion of audit findings with the Management and issue of draft report to the Management for comments. The Exit Conference was held (October 2011) with the Principal Secretary (Power), Chief Engineer and officers of the Department and the reply of the Department has been incorporated in the report at appropriate places.

<sup>&</sup>lt;sup>6</sup>Imphal Electrical Divisions I and II, Imphal Maintenance Division, Thoubal and Chandel Divisions.

<sup>&</sup>lt;sup>7</sup>Imphal Electrical Divisions I, II and III, Imphal Maintenance Division, Chandel, Churachandpur, Bishnupur, Thoubal, Senapati, Tamenglong, Jiribam, Ukhrul and Kangpokpi Divisions, and Rural Electrification Division No.I.

5.2.4 Audit Objectives

The objectives of the performance audit were to assess:

- whether aims and objectives of National Electricity Plans were adhered to and distribution reforms achieved;
- the adequacy and the effectiveness of network planning and its execution;
- efficiency and effectiveness in implementation of the central schemes such as, Revised Accelerated Power Development & Reform Programme (RAPDRP) and Rajiv Gandhi Grameen Vidyutikaran Yojna (RGGVY);
- operational efficiency in meeting the power demand of the consumers in the state;
- billing and collection efficiency of revenue from consumers;
- whether financial management was effective;
- ➢ whether energy conservation measures were undertaken; and
- whether there is a monitoring system in place and the same is utilised in assessing the completion of ongoing projects, and corrective measures are applied to overcome deficiencies.

### 5.2.5 Audit Criteria

The audit criteria adopted for assessing the achievement of the audit objectives were:

- ➢ provisions of Electricity Act 2003;
- objectives of National Electricity Plan and norms concerning distribution network of the Department and planning criteria fixed by the Joint Electricity Regulatory Commission(JERC);
- standard procedures for award of contract with reference to principles of economy, efficiency and effectiveness;
- norms prescribed by various agencies with regard to operational activities;
- > norms of technical and non-technical losses;
- guidelines/ instructions/ directions of JERC;

- ➢ terms and conditions contained in the Central scheme documents; and
- parameters of performance of electricity distribution companies in the region and all India averages.

5.2.6 Audit Findings

Important audit findings are discussed in the following paragraphs.

5.2.6.1 Distribution Network Planning

The National Electricity Plan was evolved with the following objectives:

- Access to electricity Available for all households in next five years from 2005.
- Supply of reliable and quality power of specified standards in an efficient manner and at reasonable rates.

To ensure access to electricity by all, the Department is required to prepare long term/ annual plan for creation of infrastructural facilities for efficient distribution of electricity so as to cover maximum population in the State. Besides the Department is required to upkeep the existing network and expand the distribution network keeping in view new connections and growth in demand.

However we observed that the Department did not prepare long term plan and fix any target for additions of substations, high tension lines, low tension lines and transformers; and therefore performance of the department with reference to the targets cannot be assessed in audit. Nevertheless the Department recorded some achievements during the performance audit period and these are shown in **Appendix-5.4**. As observed from the **Appendix-5.4**, the Department added 1,013 substations, 895.57 CKM of high tension lines, 973.83 CKM of low tension lines and 83.64 MVA of transformers.

Number of consumers and their connected load in bar chart during the performance audit period are shown below:



(Source: Departmental records)

The Department stated that as the distribution transformers were not metered individually their load pattern was not known. The peak load noted in the log books of power substations had been assumed to be distributed in proportion to the rated KVA of distribution transformers. Based on this assumption individual load factors were estimated. In the absence of meter, actual connected load being unknown, adequacy of distribution transformers as compared to the growth of consumers cannot be ascertained.

### **5.2.7 Implementation of Centrally Sponsored Schemes**

### **5.2.7.1 Rural Electrification**

The key development objective of the power sector is supply of electricity to all areas including rural as mentioned in Section 6 of the Electricity Act. Rural Electrification Corporation of India (REC) is the nodal agency to implement the programme of giving access to electricity to all households in the next five years beginning from 2005. The Rajiv Gandhi Grameen Vidyutikaran Yojna (RGGVY) scheme initiated by REC aims at electrifying all villages and habitations

As per the new definition of village electrification with effect from 2004-05, a village would be declared as electrified if:

a) Basic infrastructure such as distribution transformers and distribution lines are provided in the inhabited locality as well as the Dalit Basti hamlet where it exists.

- b) Electricity is provided to public places like schools, Panchayats office, health centers, dispensaries, community centers *etc*.
- c) The number of households electrified should be at least 10 *per cent* of the total number of households in the village

Besides, Rural Electrification Policy (REP) notified by the GOI in August 2006 *inter-alia* aims at providing access to electricity for all households by 2009 and minimum lifeline consumption of one Unit per household per day by the year 2012. The other RE schemes *viz.*, Accelerated Electrification of one lakh villages and one crore households, Minimum Needs Programme were merged into RGGVY. The features of the erstwhile 'Kutir Jyoti Programme' were also suitably integrated into this scheme.

The Department started the scheme from the year 2007-08 and the year-wise target and achievements of electrification under RGGVY during the period for the whole State are shown in the table below:

			(In number)			
Year	Electrified in	Target for	Electrified	Electrified	Percentage	
	the beginning	electrification	during the	at the end	of	
	of the year	during the year	year	of the year	achievement	
2007-08	1930	31	30	1960	97	
2008-09	1960	71	63	2023	89	
2009-10	2023	77	47	2070	61	
2010-11	2070	283	149	2219	53	
Total		462	289		63	

(Source: Departmental records)

From the above table, it may be seen that the percentage of achievements have reduced from year to year and during four years ending 2010-11, 173 of the targeted villages could not be electrified.

As per guidelines, the Gram Panchayats should certify the electrification status of the villages as on 31 March each year. If there is delay in certification by the Gram Panchayats, the State Government may get these verified through another appropriate independent agency. However, the Department could not produce such certificates of electrification.

Test check of four electrified villages of Chandel (Phoilen, Tollen, Salemran and Chatong) and three villages of Imphal East (Takhel, Teraphai and Waiton) revealed that the average availability of power was two to five hours per day as against the norm of six hours a day.

The position of the funds available and utilised under RGGVY during the five years ending 31 March 2011 is depicted in the table below.

					(₹ in crore)
Year	<b>Opening Balance</b>	Funds received	Total funds	Funds	Unspent funds
			available	Utilized	(Percentage)
2006-07	-	13.26	13.26	-	13.26 (100)
2007-08	13.26	5.29	18.55	11.73	6.82 (37)
2008-09	6.82	38.98	45.80	6.77	39.03 (85)
2009-10	39.03	53.47	92.50	62.41	30.09 (33)
2010-11	30.09	87.16	117.25	102.77	14.48 (12)

(Source: Departmental records)

It is evident from the above table that the Department could not fully utilize the available funds and under-utilization ranged from 12 to 100 *per cent*.

#### 5.2.7.2 Non utilisation of Funds

As per central Treasury Rules, no money shall be drawn from the treasury unless it is required for immediate disbursement. It is not permissible to draw money from the treasury in anticipation of demands or to prevent the lapse of budget grants.

Test check of records of four divisions<sup>8</sup> revealed that Chandel division drew  $\gtrless$  3.98 crore and deposited the same under 8449-Other Deposit during March 2009. The other three divisions drew  $\gtrless$  31.79 crore and parked the same under 8443 Civil Deposits during March 2011. However, these amounts had been shown as spent from the major heads concerned while in fact these had been parked under these heads. Drawing the money and keeping them under deposit, without utilizing them for the pretended purpose is against financial propriety.

### **5.2.7.3** Delays in execution of works

During January 2007 and September 2009 the Department, under RGGVY, awarded eight contracts on turnkey basis for supply of equipment and materials, and construction of 33/11 KV substations, stringing of associated lines, 11 KV lines, substations, low tension lines, outgoing and incoming line bays, transformer bays, 33 KV single circuit lines, BPL connections and providing of energy meters at various locations of the four districts - Chandel, Imphal East, Imphal West and Thoubal as shown under:

<sup>&</sup>lt;sup>8</sup>Imphal Electrical Division II, Imphal Maintenance Division, Chandel Division and Thoubal Division

Districts	Chandel	Imphal West	Imphal East	Thoubal
Contractor (s)	i) M/s National Power	M/s Shyama	Power India	Ltd,
	System, Dimapur	Haryana		
	ii) M/S Jindal Steel	-		
	Products Ltd. Kolkata			
Contract value of	i) 9.94	26.63	30.32	19.61
Supply component	ii) 42.26			
(Rupees in crore)				
Contract value of	i) 1.05	3.81	4.90	3.00
Erection component	ii) 9.42			
(Rupees in crore)				
Date of Start	22-1-2007	10-9-2009	10-9-2009	10-9-2009
Stipulated date of	11-1-2008	9-9-2010	9-9-2010	9-9-2010
completion (Supply)	11-1-2008	9-3-2011	9-3-2011	9-3-2011
(Erection)				
Payment made	i) 7.33	11.00	13.29	7.46
(Rupees in crore)	ii) 32.11			
(Supply)				
(Erection)	i) -	_	_	_
	ii) 1.25			

Although all these works were to be completed within a period of 12 to 18 months As of May 2011 the delays have overshot the stipulated time schedule by eight to 28 months. This has deferred accrual of benefits to the populace and contractor has not sought any extension of time to cover the period of delay.

The Department replied (September 2011) that Rural Electrification Corporation (REC) had agreed to extend the project implementation period up to September 2011 considering the ground realities prevailing in the State.

As the REC's approval covered only the delays occurred in implementation of the scheme between the State government and REC and not for the delays occurred in implementation of the by the contractors. The contractor was required to seek extension of time by citing the hindrances beyond his control. However, the contractors had not so far submitted any application for time extension and also the Department did not maintain any hindrance register.

Due to the delays in the work intended benefit of scheme could not be achieved.

# 5.2.7.4 Undue aid to contractor

The agreements of the above stated works executed in the three districts (Imphal East, Imphal West and Thoubal) provided that if the supplies were not completed within the stipulated periods, interest on the amount of mobilization advances outstanding as on the stipulated dates of completion, would be recoverable at 12 *per cent per annum* from the date of payment of the advance.

Test-check of records of the three connected divisions (Imphal Electrical Division No. II, Imphal Maintenance Division and Thoubal Division) revealed that for the supply component, the contractor<sup>9</sup> was paid interest-free mobilization advance of ₹ 11.48 crore. However, the supplies were not completed even after delay of more than eight months from the stipulated date of completion. As of May 2011 the interest of ₹ 1.21 crore worked out on the outstanding advance have not been recovered.

Department stated (September 2011) that REC had agreed to extend the project implementation period up to September 2011 considering the ground reality prevailing in the State and therefore the question of interest did not arise.

We observed that in absence of formal amendment to the contract by granting time extension the existing clauses of the contract are binding on both the signatories of the contract and the extension given by REC had nothing to do with payment of interest on mobilization advance by contractor.

## 5.2.7.5 Excess payment

Records of three divisions revealed that the supply orders for RGGVY schemes in the three districts stated that payment of taxes shall be made to the contractor only on the production of original documents of payment of taxes to the Department.

We observed that excise duty and central sales tax had been paid as per supply order without production of original documents. As a result, the Department had paid additional excise duty and central sales tax of  $\gtrless$  1.34 crore to the contractor. Details are shown in **Appendix-5.5**.

### 5.2.8 Accelerated Power Development Reforms Programme

The Government of India (GOI) approved the Accelerated Power Development Reforms Programme (APDRP) to leverage the reforms in power sector through the State Governments. This scheme was implemented by the State Government with the objective of upgradation of sub-transmission and distribution system including energy accounting and metering, for which financial support was provided by GOI. The funds received and utilized during the five years ending March 2011 were as shown below:-

<sup>&</sup>lt;sup>9</sup> M/s Shyama Power India Ltd. Haryana

Year	Funds re	leased by	Funds	Funds	Balance	Percentage of balance
	GOI	Others	available	utilised		to funds available
2006-07	40.09	-	40.09	-	40.09	
2007-08	-	-	-	-	40.09	
2008-09	-	-	-	24.70	15.39*	38
2009-10	-	58.88	58.88	58.88	-	-
2010-11	27.00**	-	27.00	20.66	6.34	23

(₹ in crore)

\**Not utilized due to short-closure of the scheme by March 2009.* \*\**Special Plan Assistance.* (Source: Departmental records)

From the above table it would be seen that out of ₹ 40.09 crore released by the Government of India during 2006-07, an amount of ₹ 15.39 crore (38 *per cent*) which could not be utilized. Further, out of ₹ 27.00 crore released under Special Plan Assistance (SPA) during 2010-11, ₹ 6.34 crore (23 *per cent*) could not be utilized. The Department could not state the reasons for non-utilisation of funds made available to them.

## 5.2.8.1 Abandoning of works due to delay in award

The Ministry of Power sanctioned (October 2004)  $\gtrless$  133.83 crore for implementation of four APDRP schemes in Manipur and released  $\gtrless$  40.09 crore till March 2007. It started tendering process in April 2007 after 29 months of the sanction and awarded the works in July 2008 after 14 months of the tender.

In the meantime the Ministry of Power asked (March 2008) the State Government to expedite the ongoing works for completion by March 2009 and to short close the schemes, the completion of which was not expected within March 2009. Therefore, the works of  $\gtrless$  49.17 crore in respect of these districts were closed while that of Greater Imphal was continued with the available state plan funds and special plan assistance. Thus, due to delay in tendering and award of works the APDRP scheme of the three districts had to be abandoned.

## 5.2.8.2 Undue financial benefit to the contractor

The Department awarded (July 2008) two contracts to M/S Indo Power Project Ltd., Kolkata on turnkey basis at ₹ 104.86 crore for supply of equipment and materials and ₹ 16.88 crore for erection with the stipulation to complete the works within nine and 18 months respectively for improvement of Power Distribution system of Greater Imphal (Phase-I) under APDRP under the scheme.

On the recommendations of the Tender Committee, the contractor was paid interest free mobilization advance of  $\gtrless 20.76$  crore<sup>10</sup> for the supply component. The agreement of the work provided that if the supplies were not be completed within the stipulated period, interest on the amount of outstanding advance would be recoverable at 12 *per cent* per annum from the date of payment of the advance.

Though the supplies were to be completed by March 2009 but it was not completed as of March 2010. An interest  $\gtrless$  1.22 crore worked out on mobilization advance, was resulting in an undue financial benefit to the contractor (as shown **Appendix-5.6**).

## 5.2.8.3 Excess payment

Records of one division<sup>11</sup> revealed that payment of taxes shall be made to the contractor on the production of original documents of payment of taxes to the Department.

We observed that excise duty and central sales tax had been paid as per supply order without production of original documents. As a result, the Department had paid excise duty and central sales tax of  $\gtrless$  751.68 lakh to the contractor without following the laid down procedure. Details are shown in **Appendix-5.7.** 

## 5.2.8.4 Idle outlay on Trivector meters and Kiosks

The Department purchased 731 Trivector meters (2003) and 730 kiosks (2007) costing respectively  $\gtrless$  2.72 crore and  $\gtrless$  1.35 crore. Of these 156 meters and 156 kiosks had been installed as of March 2011 leaving unutilized 575 meters and 574 kiosks valued at  $\gtrless$  3.20 crore.

The excessive purchase without ascertaining immediate requirements had resulted in blockage of funds for years together.

5.2.9 Restructured Accelerated Power Development Reforms Programme

In order to carry on the reforms further, the GOI launched the Restructured APDRP (R-APDRP) in July 2008 as a central sector scheme in XI Plan. The scheme comprises of Part A and B.

Part A was dedicated to establishment of IT enabled systems for achieving reliable and verifiable baseline data system in all towns besides installation of

<sup>&</sup>lt;sup>10</sup>August 2008: ₹ 16.16 crore; March 2009: ₹ 4.60 crore

<sup>&</sup>lt;sup>11</sup>Imphal Electrical Division No. I

SCADA<sup>12</sup>/Distribution Management System. For this, 100 *per cent* loan is provided, and is convertible into grant on completion and verification of the same by a third party independent evaluating agency.

The Part B of the scheme deals with strengthening of regular sub-transmission & distribution system and up gradation projects.

#### 5.2.9.1 Financial Performance

Under Part-A Government of India sanctioned ₹ 31.55 crore for 13 municipalities/small towns and released ₹ 8.45 crore (March 2011).

#### Aggregate Technical & Commercial Losses

The graph below depicts the ATC losses in the State over the performance audit period.



(Source: Departmental records)

The graph shows that ATC losses decreased from 75.73 to 50.46 *per cent* during 2006-2011. The Department did not fix any target for successive reduction of ATC losses over the years.

Though there was considerable reduction over the span of five years, the figure during 2010-11 was still far above the prescribed level of 15 *per cent*.

#### **5.2.9.2 Consumer metering**

Attainment of 100 *per cent* metering was one of the objectives of the R-APDRP scheme. The number of metered consumers decreased from 1,39,323 (March 2007) to 1,32,501 (March 2011) as against a total of 193661 consumers at end of March 2011.

<sup>&</sup>lt;sup>12</sup>Supervisory Control And Data Acquisition – It generally refers to industrial control systems: computer systems that monitor and control industrial, infrastructure, or facility based processes.

While, 34,208 consumers were with defective meters and 26,952 consumers were without meters.

Department (Imphal Electrical Division I) purchased 51585 static meters costing ₹ 8.83 crore during February 2009. Of these, 44,742 meters (valued at ₹ 7.65 crore) were lying un-utilized as of April 2011. Non utilisation of 44,742 meters had resulted into blockage of funds.

**5.2.10** Operational efficiency

The operational performance of the Department is evaluated on the basis of availability of adequate power for distribution, adequacy and reliability of distribution network, minimizing line losses, detection of theft of electricity, *etc.* These aspects have been discussed below.

**5.2.11 Purchase of Power** 

The Electricity Department purchased power from various central generating stations in the north-eastern region *viz.*, NEEPCO, NHPC *etc.* as per sectorial allocation. Demand of power assessed for the State based on the 17 Electric Power Survey, and actual power purchased during the period 2006-07 to 2010-11 were as under:

					(1	Million Units)
Year	Demand assessed by EPS	*Actual Power purchased	Sale outside State	Power available	Power Deficit	Percentage of Deficit
(1)	(2)	(3)	(4)	(5)	(6)	(7)
2006-07	589	524.12	40.03	484.09	104.91	17.81
2007-08	641	648.90	137.56	511.34	129.66	20.23
2008-09	702	616.59	104.40	512.18	189.81	27.04
2009-10	766	536.39	70.34	466.05	299.95	39.16
2010-11	838	639.92	110.48	529.44	308.56	36.82

\*Inclusive of free power, power generation & UI purchase. (Source: Departmental records)

It may be seen from the above table that while the State was suffering shortage of power, the Department used to sell power outside the State. The power deficit increased from 104.91 MU (2006-07) to 308.56 MU (2010-11).

In its tariff order (March 2011), the JERC observed that the power supply in the State was in a precarious condition. Nowhere in the State, barring a few privileged consumers, was the supply continuous. Even at Imphal, the capital city, supply was not more than six hours a day. While there was poor and erratic supply in the State, the Department proposed sale of about 50 *per cent* of the projected requirement to other States through UI mechanism. The Commission directed the Department to resort to outside sale only when there was surplus in the State due to excess generation or system constraints.

The Commission further observed that Heavy fuel power plant at Leimakhong may be operated during peak hours to minimize load shedding as the high cost of generation from this plant would not cause much impact on the tariff when mixed with the cheaper grid power and free power received by the State from Loktak Hydro Electric Project. It directed the Department to generate 20 MU from this plant during peak hours.

The break-up of category-wise purchase of the last five years was as follows.



It may be seen from the above that purchase from central sector generating stations decreased from 572.03 MU (2007-08) to 465.12 MU (2009-10), while the power demand was in the increasing trend (589 MU to 838 MU) during 2006-11. Drawal through UI increased from 4.4 MU to 24.47 MU during 2007-10 and decreased to 18.43 MU during 2010-11.

The source-wise purchase of power during performance audit period is given in the **Appendix-5.8**.

The peak demand surpassed supply of power during 2006-11 and the deficit ranged from 38 MW (28.36 *per cent*) to 69 MW (37.50 *per cent*) as shown under:

Year	2006-07	2007-08	2008-09	2009-10	2010-11
Peak demand(MW)	134	145	157	170	184
Demand met(MW)	96	97	100	110	115
Deficit	38	48	57	60	69
(percentage)	(28.36)	(33.10)	(36.31)	(35.29)	(37.50)

(Source: Departmental records)

The State's annual quota of power from central sector power plants operating in the north eastern region was 124.15 MW. But the Department actually drew only 50.37 MW to 65.30 MW during the last five years.

Enquiring the reasons for the lower drawal, the Department stated (September 2011) that all the purchases of the State was routed through 132 kV substation of Yurembam which could draw 50 MW from each incomer feeder (*i.e.* 28 km long 132 kV line of Leimatak- Ningthoukhong-Yurembam and one km long 132 kV Imphal-Imphal line of PGCIL substation at Imphal). It also stated (July 2010) that if more than 100 MW was injected through the existing 132 KV line, the conductors could get burnt and the insulators might get punctured resulting in a system collapse.

On being pointed out that the Department should have upgraded the Imphal-Imphal 132 KV line (1 Km) or that it should have converted it into double circuit line to draw more power and reduce the shortage of power, the Department stated that stringing of the second circuit 132 KV Imphal-Imphal line would be taken up by PGCIL.

### 5.2.12 Sub-transmission and distribution losses

The distribution system is an essential link between the generation source and the ultimate power consumers. When energy is carried from the generating source to the consumers, some energy is necessarily lost in the network. For efficient functioning of the system, it must be ensured that there are minimum losses in sub-transmission and distribution. The losses at 33KV stage are termed as sub-transmission losses while those at 11 KV and below are termed as distribution losses. These are the difference between energy received (and paid for) by the Department and energy billed to consumers. The losses occur mainly on two counts- technical and commercial. Technical losses occur due to inherent character of the equipment used for transmitting and distributing power and resistance in conductors through which the energy is carried from one place to another while commercial losses occur due to theft of energy, defective meters and unmetered supplies *etc*. The percentage of loss is a parameter to indicate the effectiveness of the distribution system.

The table below indicates the energy losses for the last five years.

Sl.	Particulars	2006-07	2007-08	2008-09	2009-10	2010-11
1	Own Generation	3.13	1.70	0.65	2.01	2.04
2	Free Power	55.33	70.77	58.76	44.79	70.89
3	Power purchased	441.22	572.03	550.43	465.12	548.56
4	Total Power from CGS (2+3)	496.55	642.80	609.19	509.91	619.45
5	Less inter-state transmission loss (3.5	17.38	22.50	21.32	17.85	21.68
	per cent)					
6	Net Power purchased from CGS (4-5)	479.17	620.30	587.87	492.06	597.77
7	UI Purchases	24.44	4.40	6.75	24.47	18.43
8	Total energy available (1+6+7)	506.74	626.40	595.27	518.54	618.24
9	Less UI sales	40.03	137.56	104.40	70.34	110.48
10	Energy import (Energy available for	466.71	488.84	490.87	448.20	507.76
	sale in the State)					
11	Sales (in the State)	187.41	197.40	197.21	220.64	271.10
12	Losses (10-11)	279.30	291.44	293.66	227.56	236.66
13	Percentage of losses	59.84	59.62	59.82	50.77	46.60
14	Percentage of losses allowed by	NA	NA	NA	NA	NA
	JERC					
15	*Excess losses (above 47 per cent)	59.95	61.69	62.95	16.91	-
	MU					
16	Average realization per unit (in ₹)	1.63	3.07	4.08	3.26	4.33
17	Value of excess losses (₹ in crore)	9.77	18.94	25.68	5.51	_

#### (In Million Units)

\*Compared with loss (47 *per cent* of 2010-11) assessed by the Commission. (Source: Departmental records)

The above table discloses losses ranging from 46.60 to 59.84 *per cent* during the last five years ending 31 March 2011.

Unmetered supplies, defective meters and theft of electricity by un-authorized consumers were the reasons for such high energy losses (Refer **Paragraphs 5.2.9.2 and 5.2.13.2**).

Reduction of these losses will be the most significant step towards financial self-sustenance, for a one *per cent* decrease in these losses could increase the annual revenue by  $\gtrless$  2.20 crore<sup>13</sup>.

#### 5.2.12.1 Performance of Distribution Transformers

The JERC (Manipur and Mizoram) had not fixed the norm of failure of Distribution Transformers (DTRs) in its tariff orders (March 2011). The details of DTRs failed and the expenditure incurred on their repairs is depicted in the table below.

Sl. No.	Particulars	2006-07	2007-08	2008-09	2009-10	2010-11
1.	Existing DTRs at the close of the year(in Number)	2569	2822	2872	3055	3120
2.	DTR Failures (in Number)	92	68	76	91	88
3.	Percentage of failures	3.58	2.41	2.65	2.98	2.82
4.	Norm allowed by SERC (in percentage)	5*	5*	5*	5*	5*
5.	Excess failure percentage over norms	-	-	-	-	-
6.	Expenditure on repair of failed DTRs (₹ in crore)	0.11	0.08	0.12	0.21	0.50
	*As stated by the Department (S	ource: Dope	rtmontal race	orde)		

As stated by the Department. (Source: De

<sup>(</sup>Source: Departmental records)

<sup>&</sup>lt;sup>13</sup>₹ 2.20 crore = 5.08 MU X ₹ 4.33 per unit based on 2010-11 losses.

The table shows that failure rate of transformers during the period 2006-11 was ranging from 2.41 to 3.58 *per cent*. During the period 2006-11, in five divisions<sup>14</sup> the failure of transformer and expenditure on repair of failed transformer was shown as nil which was not reliable and was one of the reasons for the low percentage of failure.

Failure of DTRs could be minimized by taking adequate steps for preventive maintenance and avoiding over-loading of the same. Of 14, 5 divisions<sup>15</sup> could not furnish the cause-wise failure, while another five had shown nil-failure. Cause-wise analysis of failure of DTRs revealed that in four<sup>16</sup> divisions the percentage of failure due to over-loading ranged from 41 to 73 *per cent* during the years under performance audit as shown in the table below.

Year	Number of failures during the year <sup>17</sup>	Number of failures due to over-loading	Failures due to over- loading (percentage)
2006-07	48	35	73
2007-08	32	17	53
2008-09	41	24	59
2009-10	46	21	46
2010-11	39	16	41

(Source: Departmental records)

#### 5.2.12.2 Delay in repairs of Distribution Transformers

The Department undertook repair of the damaged transformers, both in-house as well as through outside parties. There was no prescribed time limit for return of repaired transformers. Test check revealed that in the case of 35 transformers, it took more than 30 days in each case and in eight cases it took more than 180 days.

### **5.2.13** Commercial losses

Major portion of the commercial losses relate to consumer metering and billing besides pilferage of energy. Observations relating to commercial losses are discussed below.

#### 5.2.13.1 Implementation of LT less system

High voltage distribution System is an effective method of reducing technical losses, prevention of theft, improved voltage profile and better consumer service. The GOI had also stressed upon (February 2001) the need to adopt LT less system of distribution by replacement of existing LT lines by HT lines to reduce the distribution losses. The HT-LT ratio of the State during 2006-10 is depicted in the graph:

<sup>&</sup>lt;sup>14</sup>Churachandpur, Rural Electrification division I, Bishnupur, Chandel and Thoubal divisions.

<sup>&</sup>lt;sup>15</sup>Senapati, Tamenglong, Kangpokpi, Ukhrul and Jiribam.

<sup>&</sup>lt;sup>16</sup>Imphal Electrical Division No.I, II and III and Imphal Maintenance Division.

<sup>&</sup>lt;sup>17</sup>Excluding failures due to manufacturing defects.



(Source: Departmental records)

If more length of the low tension lines had been replaced by high tension lines the ratio (H/T) would have increased over the years. The Department failed to reduce the same as the HT/LT ratio remained more or less at the same level indicating inadequacy of initiatives taken for reduction of energy loss.

## 5.2.13.2 High incidence of theft

Substantial commercial loss is caused by theft of energy by tampering of meters by the consumers and unauthorized tapping and hooking by the non-consumers.

The Department did not fix any target for checking and realization of recoveries from the unauthorized tappers. However in the two years (2008-09 and 2009-10) it conducted a check during which it detected 439 cases of theft while checking 5360 cases and assessed the recoverable amount to  $\gtrless$  6,305. But it realized only  $\gtrless$  1,755 as shown in **Appendix-5.9**.

The Commission in its tariff order 2010-11 pointed out that un-authorised consumers/ theft of power cases in the State was estimated above 40 *per cent*. It therefore directed (March 2011) the Department to conduct a detailed survey and to regularize at least 30,000 of them annually till it reduces to zero.

### 5.2.13.3 Performance of Raid Team

In order to minimise cases of pilferage and to save the Department from sustaining heavy financial losses on this account, Electricity Act 2003 provides that the licensee may enter the premises of a consumer for inspection and testing the apparatus.

The Department stated that although no vigilance team was constituted for the performance audit period the sub-divisional officers and his technical staff were responsible for conducting raids in areas where large scale theft was suspected.

In the last quarter of 2010-11, the Departmental officers conducted a mass revenue drive and collected  $\gtrless$  17.6 crore of outstanding revenue, disconnected 16,887 defaulting consumers and booked 422 unauthorised consumers. Had the Department conducted such revenue drives regularly, more revenue could have been realised and the number of defaulting and un-authorised consumers could have been reduced.

### 5.2.14 Financial Position and Working Results

**5.2.14.1** The Department did not maintain pro-forma accounts such as profit and loss account, balance sheet *etc*. Further, assets and depreciation registers were also not maintained. In absence of these records Audit could not assess depreciation, return on equity *etc*. The statement of expenditure for the period 2006-11 was as shown under:

	(₹ in crore)										
Year	Budget 1	Provision		Expendi	iture incurre	ed	Excess (+)/	Excess (+)/Saving (-)			
	Plan	Non-plan	Total	Plan	Non-plan	Total	Plan	Non-Plan			
2006-07	116.81	239.10	355.91	65.76	430.74	496.50	(-) 51.05	(+) 191.64			
2007-08	129.96	200.90	330.86	150.32	154.25	304.57	(+) 20.36	(-) 46.65			
2008-09	160.22	182.82	343.04	89.94	185.33	275.27	(-) 70.28	(+) 2.51			
2009-10	293.87	195.86	489.73	289.83	164.67	454.50	(-) 4.04	(-) 31.19			
2010-11	259.83	210.42	470.25	256.70	206.06	462.76	(-)3.13	(-)4.36			
Total	960.69	1029.10	1989.79	852.55	1141.05	1993.60	(-) 108.14	(+) 111.95			

(Source: Appropriation Accounts)

From the above table it would be seen that under plan head there were savings during 2006-10 barring 2007-08 with the overall saving of ₹108.14 crore (11 *per cent*) while the excess under non-plan head during the period was ₹111.95 crore (11 *per cent*). Non-surrendering of anticipated savings in time and incurring of expenditure in excess of budget provision is indicative of failure of effective financial control.

In their reply (September 2011) the Department stated that the excess/saving in plan and non-plan expenditure had been substantially reduced from 2009-10 to 2010-11 showing improvement in financial control.

**5.2.14.2** The particulars of cost of electricity *vis-à-vis* revenue realization per unit there from are indicated below.

Sl.	Description	2006-07	2007-08	2008-09	2009-10	2010-11
1.	Income (₹ in crore)					
(i)	Revenue from Sale of Power	33.62	102.69	122.24	94.79	108.57
(ii)	Revenue subsidy & grants	-	-	-	-	55.56
(iii)	Other income	3.39	0.07	0.68	0.11	1.10
	Total Income	37.01	102.76	122.92	94.90	165.23
2.	Distribution (In MUs)					
(i)	Total power purchased <sup>18</sup>	524.12	648.90	616.59	536.39	639.92
(ii)	Less: Transmission losses	17.38	22.50	21.32	17.85	21.68
(iii)	Power available for Sale (i-ii)	506.74	626.40	595.27	518.54	618.24
(iv)	Less: Sub-transmission & distribution losses	279.30	291.44	293.66	227.56	236.66
	Net power sold	227.44	334.96	301.61	290.98	381.58
3	Expenditure on Distribution of Electricity					
5.	(₹ in crore)					
(a)	Fixed cost					
(i)	Employees cost	39.84	41.30	47.15	47.54	80.00
(ii)	Administrative and General expenses	NA	NA	NA	NA	NA
(iii)	Depreciation	2.55	2.92	3.15	5.33	6.24
(iv)	Interest and finance charges	NA	NA	NA	NA	NA
(v)	Other Expenses	NA	NA	NA	NA	NA
	Total fixed cost	42.39	44.22	50.30	52.87	86.24
<b>(b)</b>	Variable cost					
(i)	Purchase of Power	92.16	86.93	112.33	80.94	106.63
(ii)	Electricity Duty	NA	NA	NA	NA	NA
(iii)	Transmission/ Wheeling Charges	16.95	25.65	23.75	26.70	40.00
(iv)	Repairs & Maintenance	9.15	4.27	6.94	7.23	7.50
	Total variable cost	118.26	116.85	143.02	114.87	154.13
(c)	Total cost $3(a) + (b)$	160.65	161.07	193.32	167.74	240.37
4	Realisation (₹per unit)	1.63	3.07	4 08	3.26	4 33
ч.	(including revenue subsidy)	1.05	5.07	4.00	5.20	4.55
5.	Fixed cost (₹per unit)	1.86	1.32	1.67	1.82	2.26
6.	Variable cost (₹per unit)	5.20	3.49	4.74	3.95	4.04
7.	Total cost per unit (in ₹) (5+6)	7.06	4.81	6.41	5.77	6.30
8.	Contribution (4-6) (₹per unit)	-3.57	-0.42	-0.66	-0.69	0.29
9	Profit (+)/Loss(-) per unit (in ₹) (4-7)	-5.43	-1.74	-2.33	-2.51	-1.97

(Source: Departmental records)

It was also evident from the above table that purchase of power, employees cost, and repair and maintenance constituted the major elements of cost in 2010-11 which represented 61, 33.28 and 3.12 *per cent* respectively of the total cost in that year. On the other hand, revenue from sale of power and revenue subsidy constituted the major elements of revenue in 2010-11 which represented 65.71 and 33.63 *per cent* of the total revenue. It was also observed that the Department was operating the power supply with losses ranging from  $\mathbf{\xi}$  58.31 crore to  $\mathbf{\xi}$  123.64 crore.

 $<sup>^{18}</sup>$ Including own generation, free power, power purchased from central generating stations and UI purchases.

**5.2.14.3** The financial viability of the distribution utilities are generally influenced by the various factors such as

- a) Timely revision of tariff;
- b) Subsidy Support
- c) Cross subsidization
- d) Recovery of the cost of operation
- e) The billing and collection efficiency.

Each of these factors is discussed in the following paragraphs.

## (a) **Timely revision of tariff**

The Department had not got the revised tariff from August 2002. The tariff was revised from 21 March 2011 after constitution of JERC (Manipur and Mizoram) in January 2005 became operational in January 2008.

We observed that as per the JERC (Terms and Conditions for determination of tariff) Regulations 2010, the Department was required to file the ARR for the financial year 2010-11 in November 2009. However, the Department filed it only in December 2010. The tariff approved by the Commission on 15 March 2011 became effective from 21 March 2011.

Had the Department submitted its petitions to the JERC in time during the last three years (2008-11) and obtained revisions regularly it could have generated additional revenue.

## (b) Subsidy Support

During the financial year 2010-11 the Department earned an income of 109.67 crore against an expenditure of ₹ 240.37 crore and thereby suffering a loss of ₹ 130.70 crore. The State Government committed to provide a subsidy of ₹ 55.56 crore in 2010-11. No such subsidy was provided in the previous years. However, the Department did not furnish any information as to the release of subsidy by the State Government.

## (c) Cross subsidization

Section 61 of Electricity Act 2003 stipulates that the tariff should progressively reflect the Average Cost of Supply (ACOS) of electricity and also reduce cross subsidy in a phased manner as specified by the Commission.

National Tariff Plan envisaged that the tariff of all categories of consumer should range within plus or minus 20 *per cent* of the ACOS by the year 2010-11.

During the last five years (2006-11) the ACOS remained stationary at 315 paise per unit. However, the tariff across the various major sectors was as depicted in the table below:

Particulars 2006-07		2	2007-08		2008-09		2009-10		2010-11	
Sectors	Paise	Percentage	Paise	Percentage	Paise	Percentage	Paise	Percentage	Paise	Percentage
		of ACOS		of ACOS		of ACOS		of ACOS		of ACOS
Domestic	267	84.76	273	86.67	282	89.52	262	83.17	274	86.98
Commercial	320	101.59	326	103.49	312	99.05	315	100	313	99.37
Industrial	315	100	322	102.22	301	95.56	324	102.86	281	89.21
Agricultural	292	92.70	2 70	85.71	637	202.22	507	160.96	456	144.76
Others <sup>19</sup>	350	111.11	361	114.60	365	115.87	389	123.49	377	119.68

(Source: Departmental records)

It may be seen from the above table that the average rate per unit for agricultural consumer was more than the prescribed range during 2008-11. The Department may suitably adjust the tariff of all category of consumers in such a way that it falls within the range specified by the National Tariff Plan.

#### (d) Recovery of cost of operations

The Department was not able to recover its cost of operations during any of the last five years. The loss was highest during 2006-07 (₹5.43) as given in the graph below:



The high revenue gap needs immediate attention of the State Government for remedial action.

Our analysis revealed that the main reason for high cost of energy as compared to revenue from sale of power was because of high fixed cost on employees. Further, the State had been receiving free power from Loktak Hydro-Electric

<sup>&</sup>lt;sup>19</sup>Including public works, street lighting *etc*.

Plant (HEP) from year to year. Without this, the total cost and loss per unit would have been more.

Further analysis of Sales and Contribution data for the last five years ending 31 March 2011 is shown in the table below:

						(₹ in crore)
Year	Sales	Variable	Variable Fixed Contri- Deficit in recovery		Deficit as	
		costs	costs	bution	of fixed costs	percentage of sales
(1)	(2)	(3)	(4)	(5) ((2)-(3))	(6) ((4)–(5))	(7) ((6)÷(2)x100)
2006-07	33.62	118.26	42.39	-84.64	127.03	377.84
2007-08	102.69	116.85	44.22	-14.16	58.38	56.85
2008-09	122.24	143.02	50.30	-20.78	71.08	58.15
2009-10	94.79	114.87	52.87	-20.08	72.95	76.96
2010-11	108.57	154.13	86.24	-45.56	131.80	121.40

(Source: Departmental records)

The table reveals that the sale proceeds of power could not cover the variable cost during the performance audit period. The deficit in percentage of sales was highest during 2006-07 (377 *per cent*) and thereafter it ranged from 56 to 121 *per cent*.

Though it appears that the tariff was on lower side and needed to be increased for recovery of the costs, the gap can be bridged by improving operational efficiency, *viz.*, reducing ATC losses, conversion of LT lines to HT lines, metering of unmetered connections, replacing of defective meters, improving billing *etc*.

## (e) **Billing and collection efficiency**.

# **Billing efficiency**

As per procedure prescribed in the Electricity supply Code, 2008, the Department is required to take the reading of energy consumption of each consumer at the end of the notified billing cycle. After obtaining the meter readings, the Department issues bills to the consumers for consumption of energy. Sale of energy to metered categories consists of metered and assessed units. The assessed units refer to the units billed to consumers in case meter reading is not available due to meter defects or door locks *etc*.

						(in MUs)
Sl.	Particulars	2006-07	2007-08	2008-09	2009-10	2010-11
1.	Energy available for sale	227.44	334.96	301.61	290.98	381.58
2.	Free Supply	-	-	-	-	-
3.	Energy billed	227.44	334.96	301.61	290.98	381.58
4.	Assessed sales as percentage of metered sales	36.08	34.34	34.96	38.97	51.49

(Source: Departmental records)

It would be seen from the table that assessed sales constituted 34 to 51 *per cent* during performance audit period. We observed that JERC had not fixed

any norm for percentage of assessed sales as percentage of metered sales, the efficiency of present level of assessed sales could not be commented upon.

## (f) Revenue collection efficiency

As revenue from sale of energy is the main source of income of the Department, prompt collection of revenue assumes great significance. The table below indicates collection performance of the Department for the last five years ending 2010-11.

						( <b>₹</b> in crore)
SI.	Particulars	2006-07	2007-08	2008-09	2009-10	2010-11
1	Balance outstanding at the beginning of	163.52	192.84	231.65	266.30	259.65
	the year					
2	Revenue billed during the year	55.27	59.93	60.57	67.69	63.31
3	Total amount due for realisation (1+2)	218.79	252.77	292.22	333.99	322.96
4	Amount realised during the year	25.95	21.12	25.92	74.34	61.60
5	Amount written off during the year	-	-	-	-	-
6	Balance outstanding at the end of the year	192.84	231.65	266.30	259.65	261.36
7	Percentage of amount realised to the total	11.86	8.36	8.87	22.26	19.07
	dues (4/3)					
8	Arrears in terms of number of months	42	46	53	46	49
	assessment (12 times 6/2)					

(Source: Departmental records)

The above table discloses that:

- b the outstanding dues at the end of the years increased from ₹ 192.84 crore in 2006-07 to ₹ 261.36 crore in 2010-11.
- > dues outstanding for more than three years amounted to ₹ 231.65 crore (76 per cent of the total dues) consisting of dues from LT and HT consumers indicating ineffective persuasion of old debts.
- $\triangleright$  ₹ 12.55 crore of the dues related to disconnected services of the test checked divisions<sup>20</sup>.
- In two divisions<sup>21</sup> 111 consumers having arrears more than ₹ 1 lakh each did not make payment of the dues up to 30 months; but their supplies were not disconnected. The Department did not intimate any reason for the same.

### **5.2.15** Consumer Satisfaction

One of the key elements of the Power Sector Reforms was to protect the interest of the consumers and to ensure better quality of service to them. The consumers often face problems relating to supply of power, such as nonavailability of the distribution system for new connections or increase of

 $<sup>^{\</sup>rm 20}$  Imphal Electrical Division I and II, Thoubal Division and Imphal Maintenance Division

<sup>&</sup>lt;sup>21</sup> Imphal Electrical Division I and II

connected load, failure of lines and transformers and improper metering and billing.

The Department was required to introduce consumer friendly actions like introduction of computerized billing, online bill payment, establishment of customer care centres *etc*. to enhance satisfaction of consumers and reduce the extent of grievances among them.

# 5.2.15.1 Redressal of Grievances

Prior to 2009 the Department was having six complaint cells in Greater Imphal to attend complaints of consumers.

Test check of records of four cells revealed the following:

- ➢ In Lamphel and Lamlong although complaint registers were maintained dates of redressal of the complaints were not recorded.
- In Keisampat, instead of using bound registers, loose sheets were used for noting complaints of the consumers.
- In Wangkhei the cell was housed in a private scooter workshop. In spite of providing a telephone there, even a register was not maintained to record complaints of the consumers.

Because of deficiencies in the records, audit could not ascertain the number and nature of complaints received and number of cases attended to and the speed of redressal of the grievances.

One ombudsman was appointed in July 2009 and one Grievance Redressal Forum was constituted in September 2009. However locations of their offices were not specified. As a result audit could not examine records connected to their sphere of work.

## 5.2.16 Energy Conservation/Audit

Recognizing the fact that efficient use of energy and its conservation is the least-cost option to mitigate the gap between demand and supply, the GOI enacted the Energy Conservation Act, 2001. The conservation of energy being a multi-faceted activity, the Act provides both promotional and regulatory roles on the part of various organizations. The promotional role includes awareness campaigns, education and training, demonstration projects, R & D and feasibility studies. The regulatory role includes framing rules for mandatory audits for large energy consumers, devising norms of energy consumption for various sectors, implementation of standards and provision of fiscal and financial incentives.

We observed that:

- Department had made no efforts for conducting energy audit of government buildings though a study conducted by Bureau of Energy Efficiency, GOI, indicated that such energy audit would result in approximately 27 per cent to 46 per cent savings in energy.
- The Commission in its tariff order 2010-11 observed that the Department was not doing energy audit effectively.
- The JERC directed (March 2011) the Department for submission of action plan for preliminary energy audit and loss reduction measures by May 2011. But this was not submitted as of October 2011.

## 5.2.17 Monitoring

The Power Department plays an important role in the State economy. For such a large organization to succeed in operating economically, efficiently and effectively, there has to be a Management Information System for monitoring by top management.

Existence of a system of monitoring of the activities of the Department by the top management through a Management Information System did not exist in the Department. In their reply the Department stated (September 2011) that a separate cell was being set up for collection of data for establishment of a Management Information System for monitoring.

## 5.2.18 Conclusion

- > No targets were fixed for addition of sub stations to the existing infrastructure.
- Achievement of target of rural electrification decreases from 97 per cent in 2007-08 to 53 per cent in 2010-11.
- Interest on mobilisation advances paid to the contractors were not levied resulting to undue benefit.
- Though the State was facing acute shortage of power, it continued to sell the power outside state.
- ▶ HT-LT ratio in the State remained in the range of 1:0.73 to 1:0.79.

5.2.19 Recommendations

The department may:

- introduce system of target fixation for addition of substation and improvement of LT/HT ratio so that the achievement could be monitored.
- ➢ speed up the phase of rural electrification
- levy interest on mobilisation advance remaining outstanding after the schedule date of completion of projects.
- avoid selling the power outside the state and consider using the same within the state for meeting the power requirements.

Imphal The (Stephen Hongray) Accountant General (Audit), Manipur

Countersigned

New Delhi The (Vinod Rai) Comptroller and Auditor General of India