

CHAPTER-IV

ECONOMIC SECTOR (PUBLIC SECTOR UNDERTAKINGS)

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4.1 Overview of State Public Sector Undertakings

Cattle Farms

Executive Summary

Audit of Government companies is governed by Section 619 of the Companies Act, 1956. The accounts of Government companies are audited by Statutory Auditors appointed by Comptroller and Auditor General of India (CAG). These accounts are also subject to supplementary audit conducted by CAG. Audit of statutory corporations is governed by their respective legislations. As on 31 March 2012, the State of Meghalaya had 14¹ working Public Sector Undertakings (PSUs) (12 companies and two statutory corporations) and one non-working company, which employed 4609 employees. The working PSUs registered a turnover of ₹ 463.14 crore for 2011-12 as per their latest finalised accounts as of September 2012. This turnover was equal to 2.91 per cent of State Gross Domestic Product indicating a moderate role played by State PSUs in the economy. However, the working State PSUs incurred an overall loss of ₹ 85.76 crore in the aggregate for 2011-12 as per their latest finalised accounts as on 30 September 2012.

Investments in PSUs

As on 31 March 2012, of the total investment in State PSUs, 99.70 per cent was in working PSUs and the remaining 0.30 per cent in one non-working PSU. This total investment consisted of 31.19 per cent towards capital and 68.81 per cent in long-term loans. The investment had increased by 21.66 per cent from ₹ 1290.34 crore in 2006-07 to ₹ 1569.81 crore in 2011-12.

¹ Including erstwhile MeSEB, which ceased to exist w.e.f. 1 April 2010.

Performance of PSUs

During the year 2011-12, out of 14 working PSUs, two PSUs namely Meghalaya Government Construction Corporation Limited and Meghalaya Industrial Development Corporation Limited earned profit aggregating to ₹ 1.24 crore and remaining twelve PSUs incurred loss of ₹ 87.00 crore. The major losses were incurred by Mawmluh Cherra Cements Limited (₹ 18.71 crore) and Meghalaya State Electricity Board (₹ 56.42 crore). The losses of working PSUs were mainly attributable to deficiencies in financial management, planning, implementation of projects, operations and monitoring. A review of the latest Audit Reports of CAG shows that the State PSUs incurred losses to the tune of ₹ 66.51 crore and infructuous investment of ₹ 1.40 crore which were controllable with better management. Thus, there is tremendous scope to improve the functioning of PSUs and minimise losses.

Quality of accounts

The quality of accounts of PSUs needs improvement. All the 20 accounts finalised by working PSUs during October 2011 to September 2012 received qualified certificates. There were 12 instances of non-compliance with the Accounting Standards. Reports of Statutory Auditors on internal control of the companies indicated certain weak areas.

Arrears in accounts

Thirteen working PSUs had arrears of 52 accounts as of September 2012. The PSUs need to set targets for the work related to preparation of accounts with special focus

on arrears. There was one non-working company as on 31 March 2012. The Company is under liquidation process as all the employees had opted for VRS in

December 2006. As no purpose was served by keeping this non-working company in existence, Government needs to expedite the process of closure of this company.

4.1.1 Introduction

The State Public Sector Undertakings (PSUs) consist of State Government Companies and Statutory Corporations. The State PSUs are mandated to carry out activities of commercial nature while keeping in view the welfare of people. In Meghalaya, the State PSUs occupy a modest position in the State economy. The State working PSUs registered a turnover of ₹ 463.14 crore for 2011-12 as per their latest finalised accounts as of September 2012. This turnover was equal to 2.91 *per cent* of State Gross Domestic Product (GDP) for 2011-12. The working State PSUs incurred an overall loss of ₹ 85.76 crore during 2011-12 as per their latest finalised accounts as on 30 September 2012. They had employed 4609 employees as of 31 March 2012.

As on 31 March 2012, there were 15 PSUs as per details given below. Of these, no company was listed on the stock exchange(s).

Table 4.1.1

Type of PSUs	Working PSUs	Non-working PSUs ²	Total
Government Companies³	12	1	13
Statutory Corporations	2	-	2
Total	14	1	15

4.1.2 Audit Mandate

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

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

2 Non-working PSUs are those which have ceased to carry on their operations. It includes one 619-B Company namely Meghalaya Electronics Development Corporation Limited.

3 Including three subsidiaries companies of Meghalaya Energy Corporation Limited (MeECL) viz. Meghalaya Power Generation Corporation Limited (MPGCL), Meghalaya Power Transmission Corporation Limited (MPTCL) and Meghalaya Power Distribution Corporation Limited (MPDCL) which were incorporated on 18 December 2009. These Subsidiaries are yet to start functioning (September 2012).

Comptroller and Auditor General of India (CAG) as per the provisions of Section 619(2) of the Companies Act, 1956. These accounts are also subject to supplementary audit conducted by CAG as per the provisions of Section 619 of the Companies Act, 1956.

Audit of Statutory Corporations is governed by their respective legislations. Out of two Statutory Corporations, CAG is the sole auditor for Meghalaya Transport Corporation. In respect of Meghalaya State Warehousing Corporation, the audit is conducted by Chartered Accountants and the supplementary audit by CAG.

4.1.3 Investment in State PSUs

As on 31 March 2012, the investment (capital and long-term loans) in 15 PSUs was ₹ 1,569.81 crore as per details given below:

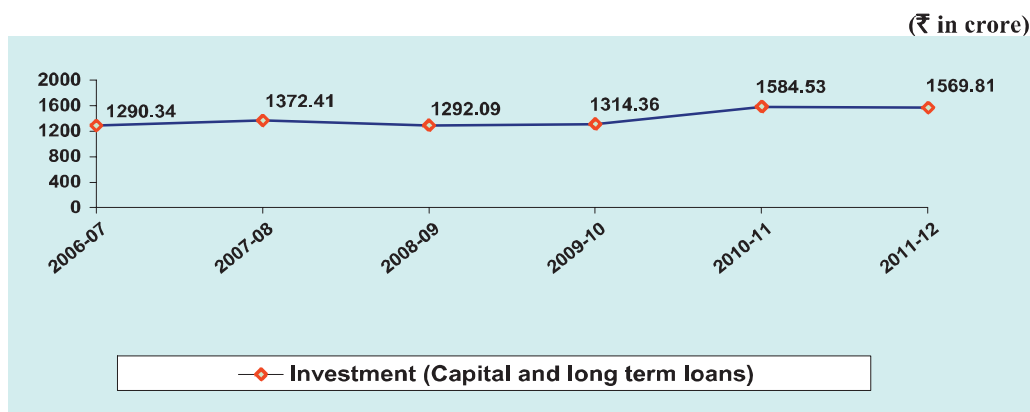
Table 4.1.2

(₹ in crore)

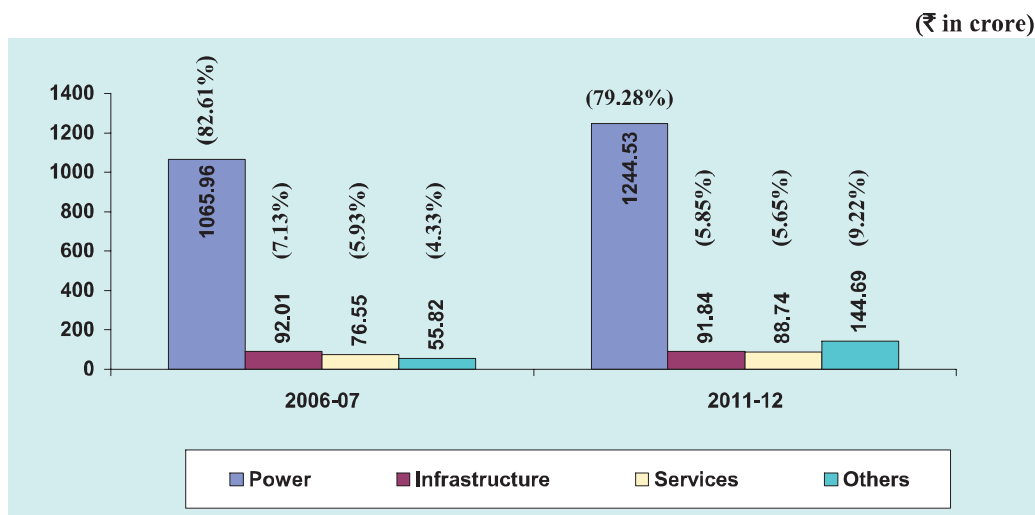
Type of PSUs	Government Companies			Statutory Corporations			Grand Total
	Capital	Long Term Loans	Total	Capital	Long Term Loans	Total	
Working PSUs	400.82	1,080.12	1,480.94	84.15	-	84.15	1,565.09
Non-working PSUs	4.72	-	4.72	-	-	-	4.72
Total	405.54	1,080.12	1,485.66	84.15	-	84.15	1,569.81

A summarised position of Government investment in State PSUs is detailed in **Appendix 4.1**.

As on 31 March 2012, of the total investment in State PSUs, 99.70 *per cent* was in working PSUs and the remaining 0.30 *per cent* in one non-working PSU. This total investment consisted of 31.19 *per cent* towards capital and 68.81 *per cent* in long-term loans. The investment has increased by 21.66 *per cent* from ₹ 1290.34 crore in 2006-07 to ₹ 1,569.81 crore in 2011-12 as shown in the graph below:



The investment in various important sectors and percentage thereof at the end of 31 March 2007 and 31 March 2012 are indicated below in the bar chart. The thrust of PSU investment in the State was on Power Sector during the five years as is evident from the table below.



(Figures in brackets show the percentage of total investment)

4.1.4 Budgetary outgo, grants/subsidies, guarantees and loans

The details regarding budgetary outgo towards equity, loans, grants/ subsidies, guarantees issued, loans written off, loans converted into equity and interest waived in respect of State PSUs are given in **Appendix 4.3**. The summarised details are given below for three years ended 2011-12:

Table 4.1.3

(₹ in crore)

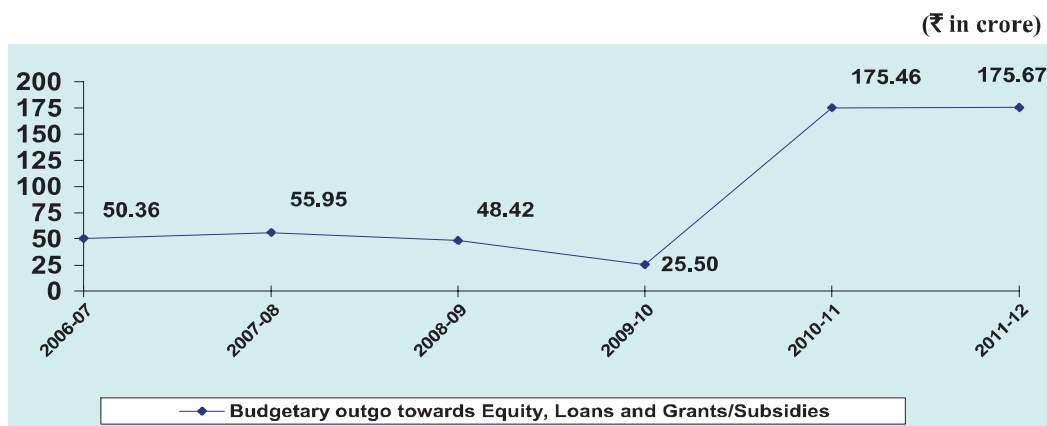
Sl. No.	Particulars	2009-10		2010-11		2011-12	
		No. of PSUs	Amount	No. of PSUs	Amount	No. of PSUs	Amount
1.	Equity(E) Capital outgo from budget	4	16.45	5	15.99	4	27.00
2.	Loans given from budget	-	-	1	23.44	2	31.63
3.	Grants(G)/Subsidy(S) received ⁴	5	9.05	3(G) 2(S)	131.47(G) 4.56(S)	5(G) 3(S)	99.27(G) 17.77(S)
4.	Total Outgo⁵ (1+2+3)		25.50		175.46		175.67
5.	Loans converted into equity	-	-	-	-	-	-
6.	Guarantees issued	1	116.88	1	31.77	2	239.76
7.	Guarantee Commitment	3	653.33	2	646.51	3	881.23 ⁶

⁴ Includes grants and subsidies provided through State Government Budget only.

⁵ Depicts actual number of PSUs which received Equity, loans, grants/subsidies out of budget.

⁶ Excluding interest portion of guarantee of ₹ 457.56 crore in respect of MeECL.

The details regarding budgetary outgo towards equity, loans and grants/ subsidies for past six years are given in a graph below:



The budgetary outgo during 2011-12 was all time high at ₹ 175.67 crore in the past six years. This was mainly due to extension of budgetary support of ₹ 132.16 crore to Meghalaya Energy Corporation Limited (MeECL) in the form of loans (₹ 28.63 crore), grants (₹ 90.24 crore) and subsidies (₹ 13.29 crore).

The guarantee commitment by the State Government against the borrowings of State PSUs increased from ₹ 646.51 crore (2010-11) to ₹ 881.23 crore (2011-12). Fresh guarantees of ₹ 239.76 crore was issued by the State Government during 2011-12 to two PSUs (the MeECL and the MCCL).

4.1.5 Reconciliation with Finance Accounts

The figures in respect of equity, loans and guarantees 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 2012 is stated below:

Table 4.1.4

(₹ in crore)

Outstanding in respect of	Amount as per Finance Accounts	Amount as per records of PSUs	Difference
Equity	259.57 ⁷	475.84 ⁸	(-) 216.27
Loans	Not available ⁹	161.71	-
Guarantees including interest	1293.20	1338.79 ¹⁰	(-) 45.59

⁷ Includes ₹ 2.14 crore in MSWC, ₹ 68.97 crore in MTC, ₹ 89.00 crore in MIDC, ₹ 82.73 crore in MCCL, ₹ 2.32 crore in MMDC, ₹ 1.97 crore in FDCM, ₹ 0.75 crore in MGCL, ₹ 8.96 crore in MTDC and ₹ 2.74 crore in MH&HDC.

⁸ Includes ₹ 2.14 crore in MSWC, ₹ 73.97 crore in MTC, ₹ 209.50 crore in MeECL, ₹ 91.09 crore in MIDC, ₹ 82.72 crore in MCCL, ₹ 2.32 crore in MMDC, ₹ 1.77 crore in FDCM, ₹ 0.75 crore in MGCL, ₹ 7.96 crore in MTDC and ₹ 3.61 crore in MH&HDC. (As per details furnished by the management of the respective PSUs)

⁹ State Government's loans to State PSUs are extended through the Government Departments. These Government Departments reallocate the loan funds to different PSUs. Hence, the PSU-wise figures of State Government loans are not available in the Finance Accounts.

¹⁰ Guarantee commitment given by the State Government against loans were ₹ 1,292.21 crore (Principal=₹ 834.65 crore and interest = ₹ 457.56 crore) for MeECL, ₹ 1.00 crore for MGCL and ₹ 45.58 crore (Principal only) for MCCL.

Audit observed that the differences occurred in equity in respect of six PSUs and one PSU¹¹ has persistent differences pending reconciliation since 2007-08. Though the Principal Secretary, Finance Department, Government of Meghalaya as well as the PSUs concerned were apprised by Audit about the differences from time to time stressing upon the need for reconciliation, no significant progress was noticed in this regard. The Government and the PSUs should take concrete steps to reconcile the differences in a time-bound manner.

4.1.6 Performance of PSUs

The financial results of PSUs, financial position and working results of working Statutory corporations are detailed in **Appendix 4.2, 4.5 and 4.6** respectively. A ratio of PSU turnover to State GDP shows the extent of PSU activities in the State economy. Table below provides the details of working PSUs' turnover and State GDP for the period 2006-07 to 2011-12:

Table 4.1.5

Particulars	(₹ in crore)					
	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
Turnover	278.18	365.47	386.20	440.72	457.06	463.14 ¹²
State GDP ¹³	8625.18	9734.73	11617.04	12709.11	14085.70	15895.15
Percentage of Turnover to State GDP	3.23	3.75	3.32	3.47	3.24	2.91

It can be seen from the above that during six years period ending 2011-12, the percentage of turnover to State GDP had declined from 3.23 *per cent* (2006-07) to 2.91 *per cent* (2011-12) indicating that the turnover of PSUs did not increase proportionately with the rise in the State's GDP.

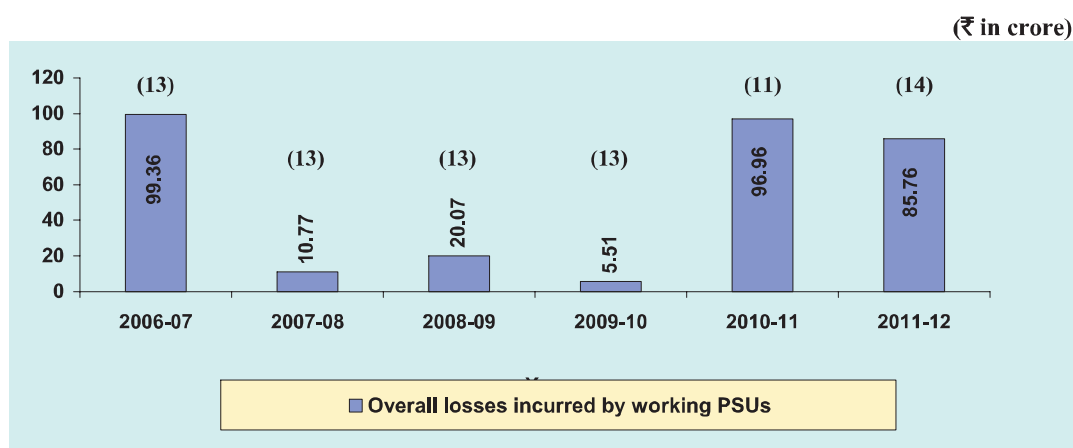
Losses¹⁴ incurred by working State PSUs during 2006-07 to 2011-12 are given below in a bar chart.

¹¹ Serial no.A-1 of Appendix 4.2.

¹² Turnover as per the latest finalised accounts (2009-10) as of 30 September 2012. It included the turnover figure (₹ 415.74 crore) of erstwhile Meghalaya State Electricity Board (MeSEB), which ceased to exist with effect from 01 April 2010 but included in Appendix 4.2 (serial no.B-1) to reflect overall financial results of the State PSUs as new Company (Meghalaya Energy Corporation Limited) formed in its place was yet to finalise account for the year 2010-11 and 2011-12.

¹³ The Gross Domestic Product of Meghalaya at current prices as furnished by Government of Meghalaya, Directorate of Economics and Statistics vide EST.5/2011/Addl.1/5 dated 31.07.2012.

¹⁴ Losses as per latest finalised accounts as shown in Appendix 4.2



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

During 2006-12, the working State PSUs incurred losses every year. The overall losses incurred by working PSUs were an all time high during 2006-07 (₹ 99.36 crore), which reduced significantly to ₹ 5.51 crore during 2009-10 but it had sharply increased to ₹ 96.96 crore in 2010-11 and ₹ 85.76 crore in 2011-12. During the year 2011-12, out of 14¹⁵ working PSUs, 2 PSUs¹⁶ earned profit aggregating to ₹ 1.24 crore while remaining 12 PSUs incurred loss of ₹ 87¹⁷ crore. The major losses were incurred by Mawmluh Cherra Cements Limited (₹ 18.71 crore) and Meghalaya State Electricity Board¹⁸ (₹ 56.42 crore).

The losses of working PSUs were mainly attributable to deficiencies in financial management, planning, implementation of projects, operations and monitoring. A review of the latest Audit Reports of CAG show that the State PSUs incurred losses to the tune of ₹ 66.51 crore and infructuous investment of ₹ 1.40 crore which were controllable with better management. Year wise details from Audit Reports are stated below:

Table 4.1.6

Particulars	(₹ in crore)			
	2009-10	2010-11	2011-12	Total
Net Loss	5.51	96.96	85.76	188.23
Controllable losses as per CAG's Audit Report	17.17	48.06	1.28	66.51
Infructuous Investment	1.40	--	--	1.40

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

¹⁵ Number of working PSUs excludes erstwhile Meghal State Electricity Board which ceased to exist wef 1 April 2010.

¹⁶ serial no.A-3 & A- 4 of Appendix 4.2

¹⁷ Including loss of ₹ 56.42 crore relating to erstwhile MeSEB for 2009-10.

¹⁸ Now Meghalaya Energy Corporation Limited.

table shows that with better management, the losses could be minimised substantially. 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.

Some other key parameters pertaining to State PSUs are given below.

Table 4.1.7

Particulars	(₹ in crore)					
	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
Return on Capital Employed (<i>per cent</i>)	-	2.93	1.87	2.26	-	-
Debt	892.37	968.28	864.76	872.19	1129.38	1080.12
Turnover ¹⁹	278.18	365.47	386.20	440.72	457.06	463.31 ²⁰
Debt/ Turnover Ratio	3.21:1	2.65:1	2.24:1	1.98:1	2.47:1	2.33:1
Interest Payments	32.11	38.08	37.69	43.76	42.35	42.65
Accumulated Losses	508.72	524.13	518.36	515.89	620.74	668.37

(Above figures pertain to all PSUs except for turnover which is for working PSUs)

The State Government had not formulated any dividend policy for payment of any minimum return by PSUs on the paid up share capital contributed by the State Government. As per their latest finalised accounts, two PSU earned an aggregate profit of ₹ 1.24 crore but did not declare dividend.

4.1.7 Arrears in finalisation of accounts

The accounts of the companies for every financial year are required to be finalised 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. Similarly, in case of Statutory Corporations, their accounts are finalised, audited and presented to the Legislature as per the provisions of their respective Acts. The table below provides the details of progress made by working PSUs in finalising their accounts by 30 September 2012.

Table 4.1.8

Sl. No.	Particulars	2007-08	2008-09	2009-10	2010-11	2011-12
1.	Number of Working PSUs	13	13	13	11	14 ²¹
2.	Number of accounts finalised during the year	13	12	10	15	20
3.	Number of accounts in arrears	60	61	64	51	52
4.	Average arrears <i>per</i> PSU (3/1)	4.61	4.69	4.92	4.64	3.71
5.	Number of Working PSUs with arrears in accounts	12	13	13	10	13
6.	Extent of arrears (Years)	1 to 15	1 to 15	1 to 15	1 to 16	1 to 15

¹⁹ Turnover as per the latest finalised accounts as of 30 September 2012.

²⁰ including the turnover figure (₹ 415.74 crore) of erstwhile Meghalaya State Electricity Board (MeSEB), which ceased to exist with effect from 01 April 2010 but included in Appendix 4.2 (serial no.B-1) to reflect overall financial results of the State PSUs as new Company (Meghalaya Energy Corporation Limited) formed in its place was yet to finalise accounts for the year 2010-11 and 2011-12.

²¹ Excluding one company (Meghalaya Electronics Development Corporation Limited) which became non-working during 2010-11 with nine accounts in arrears. Further, three new companies (serial no.A-9, 10 & 11 of Appendix 4.2) incorporated on 18 December 2009 has been included. Each of these three companies has accounts for two years (2010-11 and 2011-12) in arrears.

It can be seen from the above that the quantum of arrears in accounts and the average arrear per PSU remained high showing an average arrears per PSU at 3.71 accounts, while the extent of arrears ranges between one and fifteen years.

The State Government had invested ₹ 340.11 crore (Equity: ₹ 18.33 crore, Loan: ₹ 52.07 crore, Grants: ₹ 235.06 crore and Subsidy: ₹ 34.65 crore) in nine PSUs during the years for which accounts have not been finalised as detailed in **Appendix 4.4**. Delay in finalisation of accounts of these PSUs may result in risk of fraud and leakage of public money apart from violation of the provisions of the Companies Act, 1956.

The administrative departments have the responsibility to oversee the activities of these entities and to ensure that the accounts are finalised and adopted by these PSUs within the prescribed period. Though the attention of the concerned administrative departments and officials of the Government on the issue of the arrears in finalisation of accounts was regularly drawn by the Principal Accountant General on quarterly basis, no remedial measures were taken. As a result of this, the net-worth of these PSUs could not be assessed in audit. The matter of arrears in accounts was also taken up with the Principal Secretary of the concerned Department and the Principal Secretary, Finance Department in the form of quarterly demi-official letters to clear the arrears in accounts in a time bound manner.

In order to speed up the clearance of arrear accounts, in line with the instruction of the Ministry of Corporate Affairs (MCA), Government of India, to finalise latest two years account within a reasonable period during 2011-12, CAG office had taken up the matter with the Chief Secretary, concerned Department of the State Government and State PSUs for effective action plan for compliance of the MCA instruction. But out of 15 PSUs, 13 PSUs²² were yet to finalise latest two years accounts as on 30 September 2012.

In view of the above state of arrears, it is recommended that:

- **The Government may set the targets for individual companies for clearance of arrears and monitor the achievement on regular basis.**
- **The Government may consider outsourcing the work relating to preparation of accounts wherever the staff is inadequate or lacks expertise.**

4.1.8 Winding up of non-working PSUs

There was one non-working PSU as on 31 March 2012. The Company is under process of liquidation as all the employees of the Company had opted for VRS in December 2006 and were awaiting full settlement of VRS compensation.

The non-working PSU is required to be closed down as its existence is not going to serve any purpose.

²² The PSUs viz. the MCCL and MMDC have finalised accounts upto 2011-12 and 2010-11 respectively.

4.1.9 Accounts Comments and Internal Audit

Eleven companies forwarded fourteen²³ audited accounts to Principal Accountant General (Audit) during the year 2011-12. Of these, twelve accounts of nine companies were selected for supplementary audit and two accounts were issued non review certificate. The accounts of Mawmluh Cherra Cements Limited for 2011-12 was received on 29 September 2012 and Supplementary audit was in progress (October 2012). 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. The details of aggregate money value of comments of statutory auditors and CAG are given below:

Table 4.1.9

Sl. No.	Particulars	(₹ in crore)					
		2009-10		2010-11		2011-12	
		No. of accounts	Amount	No. of accounts	Amount	No. of accounts	Amount
1.	Decrease in profit	-	-	1	21.06	1	0.31
2.	Increase in loss	-	-	4	1.80	4	0.34
3.	Non-disclosure of material facts	1	0.21	2	6.51	2	3.34
4.	Errors of classification	-	-	3	0.86	1	0.23

It can be seen from the above that two companies²⁴ had impact of comments under 'Non-disclosure of material facts' category of ₹ 3.34 crore during 2011-12.

During the year, the Statutory auditors had given qualified certificates to all the fourteen accounts. The compliance of companies with the Accounting Standards remained poor as there were twelve instances of non-compliance in fourteen accounts during the year.

Some of the important comments in respect of accounts of companies are stated below:

*Mawmluh Cherra Cements Limited (2010-11)*²⁵

- Non provisioning of ₹ 7.95 lakh pending recovery from M/S Techno Export and M/S Rameshwar Daga and Co. for more than 40 years, resulted in overstatement of Loans and Advances and understatement of loss for the year by ₹ 7.95 lakh.
- Non provisioning of electricity dues payable to MeECL had resulted in understatement of Sundry Creditors and loss for the year by ₹ 31.43 lakh.

²³ Including one year accounts of one Non-working company namely Meghalaya Electronics Development Corporation Limited.

²⁴ Meghalaya Bamboo Chips Limited and Meghalaya Tourism Development Corporation Limited.

²⁵ Account of the Company was received during the period of previous Audit Report (2010-11) but audit process was completed in the current audit period.

- Non provisioning of royalty payable to the Government of Meghalaya resulted in understatement of sundry creditors and loss for the year by ₹ 14.83 lakh.
- Non provisioning of penal interest for default in remittance of Royalty and Cess resulted in understatement of Sundry Creditors and loss by ₹ 16.16 lakh.
- Non provisioning for Employer's Contribution to Provident Fund against arrear DA resulted in understatement of Current Liabilities & Provisions and loss for the year by ₹ 5.46 lakh.
- Non provisioning of Cess payable against sale of Cement from January 2011 to March 2011 resulted in understatement of current liabilities and loss for the year by ₹ 2.64 lakh.

Meghalaya Bamboo Chips Limited (2008-09)

- Profit and Loss Account does not include ₹ 0.39 lakh being the interest on bridging loan taken from the holding company (MIDC). This had resulted in understatement of Interest on Bridging Loan and Loss for the year by ₹ 0.39 lakh.
- Profit and Loss Account did not include outstanding liability on account of electricity charges amounting to ₹ 10.51 lakh relating to prior periods (as on 19.03.2009). This resulted in understatement of prior period expenses and loss by ₹ 10.51 lakh and corresponding understatement of Current Liabilities by the same amount.

Meghalaya Tourism Development Corporation Limited (1995-96)

- Depreciation on various Assets had been charged at rates lesser than those prescribed in the Companies Act, 1956. This had resulted in understatement of depreciation and loss for the year by ₹ 2.90 lakh and overstatement of Assets by the same amount.

Meghalaya Energy Corporation Limited (14 September 2009 to 31 March 2010) & Meghalaya Power Generation Corporation Limited (18 December 2009 to 31 March 2010)

- There has been contravention of provision contained in Section 166 of the Companies Act, 1956 by not holding the first Annual General Meeting within eighteen months from the date of incorporation of the Company. This fact of contravention of the Companies Act, 1956 has not been pointed out by the Statutory Auditor in their Report.
- The Statutory Auditor has pointed out that provision for Deferred Tax has not been created in terms of Accounting Standard 22. Considering the fact that the erstwhile MeSEB had accumulated losses of ₹ 449.03 crore as on March 2010, it cannot be said that there is a reasonable certainty for realisation of deferred

tax. Hence, provision of deferred tax is not permissible under Accounting Standard 22 and qualification of Statutory Auditors is not sustainable.

During 2011-12, two working Statutory Corporations forwarded six accounts²⁶ to the Principal Accountant General. Accounts of one Statutory Corporation was selected for sole audit and for the other CAG decided for conducting supplementary audit. Both the audits were completed during the year. The audit reports of statutory auditors and the sole/ supplementary audit of CAG indicated that the quality of maintenance of accounts needed to be improved substantially. The details of aggregate money value of comments of CAG are given below:

Table 4.1.10

Sl. No.	Particulars	2009-10		2010-11		2011-12	
		No. of accounts	Amount	No. of accounts	Amount	No. of accounts	Amount
1.	Decrease in profit	1	16.12	-	-	-	-
2.	Increase in loss	1	3.02	2	5.98	1	5.09
3.	Non-disclosure of material facts	-	-	2	16.71	1	8.58
4.	Errors of classification	-	-	1	0.76	1	1.92

It can be seen from the above that the average impact of comments per account under ‘*increase in loss*’ category increased from ₹ 2.99 crore in 2010-11 to ₹ 5.09 crore in 2011-12. Besides, average money value of the non-disclosure of material facts also increased from ₹ 8.36 crore in 2010-11 to ₹ 8.58 crore in 2011-12.

During the year, the six accounts of two Statutory Corporations²⁷ received qualified certificates.

Some of the important comments in respect of accounts of Statutory Corporations are stated below:

Meghalaya Transport Corporation (2009-10)

- The Corporation did not provide interest amounting to ₹ 2.57 crore (including penal interest of ₹ 0.06 crore) on capital contribution of the State Government. This had resulted in understatement of “Provisions” and “Loss” for the year by ₹ 2.57 crore (Prior Period ₹ 2.51 crore and Current year ₹ 0.06 crore).
- The Capital Receipts from State Government included an amount of ₹ 1.31 crore being the equity capital released by the State Government in 1999-2000. This had resulted in overstatement of Capital Receipts and understatement of Equity Capital by ₹ 1.31 crore.

²⁶ Meghalaya Transport Corporation has forwarded six years accounts from 2005-06 to 2009-10 and Meghalaya State Warehousing Corporation has submitted one year accounts of 2010-11 during the year 2011-12.

²⁷ Meghalaya Transport Corporation submitted five accounts and Meghalaya State Warehousing Corporation Limited submitted one accounts during 2011-12.

- The Corporation received an amount of ₹ 1.00 crore during the year 2009-10 towards capital contribution from the State Government. However, no utilisation certificate was made available to Audit, in absence of which it was not clear as to how much was utilised towards Plan expenditure. No disclosure in this regard was made by the Corporation.
- The Capital Receipt of Central Government amounting to ₹ 6.81 crore had been converted (April 1994) into equity capital by the Central Government but the same was not shown in the accounts. This had resulted in understatement of Equity Capital and overstatement of Capital receipts by ₹ 6.81 crore.
- A reference is invited to Para No. 5 of the Separate Audit Report of the Corporation for the year ended 31 March 2005 wherein it was stated that the payments made to CPF authorities amounting to ₹ 61.29 lakh were credited to CPF account instead of debiting the same in the accounts for the year 2002-03. No corrective action had been taken by the Corporation during the year 2009-10. This had resulted in overstatement of “Current Liabilities and Provisions” and “Cash at Bank” by ₹ 1.23 crore.
- The Corporation had not disclosed a contingent liability amounting to ₹ 47.41 lakh being the disputed claim of Motor Vehicle Tax.
- Due to non availability of information/records, the following items of Fixed Assets could not be verified in audit:

Sl. No.	Particulars	Amount (₹ in lakh)
(i)	Land	32.22
(ii)	Building (Pucca)	236.65
(iii)	Building (Kutch)	11.56
(iv)	Plant and Machinery	29.86

- Authenticity of the following Sundry Debtors could not be verified in audit due to non-availability of records:

Sl. No.	Particulars	Amount (₹ in lakh)
1.	Bills Receivable	3.80
2.	Govt Pension & Gratuity	252.27
3.	N F Railway Receivable	86.00
4.	House Rent Receivable	126.35
5.	Postal Warrant Receivable	11.37
6.	Road Warrant Receivable	1.23
7.	Mizoram State Transport	0.64

The correctness of outstanding rent recoverable could not be ascertained due to non-maintenance of party wise ledger for Bills Receivable.

- Out of twenty seven (27) bank accounts maintained by the Corporation bank reconciliation was done in respect of only two bank accounts. However, bank reconciliation was carried out with General Ledger instead of Cash Book. There

was however a difference of ₹ 1.63 crore between the balance as per Cash Book and General Ledger in respect of these two bank accounts which remained unreconciled as on 31 March 2010. In respect of remaining twenty five (25) bank Accounts neither any Bank Statement/Pass Book nor Bank Reconciliation Statement was made available to Audit.

- As per Cash and Bank Statement of Meghalaya Helicopter Service (MHS) an amount of ₹ 0.26 lakh (Cash in hand) and ₹ 6.14 lakh (Bank balance) received on behalf of the State Government were not reflected in the accounts. This has resulted in understatement of Cash and Bank balance by ₹ 6.40 lakh with consequent understatement of Current Liabilities - Accrued Charges (MHS) by the same amount. Further, there was a difference of (-) ₹ 2.22 lakh between the balances of MHS as per Cash Book (₹ 6.14 lakh) and as per Bank Statement (₹ 8.36 lakh). But, the same has not been reconciled as on 31 March 2010.
- The Income did not include ₹ 37.89 lakh being commission receivable on sale of tickets for Meghalaya Helicopter Service during the period from February 1999 to March 2010. This had resulted in understatement of non operating revenue ₹ 37.89 lakh (prior period – ₹ 33.93 lakh and current year – ₹ 3.96 lakh) and Current Assets by ₹ 37.89 lakh. This had also resulted in overstatement of “loss” for the year by ₹ 3.96 lakh and “accumulated loss” by ₹ 37.89 lakh.
- Out of total Grants of ₹ 14.50 crore received from Central/State Governments for Voluntary Retirement Scheme (VRS) compensation, the Corporation utilised ₹ 13.35 crore for payment of VRS compensation. The balance fund of ₹ 1.15 crore was not surrendered to the State/Central Government.

Meghalaya State Warehousing Corporation (2010-11)

- Establishment expenses did not include ₹ 10.01 lakh being management expenses incurred and adjusted directly against managerial subsidy receivable. This had resulted in understatement of Expenses and Income by ₹ 10.01 lakh.

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 and other areas in respect of eight companies²⁸ for the year 2010-11 and seven companies²⁹ for the year 2011-12 are given below:

²⁸ Sl. No. A-1, 2, 4, 5, 6, 7, 8 and C-1 in Appendix – 4.2

²⁹ Sl. No. A-2, 3, 5, 6, 7, 12 and C-1 in Appendix – 4.2

Table 4.1.11

Sl. No.	Nature of comments made by Statutory Auditors	2010-11		2011-12	
		Number of companies where recommendations were made	Reference to serial number of the companies as per Appendix 4.2	Number of companies where recommendations were made	Reference to serial number of the companies as per Appendix 4.2
1.	Auditors Report & Comments / Draft paras/Mini Reviews not discussed in Audit Committee	1	A-5	-	-
2.	Non prescribing of Maximum / Minimum level of stock	4	A-1, A-2, A-5, A-8	-	-
3.	No ABC analysis adopted to control the inventory	4	A-1, A-2, A-5, A-8	-	-
4.	Inadequate scope of Internal Audit	1	A-5	1	A-5
5.	Absence of proper maintenance of Fixed Asset Register	6	A-1, A-3, A-5, A-6, A-8, C-1	6	A-2, A-3, A-6, A-7, A-12, C-1
6.	Inadequate credit policy	7	A-1, A-2, A-3, A-4, A-6, A-8, C-1	-	-
7.	Inadequate system of giving discount	2	A-8, A-2	-	-
8.	Inadequate system for timely recovery of outstanding dues	4	A-1, A-2, A-4, C-1	-	-
9.	No system of obtaining confirmation of balances from debtors.	6	A-1, A-2, A-3, A-4, A-8, C-1	5	A-2, A-5, A-7, A-12, C-1
10.	Non recoverable of ledger (Debtor Advances)	-	-	1	A-7

4.1.10 Status of placement of Separate Audit Reports

The following table shows the status of placement of various Separate Audit Reports (SARs) issued by the CAG on the accounts of Statutory corporations in the Legislature by the Government.

Table 4.1.12

Sl. No.	Name of Statutory corporation	Year up to which SARs placed in Legislature	Year for which SARs not placed in Legislature		
			Year of SAR	Date of issue to the Government	Reasons for delay in placement in Legislature
1.	Meghalaya Transport Corporation	2004-05	2005-06	04 April 2012	SAR received by the Government/ Management and is yet to be placed in the Legislature.
			2006-07	10 April 2012	
			2007-08	12 April 2012	
			2008-09	12 April 2012	
			2009-10	12 April 2012	

Delay in placement of SARs weakens the legislative control over Statutory corporations and dilutes the latter's financial accountability. The Government should ensure prompt placement of SARs in the legislature(s).

4.1.12 Disinvestment, Privatisation and Restructuring of PSUs

During the year 2011-12, no exercise was undertaken by the Government of Meghalaya for the Disinvestment, Privatisation and Restructuring of PSUs.

POWER DEPARTMENT

MEGHALAYA ENERGY CORPORATION LIMITED

4.2 Performance Audit on Power Transmission activities

Executive Summary

The performance audit of transmission activities of Meghalaya Energy Corporation Limited (MeECL) for the period 2007-12 was conducted to assess whether aims and objectives of National Electricity Policy/ Plans (NEP) were adhered to and whether the Company was able to provide an efficient, adequate and properly coordinated grid management and transmission of energy.

Planning and Development

The Company did not make any long term business plan as per recommendations of the working group of Meghalaya State Planning Board. During 2007-12, the Company could add capacity of 407.50 Mva against the planned addition of 1132.50 Mva. Against the planned addition of 555.65 Ckm to transmission line, the Company could add only 401.55 Ckm (72.27 per cent).

Project Management of Transmission System

Project execution

Out of six substations taken up for construction during 2007-12, three substations were completed after delays ranging from 8 to 23 months and a cost overrun of ₹ 5.96 crore. Two augmentation works were behind schedule by seven months.

Out of 14 transmission lines taken up for construction during 2007-12, seven were completed after delays ranging from 6 to 25 months and cost overrun of ₹ 1.88 crore.

Mismatch between Generation/power purchase plan and Transmission facilities

Delay in completion of Myntdu Leshka Hydro Electric Project (MLHEP) resulted in idling of transmission line from MLHEP to Khliehriat for 22 months. Due to delay in approval and implementation of 132 KV transmission line inter-connecting the 220/132KV Killing substation with the existing EPIP-I and EPIP-II substations at Byrnihat and also due to delay in construction of 220/132 KV Killing substation for more than four months, the 220 KV D/C Misa line could not be utilised for 11 months during February 2010 to December 2010. The 220/132KV Killing substation capacity (320 Mva) was also underutilised due to non completion of 132 KV transmission line from 220/132 KV Killing substation to 132/33 KV EPIP-I substation at Byrnihat.

Performance of transmission system

The unutilised transmission capacity had increased from 11.15 Mva in 2007-08 to

287.76 Mva in 2011-12. The burden for this underutilised capacity at the end of March 2012 worked out to ₹13.32 crore which was passed on to the consumers.

Transmission losses

Due to incompatibility of equipments, transmission loss data furnished by the Company was inconsistent.

Grid Management

Infrastructure for load monitoring

Ten substations and two generating units were not provided with Remote terminal Units (RTUs) for recording real time data for efficient Energy Management System.

Grid discipline by frequency management

For grid indiscipline, North Eastern Regional Load Despatch Centre (NERLDC) issued 241 violation messages to the Company in 2009-10 which had sharply increased to 335 during 2011-12.

Backing Down Instructions (BDI)

BDI issued by the State Load Despatch Centre (SLDC) to the generating stations were verbal and not recorded. In absence of the record of operational instructions given by SLDC, adherence to its instruction could not be examined.

Disaster Management

Out of six major generating stations, DG sets for black start for emergency restoration was available only at Myntdu Leshka Hydro Electric Project (MLHEP), Leshka. However, during a major grid failure that occurred on July 2012, MLHEP failed to black start.

Material Management

The Company did not follow good management practices like ABC Analysis, fixation of minimum/maximum stock level/reorder level.

Energy Accounting and Audit

The Company had proposed (2006-07) energy audit but it was not taken up due to non availability of funds.

Monitoring by top Management

The Company did not have proper MIS in place for exercising effective control over its activities by top management.

Conclusion

The Company failed to prepare long term business plan as per recommendations of the Meghalaya State Planning Board for capacity addition and strengthening of the transmission system. There were delays in execution of major projects leading to time and cost overrun. There was lack of proper system for maintenance of its transmission system. Energy accounting was not done during the review period to have proper monitoring and control over its transmission losses. The Grid discipline by frequency management was not maintained during 2009-12 due to overdrawal of power from the Grid despite low frequency conditions to meet the increased power demand. The Company did not have any system to review the achievement of envisaged benefits of completed transmission projects.

4.2.1 Introduction

With a view to supply reliable and quality power to all by 2012, the Government of India (GoI) prepared the National Electricity Policy (NEP) in February 2005 which stated that the transmission system requires adequate and timely investment besides efficient and coordinated action to develop a robust and integrated power system for the country. It also, inter-alia recognised the need for development of a National and State Grid with the co-ordination of Central/State Transmission Utilities.

Transmission of electricity and grid operations in Meghalaya are managed and controlled by the Meghalaya Energy Corporation Limited (MeECL-Company) to provide an efficient, adequate and properly coordinated grid management and transmission of energy in the state. As part of power sector reforms, the erstwhile Meghalaya State Electricity Board (MeSEB) was unbundled and the Company was incorporated on 14 September 2009 under the Companies Act, 1956 under the administrative control of the Power Department, Government of Meghalaya (GOM). However, pending formation of its three subsidiaries viz., Meghalaya Power Generation Corporation Limited (MePGCL), Meghalaya Power Transmission Corporation Limited (MePTCL) and Meghalaya Power Distribution Corporation Limited (MePDCL), the business of these three subsidiary companies viz., generation, transmission and distribution of electricity in Meghalaya was being carried out by the Company (which is also holding company of the three subsidiaries). The Company started functioning with effect from 01 April 2010.

The management of the Company is vested in Board of Directors comprising of six members appointed by the GOM. The day-to-day operations are carried out by the Chairman-cum-Managing Director (who is the Chief Executive of the Company) with the assistance of the Director (Finance), Director (Corporate Affairs), Director (Distribution), two Government nominated Directors and a Company Secretary.

During 2007-08, 1587.21 MUs of energy was transmitted by the Company which increased to 1682.78 MUs in 2011-12 (provisional) i.e. an increase of 6.02 *per cent* during the five year period 2007-12. As on 31 March 2012, the Company had a transmission network of 1109.54 circuit kilometres (Ckm) lines and 14 substations with installed capacity of 865 MVA, capable of annually transmitting a total of 6440.79 MUs at 220 KV and 132 KV. The turnover of the Company was ₹ 528.05 crore³⁰ in 2011-12, which was equal to 3.32 *per cent* of the State Gross Domestic Product³¹. It employed 3307 employees as on 31 March 2012.

Performance Audit on 'Power Generating Utility (the Company) in the state of Meghalaya' and 'Power Distribution set up in the State of Meghalaya' and a para on 'Implementation of Rural Electrification Schemes' were included in the reports of the

³⁰ This represents the overall turnover of MeECL against Generation, Transmission and Distribution activities during 2011-12; as separate turnover figures for transmission activities were not available.

³¹ State GDP for 2011-12 was ₹15,895.15 crore

Comptroller and Auditor General of India (Civil/ Commercial), GOM for the year ended 31 March 2010, 31 March 2011 and 31 March 2008 respectively. The Committee on Public Undertakings (COPU) had discussed the para on 'Implementation of Rural Electrification Schemes' and 'Performance Audit on Power Generating Utility (the Company) in the state of Meghalaya' in August 2010 and September 2011 respectively. However, recommendations of the COPU on the said Para/Performance Audit are yet to be received (October 2012).

4.2.2 Scope of Audit

The present Performance Audit conducted during April 2012 to July 2012 covered performance of the transmission set up of the Company during 2007-08 to 2011-12. Audit examination involved scrutiny of records of entire transmission set up comprising of transmission wing at the Company's Head Office (headed by Chief Engineer) and all the four transmission divisions, one 220/132 KV substation Division and one System Protection Division, each headed by an Executive Engineer. Besides, Audit also scrutinised records relating to transmission at different wings of the Company's Head Office and the State Load Despatch Centre (SLDC), headed by a Superintending Engineer.

During the period covered under the performance audit, the Company took up the construction of six substations (1120 MVA), augmentation of four substations (127.5 MVA) and 14 transmission lines (544.77 Ckm) (**Appendix 4.7**). Out of this, the Company completed three substations (capacity 400 MVA), and augmented two existing substations by 12.50 MVA and seven transmission lines by 380.74 Ckm. As on 31 March 2012, construction work for three substations (capacity 720 MVA), augmentation of two substations (by 115 MVA) and seven transmission lines (by 164.03 Ckm) was in progress. Against deposit works for construction of six transmission lines (27.13 Ckm) undertaken by the Company only four transmission lines (20.81 Ckm) were completed till 31 March 2012. Audit examination included these completed works as well as works which were in progress as on 31 March 2012.

4.2.3 Audit Objectives

The objectives of the performance audit were to assess whether:

- Perspective Plan was prepared in accordance with the guidelines of the National Electricity Policy/ Plan and Meghalaya State Electricity Regulatory Commission (MSERC) and assessment of impact of failure to plan, if any;
- The transmission system was developed and commissioned in an economical, efficient and effective manner;
- Effective failure analysis system was set up;
- Operation and maintenance of transmission system was carried out in an economical, efficient and effective manner;

- Disaster Management System was set up to safeguard its operations against unforeseen disruptions;
- Filing of Aggregate Requirement Revenue (ARR) for tariff revision in time;
- Efficient and effective system of procurement of material and inventory control mechanism was adopted;
- Efficient and effective energy conservation measures were undertaken in line with the National Electricity Plan (NEP) and effective Energy Audit System was established; and
- There is a monitoring system in place to review the existing/ ongoing projects, take corrective measures to overcome the deficiencies identified, respond promptly and adequately to Audit observations.

4.2.4 Audit Criteria

The audit criteria adopted for assessing the achievement of the audit objectives were derived from the following sources:

- Provisions of the National Electricity Policy / Plan and National Tariff Policy;
- Perspective Plans and Project Reports of the Company;
- Standard procedures for award of contracts with reference to principles of economy, efficiency, effectiveness, equity and ethics;
- Annual Revenue Requirement (ARR) filed with the Meghalaya State Energy Regulatory Commission (MSERC) for tariff fixation, Circulars, Manuals and MIS reports;
- Manual of Transmission Planning Criteria (MTPC);
- Code of Technical Interface (CTI)/ Grid Code consisting of planning, operation, connection codes;
- Directions from GOM / Ministry of Power (MoP);
- Norms/Guidelines issued by MSERC/Central Electricity Authority (CEA);
- Report of the Committee constituted by the Ministry of Power recommending the “Best Practices in Transmission”;
- Report of the Task force constituted by the Ministry of Power to analyse critical elements in transmission project implementation; and
- Reports of North Eastern Regional Power Committee (NERPC)/ North Eastern Regional Load Despatch Centre (NERLDC).

4.2.5 Audit Methodology

Audit followed the following mix of methodologies:

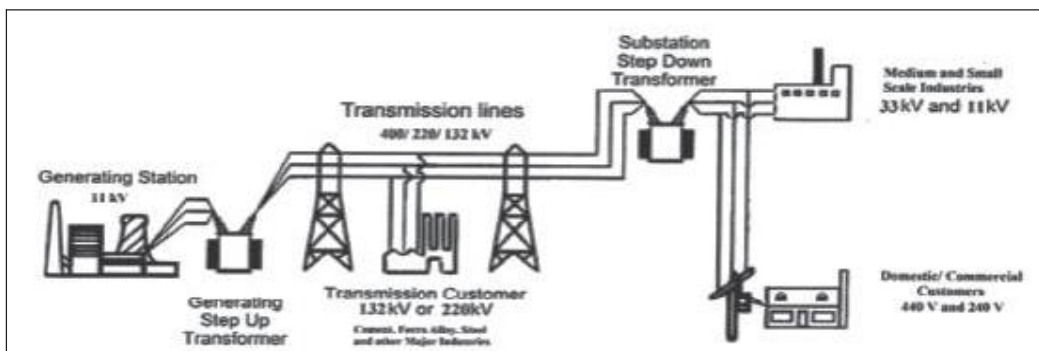
- Review of Agenda notes and Minutes of the Company's Board/ NERPC/ NERLDC; annual reports, accounts and regional energy accounts (REA);
- Scrutiny of loan files, physical and financial progress reports;
- Analysis of data from annual budgets and physical as well as financial progress with completion reports;
- Scrutiny of records relating to project execution, procurement, receipt of funds and expenditure; and
- Interaction with the Management during Entry and Exit Conference.

4.2.6 Brief description of Transmission Process

Transmission of electricity is defined as bulk transfer of power over long distances at high voltages, generally at 132 KV and above. Electric power generated at relatively low voltages in power plants is stepped up to high voltage power before it is transmitted, so as to reduce the energy loss in transmission and to increase efficiency in the grid. Sub-stations are facilities within the high voltage electric system used for stepping-up/ stepping down voltages from one level to another, connecting electric systems and switching equipment in and out of the system. The step up transmission substations at the generating stations use transformers to enhance the voltages for transmission over long distances.

Transmission lines carry high voltage electric power. The step down transmission substations thereafter reduce voltages to sub transmission voltage levels for distribution to consumers. The distribution system includes lines, poles, transformers and other equipment needed to deliver electricity at specific voltages.

Electrical energy cannot be stored; hence generation must be matched to need. Therefore, every transmission system requires a sophisticated system of control called grid management to ensure balancing of power generation closely with demand. A pictorial representation of the transmission process is given below:



4.2.7 Audit Findings

The audit objectives were explained to the Company/Govt of Meghalaya during an ‘Entry Conference’ held on 26 March 2012. Subsequently, audit findings were reported to the Company and the Government of Meghalaya (GOM) in August 2012 and discussed in an ‘Exit Conference’ held on 3 September 2012. The Exit Conference was attended by the Additional Chief Secretary, Power Department from the GOM, the Director (Transmission), Director (Distribution), Additional Chief Engineer, Chief Accounts Officer and other officials of the Company. The Company/GOM replied to audit findings in October 2012. The views expressed by them have been considered while finalising this Performance Audit. The audit findings are discussed in subsequent paragraphs.

4.2.8 Planning and Development

National Electricity Policy/Plan

The Central Transmission Utility (CTU) and State Transmission Utilities (STUs) have the key responsibility of network planning and development based on the National Electricity Plan (NEP) in coordination with all concerned agencies. At the end of 10th Plan (March 2007), the transmission system in the country at 765/HVDC/400/230/220/KV stood at 1.98 lakh Circuit Kilometres (Ckm) of transmission lines which was planned to be increased to 2.93 lakh Ckm by end of 11th Plan i.e. March 2012. The NEP assessed the total inter-regional transmission capacity at the end of 2006-07 as 14,100 MW and further planned to add 23,600 MW in 11th Plan bringing the total inter-regional capacity to 37,700 MW.

The Company’s transmission network at the beginning of 2007-08 consisted of 11 Extra High Tension (EHT) substations with a transformation capacity of 457.50 MVA and 707.99 Ckm of transmission lines. The transmission network as on 31 March 2012 consisted of 14 substations with a transformation capacity of 865 MVA³² and 1109.54 Ckm of EHT transmission lines.

The Company is also responsible for planning and development of the intra-state transmission system. Assessment of demand is an important pre-requisite for planning capacity addition.

The Company submitted (August 2006) an Approach Paper for XIth Plan (2007-12) to the Power Department, GOM treating the proposals made under the said Approach Paper as the Perspective Plan of the Company for the period from 2007-12. However, all the projects as per Approach Paper were not taken up / completed by the Company.

³² Excluding one 5 MVA transformer at Rongkhon dismantled (January 2012) for replacing it by a 20 MVA transformer, which has not been installed yet (October 2012).

It was observed that:

- The Approach Paper envisaged completion of 26 projects³³ (four substations and twenty two transmission lines) out of which the Company had undertaken seven projects (one substation and six transmission lines) and completed five projects (one substation and four transmission lines).
- The plans made under Approach Paper were not phased for the five year period properly.
- The Company had neither followed Approach Paper in totality nor adhered to the annual plans during 2007-12. Only one substation project envisaged in Approach Paper was included in the annual plans also and completed. The Company had undertaken nine other substation projects during the period 2007-12, out of which only five projects were as per annual plans. The remaining four projects undertaken during 2007-12 were neither included in annual plans nor in the perspective plan. This indicated that the annual plans submitted to the GOM for execution of projects during 2007-12 were prepared on ad-hoc basis and in isolation without any linkage and assessment of future requirements, growth of load, etc as per the approach paper.

Further the working group of Meghalaya State Planning Board had recommended (October 2008) suitable advance plans for development/ strengthening the transmission network of the Company in association with Power Grid Corporation of India Limited, (PGCIL) and CEA. It was observed that the Company did not make any long term business plan for 2007-12 for addition in the transmission network for strengthening the existing system in association with PGCIL and CEA as per recommendations of the State Planning Board.

In reply, the Management stated that based on the comprehensive planning prepared by PGCIL for investment out of World Bank funding of ₹ 1041 crore in North East India, the Company had prepared and submitted an Approach Paper for the XIIth Five Year Plan for implementation of different projects for approval of North East Council. No comments were however, offered by the Company on non-preparation of long term business plan for 2007-12 as per Meghalaya State Planning Board recommendation and also for taking up the projects during 2007-12 in deviation to the perspective plan envisaged in the Approach Paper submitted to GOM.

Although the Management had proposed Approach Paper for the 12th Five year plan, the approval and implementation of the same during the next five year period remained to be seen.

³³ Including two switching stations at Jowai and Mawngap

4.2.9 Transmission network and its growth

The transmission capacity of the Company at Extra High Tension (EHT) level during 2007-08 to 2011-12 is given below:

Table 4.2.1

Sl. No	Description	2007-08	2008-09	2009-10	2010-11	2011-12	2007-12
A. Number of substation (Numbers)							
1	At the beginning of the year	11	11	12	12	13	11
2	Additions planned for the year ³⁴	0	0	2	2	4	-
3	Added during the year	0	1 [#]	0 [#]	1	1	3
4	Total sub stations at the end of the year (1+3)	11	12	12	13	14	14 [*]
5	Shortfall in additions (2-3)	0	0	1	1	3	-
B. Transformer capacity (Mva)							
1	Capacity at the beginning of the year	457.50	465	485	490	810	457.50
2	Additions/ augmentation planned for the year [*]	7.50	0	85	380	780	-
3	Capacity added during the year	7.50	20 [#]	5 [#]	320	55 ³⁵	407.50
4	Capacity at the end of the year (1+3)	465	485	490	810	865	865
5	Shortfall in additions/ augmentation	0	0 [#]	60 [#]	60	725	-
C. Transmission line (Ckm)³⁶							
1	At the beginning of the year	707.99	708.59	710.46	1020.69	1041.22	707.99
2	Additions planned for the year [*]	56.96	75.59	402.98	137.64	222.42	-
3	Added during the year	0.60 [@]	1.87	310.23	20.53	68.32	401.55
4	Total lines at the end of the year (1+3)	708.59	710.46	1020.69	1041.22	1109.54	1109.54
5	Shortfall in additions (2-3)	56.96 [@]	73.72	92.15 [@]	117.11	154.10	-

Source: MeECL

From the above it is clear that:

- During 2007-12, the Company could not complete the planned transmission lines as was evident from fact that the shortfall in laying of transmission lines had increased from 56.96 Ckm in 2007-08 to 154.10 Ckm in 2011-12.
- During 2007-12 in respect of substations, the Company could add capacity of only 407.50 Mva (35.98 *per cent*) against the planned addition of 1132.50 Mva for six substations (including augmentation of two substations).

³⁴ Excluding four projects of augmentation planned during 2007-12. In the absence of any long terms plan, additions planned for the respective years as per the target date of completion indicated in the sanction letter of the funding agencies were considered by Audit as “additions planned for the year”. Where the sanction letter was silent on completion schedule, projected completion as per DPR was taken into consideration. For Deposit Works, in the absence of any agreement with the consumers, additions planned were taken as per the targeted date of completion mentioned in the work order.

[#] Umiam substation with two transformers was scheduled for completion in 2009-10. While one transformer (20 Mva) was commissioned in 2008-09, second transformer (20 Mva) was commissioned in February 2012.

^{*} Represents one 220 KV and 13 132 KV Substations

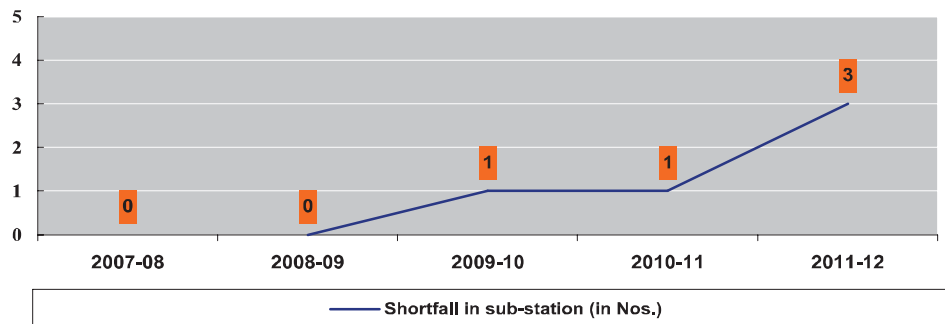
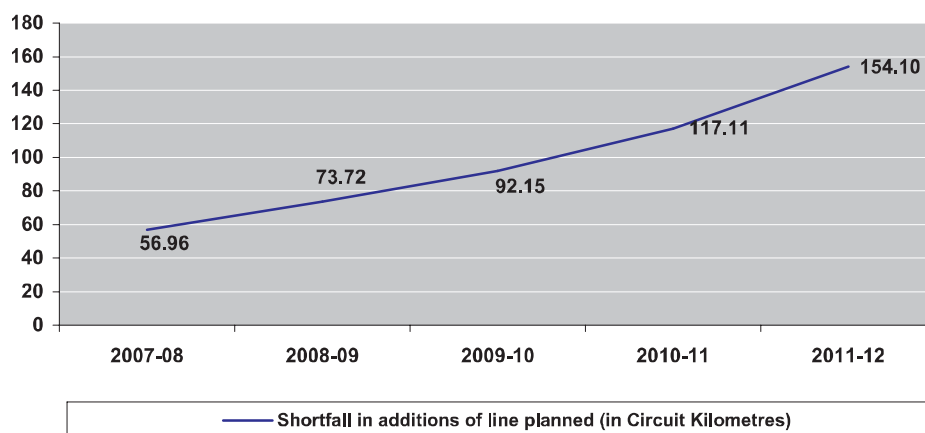
^{*} The shortfall in achieving the addition targets for each year have been carried over to the planned targets of subsequent years.

³⁵ Excludes one 5 Mva transformer at Rongkhon substation which was dismantled in January 2012 for installation of one transformer (20 Mva) under augmentation project.

³⁶ Includes Deposit Works

[@] As per the sanction letter of the funding agency, the LILO of Sumer-NEHU transmission line at Umiam substation was to be completed by May 2010. Since the work for the transmission line was taken up by the MeECL, out of its own resources, it was partially completed in December 2007, though it was complete in all respects in November 2010.

➤ Non completion of the projects in time (discussed in Para 4.2.11) was the main reason for shortfall in *capacity* addition. The shortfall in capacity addition had resulted in non-achievement of the envisaged benefits of the projects planned.



4.2.10 Project Management of Transmission System

A transmission project involves various activities from conceptualisation to commissioning. Major activities in a transmission project are (i) Project formulation, appraisal and approval phase and (ii) Project execution phase. For reduction in project implementation period, the Ministry of Power, Government of India constituted a Task Force on transmission projects (February 2005) with a view to:

- analyse the critical elements in transmission project implementation;
- implementation from the best practices of Central and State Transmission Units; and
- suggest a model transmission project schedule for 24 months' duration.

The task force suggested and recommended (July 2005) the following remedial actions to accelerate the completion of Transmission systems:

- undertake various preparatory activities such as surveys, design & testing, processing for forest & other statutory clearances, tendering activities etc. in advance/parallel to project appraisal and approval phase and go ahead with construction activities once Transmission Line Project sanction/approval is received;
- break-down the transmission projects into clearly defined packages such that the packages can be procured & implemented requiring least coordination & interfacing and at same time it attracts competition facilitating cost effective procurement; and
- standardise designs of tower fabrication so that 6-12 months can be saved in project execution.

Audit observed that in most of the project works undertaken by the Company, preparatory activities were not undertaken prior to project implementation. This led to delays in completion of the projects. As can be seen from the **Appendix 4.7**, most of the projects were delayed mainly on account of excessive time taken in completing the preparatory activities, such as acquisition of land, resolving ROW issues, obtaining statutory clearance, etc. Thus, the good management practices were not followed by the Company for completion of transmission systems in time.

The management replied (June 2012) that it was not aware of the above stated recommendations of the Task Force.

4.2.11 Project execution

For implementation of transmission projects, the Company depended on funding from the Government agencies. The Company was receiving 90 *per cent* of the project funds in the form of grants from Government of India under Special Plan Assistance and from Ministry for Development of North Eastern Region (DONER) and North Eastern Council (NEC), while the remaining 10 *per cent* was being funded by the GOM in the form of loans. A review of substation and transmission line projects indicated that the Company failed to complete several projects during 2007-12 detailed in **Appendix 4.7**.

It was observed that:

- Out of five completed substation projects, three projects were completed with a delay ranging between 6 to 24 months at a cost overrun of ₹ 5.96 crore. All the five ongoing substation projects were running behind schedule by four to seven months.
- Out of the seven completed transmission line projects, five projects were delayed by periods ranging between 6 to 25 months with a cost overrun of ₹ 1.88 crore (9.59 *per cent* of the project cost). Similarly, out of seven ongoing projects, five projects were running behind the schedule by 7 to 27 months and the expenditure in respect of one delayed project (132 KV transmission line from Nangalbibra to Agia) as on 31 March 2012 had already exceeded the project cost by ₹ 3.63 crore (8.38 *per cent*).

Project wise reasons for delay and cost over runs are discussed in the following paragraphs.

➤ The Company had not taken approvals from Public Health Engineering Department and Inspectorate of Electricity, GOM for the Loop In Loop Out (LILO) work as objections were raised by the Department after the start of work by the Company. Consequently, the Company decided that one tower would be shifted to take care of the Department's objections. However the work on shifting of tower had not started yet (October 2012) (**Appendix 4.7, B-11**). The project was already delayed by 17 months.

➤ The Company had not completed four projects viz 133/33kV Mendipather substation³⁷, Augmentation of Agia substation³⁸, construction of D/C LILO of Agia-Nangalbibra line at Mendipather substation³⁹ and construction of S/C line from 132/33 Nangalbibra substation to 220/132 Agia substation⁴⁰ (**Appendix 4.7**), undertaken for meeting growing demand of power for Garo Hills, for better connectivity with the grid and to meet the power requirement of Industrial Growth Centre (IGC), Mendipather due to following:

- The work of Agia Transmission line was delayed by about 27 months (till October 2012) on account of delayed commencement of work and settlement of supervision charges to Assam Electricity Grid Corporation Limited (AEGCL).
- Non-commissioning of transformer, purchased (May 2011) for Rs 1.01 crore for Mendipather substation.
- Non-execution of agreement with AEGCL for deposit work of augmentation of substation at Agia contributed to non completion of project in scheduled time (scheduled date-June 2012, anticipated date-December 2012).

➤ The work on construction of second S/C transmission from Stage-III Power House to Stage-IV Power House (**Appendix 4.7**) which was to evacuate additional power of 40 MW was delayed due to delay in award of work by the Company. The project was completed and commissioned in April 2009 against approved date of completion by August 2008.

➤ The Company had delayed land acquisition for 132/33 KV substation at Ampati and 132 KV transmission line from Rongkhon to Ampati (**Appendix 4.7, A-7 and B-13**) resulting non-achievement of scheduled commissioning date. The Company had identified land for the project in September 2010 and submitted the proposal for acquisition in July 2011 which was approved in February 2012. Against the original schedule of completion by March 2012, the Project was in progress till October 2012. Thus, the slow pace of land acquisition process by the Company had delayed the project by seven months.

³⁷ Annexure 4.7, A-8

³⁸ Annexure 4.7, A-10

³⁹ Annexure 4.7, B-10

⁴⁰ Annexure 4.7, B-14

➤ Preparatory activities (e.g ROW land acquisition etc) are integral part of any project. It was observed that the Company had not taken up preparatory activities in advance/parallel to the project appraisals as suggested by Task Force. It was seen that most of the projects had ROW problems e.g 132/33 KV D/C LILO of Mawlai to Cherra line at Mawngap (**Appendix 4.7, B-11**), Nangalbibra-Agai transmission Line (**Appendix 4.7,B-14**), 132KV transmission line from stage III to Stage IV power house (**Appendix 4.7, B-2**) 132KV/33 KV substation and connected transmission line (**Appendix 4.7,A-3,B-4**).

Thus, delays in execution of the above projects, during 2007-12 led to non-achievement of the intended objectives for improving stability and reliability of power supply besides cost overrun of Rs 11.47 crore (details in the **Appendix 4.7**).

The Management attributed (June 2012) delays in execution of the project to ROW problems, long monsoon periods which shortened working days, delays in acquisition of land and in procurement of equipments.

The Management reply was not acceptable since the constraints cited were already known to the Management at the planning and execution stage and should have been factored appropriately to avoid adverse impact of these constraints on execution of projects.

4.2.12 Mismatch between Generation/power purchase plan and Transmission facilities

National Electricity Policy (NEP) envisaged augmenting transmission capacity taking into account the planning of new generation capacities, to avoid mismatch between generation capacity and transmission facilities. During the period 2007-12, 35 *per cent* of power available for sale was internally generated and balance 65 *per cent* was met from State's share of free supply from Central Government power utilities (4 *per cent*) and power purchased from outside the State (61 *per cent*). The demand for energy was increasing year after year in the State. As of 31 March 2012, the total generation capacity of the Company was 270.70 MW of which 84 MW⁴¹ was added during the last three years.

The transmission facilities of the Company should match the generation plan as well as requirement for inter-state drawal of power as per purchase plans. However, instances of mismatch between generation/power purchase plans and transmission facilities were noticed as mentioned below:

4.2.12.1 Mismatch with Generation Plan

The work for construction of the 3 x 42 MW Myntdu Leshka Hydro Electric Project (MLHEP) was taken up from August 2004 with a target completion by May 2009. The construction of the generating station was, however, delayed and the first Unit of the MLHEP was commissioned only in December 2011. For evacuation of power from this generating station, work for construction of the double circuit 132 KV

⁴¹ Two units each of 42 MW of Myntdu Leshka HEP commissioned in December 2011/ March 2012

MLHEP – Khliehriat transmission line commenced in May 2007. It was observed that the Company failed to properly synchronise the execution of the transmission line project with the actual progress of implementation of the related generation project. The Company, ignoring the slow progress of the generating station work, continued with the work of construction of the transmission line and completed the same in January 2010. Resultantly, the transmission line constructed at a cost of ₹ 12.55 crore remained idle for 22 months till commissioning of the generating unit in December 2011. Thus, the failure of the Company to synchronise the pace of work for transmission line to that of the generating station led to idling of transmission infrastructure for mismatch period.

4.2.12.2 Mismatch with Purchase Plan (inter-state drawal of power)

In the following cases, mismatch of transmission facilities with inter-state drawal of required power purchase was caused due to delay in completion of transmission projects:

a) Loop In Loop Out (LILO) of the Sarusajai to Stage-IV line at Umtru Power Station (Sl. No. B-3 of Appendix 4.7)

The Company took up work on LILO of Sarusajai to Stage-IV line at Umtru Power Station to ensure stable power supply to the consumers in the Byrnihat Industrial Area. This work was funded by North Eastern Council (NEC) along with the work of extension of Switchyard at the Power Station which was required for the LILO. While the LILO was taken up by transmission wing, the Switchyard extension was taken up by the Generation wing of the Company.

The work was taken up in August 2005 and after completion (April 2007) of foundation and erection work, stringing of the line could not be completed because of non completion of the Switchyard extension. The Switchyard extension was completed by the Generation wing in March 2008.

It was observed that while preparing (July 2005) the Draft Project Report (DPR) for the LILO work, the work of integration of the transmission line project with the existing Remote Terminal Unit (RTU) and Supervisory Control and Data Acquisition (SCADA) system at Umtru Power Station, which was essential for energy accounting and monitoring purposes, was completely omitted. Resultantly, despite completion of LILO (April 2007) and the Switchyard extension works (March 2008), the LILO could not be connected to the 132 KV Sarusajai – Stage IV line as the permission for taking shut down of the Sarusajai-Stage IV line was not accorded by the SLDC⁴² for want of integration of the LILO with the existing RTU and SCADA connections. The work relating to integration of existing RTU and SCADA with the LILO, however, could not be taken up due to funds constraints (October 2012). In November 2009, it was decided to complete the LILO without waiting for the integration of the RTU and SCADA system with LILO works and was finally charged in February 2010 after

⁴² - A constituent of North Eastern Regional Load Despatch Centre (NERLDC) responsible to ensure integrated operation of power system in the state.

lying idle for more than 23 months after completion of Switchyard extension (March 2008).

The management stated (July 2012) that the RTU and SCADA was proposed to be integrated in the new RTU scheme (discussed in *para 4.2.15.2*).

Although the management proposes integration in future, the fact remained that the consumers have been deprived of stable power supply for 23 months due to timely action by the management.

b) Underutilisation of transmission line and substation at Killing

In Meghalaya, for inter-state drawal of power, the transmission system is connected to grid at Kahelipara, Sarusajai, Panchgram and Khliehriat substations, through a 132 KV line. With a view to overcome the limitations of existing infrastructure of available for drawal of power; the Company took up the following projects with the aim of drawing power from 400/220 KV Misa substation of PGCIL into the Meghalaya grid:

Table 4.2.2

Sl. No.	Appendix 4.7 Ref.	Name of the Project
(i)	A-1	220/132 KV Killing substation (2 x 160 Mva) (Completed with 8 months delay in November 2010)
(ii)	B-7	220 KV Double Circuit (D/C) transmission line from 400/220 KV Misa substation to Killing substation (Completed on time in February 2010)
(iii)	B-6	132 KV transmission line interconnecting the Killing substation with the existing substation at EPIP-II (Completed on time in December 2010)
(iv)	B-9	132 KV transmission line interconnecting the Killing substation with the existing substation at EPIP-I (Ongoing – delayed by 19 months till October 2012)

The works at Sl. No. (i) and (ii) were interdependent with the works at Sl. No. (iii) and (iv) respectively. While the works at Sl. No. (i) and (ii) were undertaken by PGCIL on deposit work basis, the works at Sl. No. (iii) and (iv) were to be completed by the Company matching the pace and schedule of PGCIL. PGCIL approved the DPRs for the said two works in September 2005 and completed the work at Sl. No. (ii) in time (February 2010). PGCIL, however, could complete the work of Killing substation (Sl. No. i) after a delay of 8 months in November 2010 as the land was not made available in time by the Company. DPRs for the remaining two works (Sl. No. (iii) and (iv)) to be implemented by the Company were approved in April 2009, two years after the approval of the Board (June 2007). The company completed the transmission line work at Sl. No. (iii) in December 2010 after a mismatch of 1 month with related work at Sl. No. (i) while the work at Sl. No. (iv) was yet to be completed (October 2012).

Thus, delay in providing land to PGCIL for works at Sl. No. (i) delayed the project by eight months. The project so completed could not be utilised for one month due to

delay in completion of the related transmission line (Sl. No. iii) by the Company. Further, though the Double Circuit transmission line project (Sl. No. ii) was completed by PGCIL well in time but it remained idle for 10 months (till December 2010) due to delay in completion of related works (Sl. No. i and iii).

4.2.13 Performance of transmission system

The performance of the Company mainly depends on efficient maintenance of its Extra High Tension (EHT) transmission network for supply of quality power with minimum interruptions. In the course of operation of substations and lines, the supply-demand profile within the constituent sub-systems is identified and system improvement schemes are undertaken to reduce line losses and ensure reliability of power by improving voltage profile. These schemes are for augmentation of existing transformer capacity, installation of additional transformers, laying of additional lines and installation of capacitor banks. The performance of the Company with regard to operation and maintenance (O&M) of the system is discussed in the succeeding paragraphs.

4.2.13.1 Transmission capacity

To evacuate power from the Generating Stations and to meet the load growth in different areas of the State, the Company constructs lines and substations at different EHT voltages. A transformer converts AC voltage and current to a different voltage and current at a very high efficiency. The voltage levels can be stepped up or down to obtain an increase or decrease of AC voltage with minimum loss in the process. The evacuation is normally done at 132 KV substations in Meghalaya. Besides, the Company had also constructed one 220 KV substation (320 MVA) for evacuation of power purchased from outside the State and drawal against scheduled interchange. The transmission capacity (220 KV/132 KV) created *vis-à-vis* peak demand met and unrestricted demand at the end of each year by the Company during the five years ending 31 March 2012 were as follows:

Table 4.2.3

Year	Transmission Capacity			
	Installed (Mva)	After leaving 30 <i>per cent</i> towards margin	Peak demand (met) (Mva) including non-coincident demand ⁴³	Excess (Mva)
(1)	(2)	(3)	(4)	(5)
2007-08	465	325.50	313.85	11.65
2008-09	485	339.50	303.73	35.77
2009-10	490	343.00	272.41	70.59
2010-11	810	567.00	299.09	267.91
2011-12	865	605.50	317.74	287.76

Source: MeECL

It was observed that the overall transmission capacity was in excess of the peak demand (met) during 2007-12. The existing transmission capacity after leaving 30 *per cent* towards redundancy had progressively increased from 11.65 Mva in 2007-08 to 287.76 Mva in 2011-12. The investment on this account worked out to ₹ 13.32

⁴³Peak demand met in Mva is taken as Peak Demand Met (MW) / Power Factor (0.85)

crore⁴⁴ which was a burden passed on to consumers through electricity tariff in the form of depreciation on capital assets.

4.2.13.2 Sub-Stations

a) Adequacy of substations

Manual on Transmission Planning Criteria (MTPC) stipulates the permissible maximum capacity for different substations i.e. 320 Mva for 220 KV and 150 Mva for 132 KV substations. Review of the maximum capacity levels of substations revealed that all 14 substations of the the Company (one 220 KV and thirteen 132 KV) were within the permitted levels. The MTPC also prescribes that every substation of capacity 132 KV and above should have at least two transformers.

It was, however, observed that out of the 13 substations of 132 KV above, three substations (Lumshnong, Cherra and Nongstoin) had only one transformer each. Thus, in the event of outage of any single transformer, these substations would not be able to transmit power.

b) Voltage management

A State Transmission Unit (STU) using intra-state transmission system should make all possible efforts to ensure that grid voltage always remain within limits. As per CERC Grid Code (April 2010), STUs should maintain voltage ranging between 198-245 KV (in 220 KV lines) and 119-145 KV (in 132 KV lines). A review of the 220 KV bus voltages⁴⁵ in the Killing substation for the period January 2011 to March 2012 revealed that the voltages recorded ranged between 203.17 KV and 242.82 KV which was within the prescribed norm. In the case of 132 KV substations, the position regarding minimum voltage and maximum voltage for the period 2007-08 to 2011-12 in respect of six substations (out of 13) only was furnished by the Company. During 2007-12, in two out of six substations, the minimum voltages ranged between 98 kV to 116 kV (Nangalbibra substation) and 90 kV to 113 kV (Rongkhon substation⁴⁶), which was below the prescribed level (119kV). In the remaining four substations, however, the grid voltage during 2007-12 remained within the prescribed limits.

Management attributed (June 2012) the low voltage to the fact that these substations were located at the farthest end of the grid.

Although the substations were at the farthest end of the grid, the fact remained that the on-going projects , viz., 132 KV Nangalbibra-Agia line (Sl. No. B-14 of the Appendix 4.7) and the installation of 100 MVA transformer at Agia substation (Sl. No. A-10 of Appendix 4.7) in Assam were delayed and therefore needed to be completed expeditiously to improve voltage level at these substations.

⁴⁴ Based on the cost of 100 Mva transformer of ₹4.63 crore, value of 287.76 Mva was arrived at ₹ 13.32 crore (₹ 4.63 crore/100 Mva*287.76 Mva).

⁴⁵ Bus voltage is the measurement of potential energy measured at the beginning and end of bus.

⁴⁶ Except for two months in Rongkhon substation when the voltage ranged within the prescribed level

4.2.13.3 *Transmission Lines* *Extra High Tension (EHT) lines*

As per the MTPC, permissible line loading cannot normally be more than the Thermal Loading Limit (TLL). The TLL limits the temperature attained by the energised conductors and restricts sag and loss of tensile strength of the lines. The TLL limits the maximum power flow of the lines. As per the MTPC, the TLL of 132 KV line with Aluminium Conductor Steel Reinforced (ACSR) Panther 210 sq. mm. conductor is 366 amps. Scrutiny of the line loadings on the 132 KV feeders revealed that only one out of 117 feeders (0.85 *per cent*) in the State Grid were loaded above 366 amps.

4.2.13.4 *Maintenance*

a) Performance of Current transformers (CTs)

Current Transformers (CT) are one of the most important and cost-intensive components of electrical energy supply networks. Thus, it is important to prolong their life duration while reducing their maintenance expenditure. In order to gather detailed information about the operational conditions of CTs, various kinds of oil analysis like the standard oil Dissolved Gas Analysis (DGA) tests are generally conducted. For CT insulation a combination of an insulating liquid and a solid insulation impregnated therewith are used. For an evaluation of the actual condition of this insulating system usually a DGA is used, as failures inside the CT lead to degradation of the liquid insulation in such a way that the compound of the gases enables an identification of the failure cause. The Company did not maintain any record(s) to monitor and control failure of CTs.

As per details furnished by the Company's five transmission divisions for the years 2007-08 to 2011-12, the number of CTs held and their failure were as follows:

Table 4.2.4

Year	No. of transformers at the beginning of the year	No. of transformers failed	No. of transformers failed within guarantee period	No. of transformers ⁴⁷ failed within normal working life
2007-08	195	13	--	13
2008-09	210	5	1	4
2009-10	216	3	--	3
2010-11	216	3	--	3
2011-12	229	2	--	2

Source: MeECL

In this connection, it was observed that

➤ Out of the 27 failed CTs, 13 numbers were of ITC make which were supplied during 2001-2006 by M/s Hi-Tech Corporation Limited (Supplier). The main cause of the failures was attributed by the management to bursting of CTs from the main tank due to manufacturing defects.

⁴⁷ In MeECL, no repair works were carried out and the failed transformers were being replaced with new transformers. The details of expenditure incurred on replacement of failed transformers with new transformers not furnished by MeECL.

➤ The Company had taken up (April 2008/May 2009) with the supplier for replacement of failed CTs, however, no response was received. Audit examination however, revealed that despite failure of 9 CTs of ITC make (Shillong division) during 2007-08, the Company made procurement (November 2008) of three similar CTs at ₹ 5.22 lakh from the same supplier. The Management stated (February 2012) that further procurement from the firm was discontinued.

b) Maintenance of transmission system

Regular and periodic maintenance of transmission system is of utmost importance for its uninterrupted operation. Apart from scheduled patrolling of lines following techniques are prescribed in the Report of the Committee constituted by the Ministry of Power, GOI for updating the 'Best Practices of Transmission' in the country for maintenance of lines:

- | | |
|--|--|
| ➤ Hot Line Maintenance | ➤ Vibration Measurement of the line |
| ➤ Hot Line Washing | ➤ Thermo-scanning |
| ➤ Hot line Puncture Detection of Insulators | ➤ Pollution Measurement of the equipment |
| ➤ Preventive Maintenance by using portable earthing hot line tools | |

➤ The hot line technique (HLT) envisages attending to maintenance works like hot spots, tightening of nut and bolts, damages to the conductor, replacement of insulators etc. of substations and transmission lines without switching off. This includes thermo scanning of all the transmission lines and substations towards preventive maintenance. HLT was introduced in India in 1958.

The Company had however, not implemented HLT for line maintenance so far (March 2012). It was observed that Company was resorting to shut down for all maintenance work leading to interruption in power supply.

4.2.14 Transmission losses

While energy is carried from the generating station to the consumers through the transmission and distribution (T&D) network, some energy is lost which is termed as T&D loss. Transmission loss is the difference between energy received from the generating station/Grid and energy sent to the distribution wing of the Company.

The Company was unable to furnish accurate information on transmission losses. The transmission losses as furnished by the Company for the period 2007-12 were inconsistent and varied widely from year to year. Instances where meter readings at the outgoing feeders exceeded the meter readings at the incoming feeders, indicating the energy gain in transmission, were noticed in all substations during the period which was not practically possible.

Test check conducted by Audit on the 12 hourly meter readings taken at three substations⁴⁸ confirmed these instances. This was indicative of serious inaccuracies in recording and maintaining of energy loss data leading to non reliability on the system of energy accounting in the Company.

⁴⁸ Mawlai, NEHU and NEIGRIHMS

Inaccuracy in meter reading data was attributed (July 2012) to the non compatibility of the class of Current Transformers (CTs) with the class of installed meters. However, the Company did not maintain records relating to details of CTs and installed meters to identify reasons of incompatibility and take corrective action. Further, the Company had been fixing the combined annual targets for transmission and distribution losses based on the consolidated year-wise plans for reduction of T&D losses submitted to MSERC. As such, the system for monitoring of the transmission loss separately was yet to be introduced by the Company.

The above facts indicated non existence of an appropriate and effective energy accounting system in the Company. In the absence of proper system for energy accounting and reporting of authentic transmission loss data, the desired level of monitoring and control of the transmission losses could not be reviewed by Audit.

4.2.15 Grid Management

4.2.15.1 Maintenance of Grid and performance of State Load Despatch Centre (SLDC)

Transmission and Grid Management are essential functions for smooth evacuation of power from generating stations to the distribution wing/consumers. Grid Management ensures moment-to-moment power balance in the interconnected power system to take care of reliability, security, economy and efficiency of the power system. Grid management in India is carried out in accordance with the standards/directions given in the Grid Code issued by CEA. National Grid consists of five regions *viz.*, Northern, Eastern, Western, North Eastern and Southern Grids and each of these have a Regional Load Despatch Centre (RLDC) which is an apex body to ensure integrated operation of the power system in the concerned region. In Meghalaya, State Load Despatch Centre (SLDC), a constituent of North Eastern Regional Load Despatch Centre (NERLDC), Shillong ensures integrated operation of power system in the State.

4.2.15.2 Infrastructure for load monitoring

Remote Terminal Units/Substation Management Systems (RTUs/SMSs) are essential for monitoring the efficiency of the transmission system and the loads during emergency in load despatch centres as per the Grid norms for all substations. The status of availability of RTUs as on 31 March 2012 was as follows:

Table 4.2.5

RTU	No. of substation	No of Generating Station
Installed	4 – (Mawlai, NEHU, Umiam and Khliehriat)	5 – (Stage-I, Stage-II, Stage-III and Stage-IV at Umiam and Umtru)
Not installed	10 – (Killing, Lumshnong, Umiam, NEIGRIHMS, EPIP-I, EPIP-II, Cherra, Nongstoin, Nangalbibra and Rongkhon)	2 – (Myntdu Leska and Sonapani)
Total	14	7

Source: MeECL

It was observed that out of 14 substations and 7 generating stations, only 4 substations (28.57 *per cent*) and 5 generating units (71.43 *per cent*) were provided with RTUs for recording real time data for efficient Energy Management System. Besides, in case of Killing substation, RTU installed was only for local control within the substation itself and line loading could not be monitored in real time.

The NEC released (December 2010) an amount of ₹ 1.60 crore for integration of remaining two generating substations and five out of remaining ten substations into existing SCADA system and installation of RTUs and communication equipment with stipulation to complete all the works within three years. It was, however, observed that the State Government released the funds aggregating ₹ 1.78 crore (including its share of 10 *per cent*) after a delay of 15 months in March 2012. The Company had however, yet not placed the orders for the said works (September 2012).

Thus, in the absence of RTU, the SLDC was facing problems in managing grid operation due to inadequate communication facility. As such, at times to control the drawal of power, the SLDC had to resort to disconnection of power supply causing disruption of power supply to the consumers and affected the trading of power by the power utilities embedded in the State transmission network.

The Management replied that the action is being taken for installation of RTU and its integration with SCADA.

4.2.15.3 *Grid discipline by frequency management*

As per the Grid Code, the transmission utilities are required to maintain Grid discipline for efficient functioning of the Grid. All the constituent members of the Grid are expected to maintain a system frequency between 49 and 50.5 Hertz (Hz) (49.2 and 50.3 Hz with effect from April 2010). However, due to various reasons such as shortages in generating capacities, high demand, Grid indiscipline in maintaining load generation/purchase balance, inadequate load monitoring and management, Grid frequency goes below or above the permitted frequency levels. To enforce the Grid discipline, the North East Regional load Despatch Centre (NERLDC) issues three types of violation messages (A, B, C). Message ‘A’ is issued when the frequency is less than 49.2 Hz and over-drawal is more than 50 MW or 10 *per cent* of schedule whichever is less. Violation ‘B’ message is issued when frequency is less than 49.2 Hz and over-drawal is between 50 and 200 MWs for more than ten minutes or 200 MW for more than five minutes. Message ‘C’ (serious nature) is issued, 15 minutes after the issue of message ‘B’ when frequency continues to be less than 49.2 Hz and over drawal is more than 100 MW or ten *per cent* of the schedule whichever is less.

The NERLDC started the system of issuing violation messages from August 2009. Details of messages received by the Company till 31 March 2012 are given below:

Table 4.2.6

Year	Messages			
	A	B	C	Total
August 2009 to March 2010	160	81	0	241
April 2010 to March 2011	165	75	1	241
April 2011 to March 2012	296	39	0	335

Source: NERLDC

From the above it is clear that there was a sharp increase in the type A messages since last three years which indicated increased Grid indiscipline and therefore risk of levy of penalty by the CERC.

The Management stated that SLDC of Meghalaya was yet to ring framed and therefore Grid discipline could not be enforced by SLDC alone.

4.2.15.4 Backing Down Instructions (BDI)

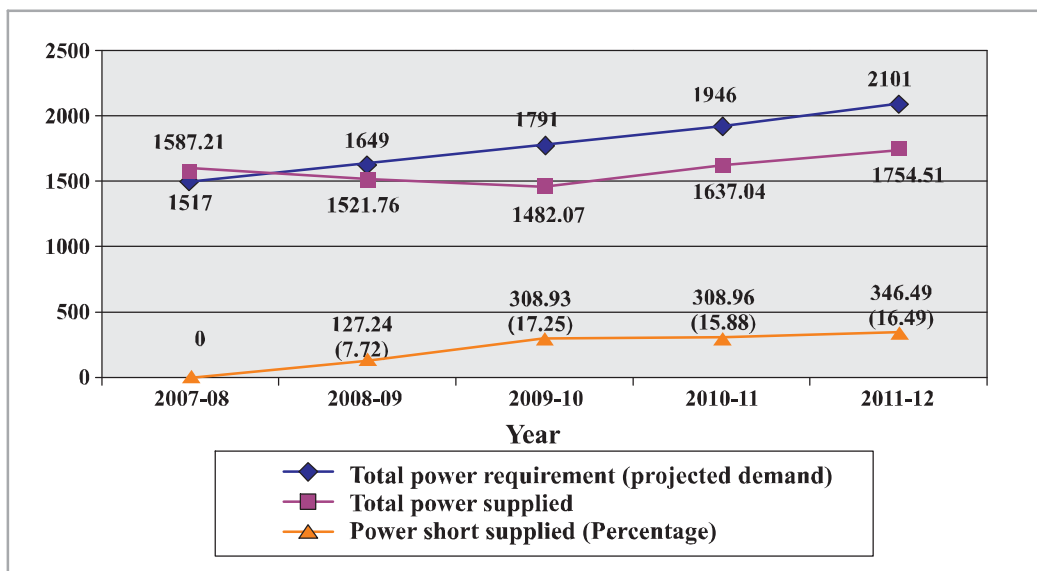
When the frequency exceeds the ideal limits i.e. situation where generation is more and drawal is less (at a frequency above 50 Hz) SLDC takes action by issuing BDIs to the Generators to reduce the generation for ensuring the integrated Grid operations and for achieving maximum economy and efficiency in the operation of the power system in the State. Failure of the generators to follow the SLDC instructions would constitute violation of the Grid code and would entail penalties.

SLDC functioning under the Company had not been penalising generators because they were yet to function as separate entities. As per CEA (Grid Standards) Regulations, 2010, the SLDC should record all operational instructions given through telephone, fax, e-mail, etc. Contrary to the provisions of the Grid Standard Regulations; SLDC had been issuing only verbal BDIs without keeping record of the same. Thus, in the absence of any record of operational instructions, Audit was not able to examine non-compliance of the instructions by the generators.

4.2.15.5 Planning for power procurement

The Company assesses the requirement of power on the basis of past consumption trends, present requirement, load growth trends, T&D losses trends as well as the own generation capacity, allocation from central sector and future committed generation projects. The Company submits action plan for meeting annual power demand to the MSERC which approves the sources of purchase of power and the purchase cost based on the estimates made in the Annual Revenue Requirement (ARR) by the Company.

The details of total requirement of the State based on the 17th Electric Power Survey (EPS) (March 2007) conducted by CEA, total power supplied and shortage of power for the five years 2007-12 are given below:



It can be seen from the above that:

- During 2007-12, the power demand had increased by 584 MU (38.50 *per cent*) from 1517 MU in 2007-08 to 2101 MU in 2011-12. As against this, power supplied increased only by 167.30 MU (10.54 *per cent*) from 1587.21 MU in 2007-08 to 1754.51 in 2011-12.
- While the Company met the projected demand in 2007-08, there was a shortfall in power supplied ranging between 7.72 *per cent* (2008-09) and 17.25 *per cent* (2009-10).

The gap in demand supply position also leads to variation between actual generation and actual drawal and scheduled generation or scheduled drawal which is accounted through Unscheduled Interchange (UI) charges, worked out by the North Eastern Regional Power Committee (NERPC) for each 15 minutes time block. UI charges are levied for the supply and consumption of energy in variation from the pre-committed daily schedule. This charge varies inversely with the system frequency prevailing at the time of supply/consumption. Hence, it reflects the marginal value of energy at the time of supply. The levying of UI charges acts as a commercial deterrent to curb over drawal from Central Generating Stations (CGS) during low frequency conditions. It was observed that during the period under review, the Company had over drawn power from CGS during low frequency which ultimately resulted in high power purchase cost by way of UI charges as shown below:

Table 4.2.7

Year	Unscheduled Interchange (UI) Receivable (-)/ Payable (+)	
	Power (MU)	Amount (₹/ crore)
2007-08	(-) 21.61 [#]	(-) 12.18 [#]
2008-09	(-) 36.21 [#]	(-) 38.77 [#]
2009-10	55.96	3.99
2010-11	71.27	10.70
2011-12	109.80	37.58

Source: MeECL

It can be seen from the above that there was an increase of more than nine fold in UI charges payable from ₹ 3.99 crore (2009-10) to ₹ 37.58 crore (2011-12).

Increasing trend in overdrawing by the Company was against the grid discipline norms required for efficient functioning of grid.

4.2.16 Disaster Management (DM)

Disaster Management (DM) aims at mitigating the impact of a major breakdown on the system and restoring it in the shortest possible time. As per the Best Practices, DM should be set up by all power utilities for immediate restoration of transmission system in the event of a major failure. It is carried out by deploying Emergency Restoration System, DG sets, vehicles, fire fighting equipment, skilled and specialised manpower.

The Disaster Management Centre, National Load Despatch Centre, New Delhi acts as a Central Control Room in case of disasters. As a part of DM programme, Crisis Management Plan, Manual for Black Start⁴⁹ and Restoration Scheme for Meghalaya was adopted by the Company in October 2007. According to the Manual, mock drill for starting up generating stations during black start operations was scheduled to be carried out every six months.

4.2.16.1 Inadequate facilities for DM

The SLDC identified six major generating stations in the State out of which black start facilities were available in only three generating stations which indicated inadequacy in the preparedness for DM. Diesel generating (DG) sets and synchroscopes⁵⁰ form part of DM facilities at EHT substations connecting major generating stations. The Company stated (May 2012) that DG sets for black start for emergency restoration was already installed at its one generating station (MLHEP, Leshka) out of total five generating units and mock drill was also carried out in this generating station. The Company had also initiated action for procurement of DG set for making the black start facilities available at Stage IV generating station. For remaining four generating stations (Stage I, II, III and Umtru), the management did

[#] Negative figures indicate MeECL's underdrawal of its share of power against Schedule.

⁴⁹ The procedure necessary to recover from partial or a total black out.

⁵⁰ In an AC electrical power system it is a device that indicates the degree to which two systems generators or power networks) are synchronised with each other.

not consider DG sets necessary⁵¹ for black start facilities and had not carried out any drill till May 2012.

A major Grid failure occurred on 31 July 2012 in the State of Meghalaya. The State Grid collapsed due to failure of whole North Eastern Grid simultaneously with Eastern and Northern Grid and all substations and generating stations with total generation capacity of 75.20 MW were affected. As MLHEP failed to black start, Stage I and Stage III power stations were black started for restoration of the system. The system could be finally restored for power supply only after four hours. Thus, the Company needs to review the black start facilities available at MLHEP to avoid such black start failure in future.

4.2.17 Tariff Fixation

The financial viability of the Company depends on generation of surplus (including fair returns) from the operations to finance their operating needs and future capital expansion programmes by adopting prudent financial practices. Revenue collection is the main source of generation of funds for the Company.

The tariff structure of the Company is subject to revision approved by the Meghalaya State Electricity Regulatory Commission (MSERC)⁵² after the objections, if any, received against Annual Revenue Requirement (ARR) petition to be filed by it within 121 days before the commencement of the respective financial year. The MSERC accepts the application filed by the Company with such modifications/conditions as may be deemed just and appropriate and after considering all suggestions and objections from public and other stakeholders.

The table below shows the due date of filing ARR for consolidated tariff, actual date of filing, date of approval of tariff petition and the effective date of the revised consolidated tariff:

Table 4.2.8

Year	Due date of filing	Actual date of filing	Delay in days	Date of approval	Effective date
2008-09	30/11/2007	31/03/2008	120	30/09/2008	01/10/2008
2009-10 ⁵³	30/11/2008	28/11/2008	-	30/11/2009	01/12/2009
2010-11	30/11/2009	12/02/2010	74	23/8/2010	01/09/2010
2011-12	30/11/2010	30/11/2010	-	20/01/2012	01/02/2012
2012-13	30/11/2011	08/12/2011	8		

Source: MeECL

It can be seen from the above that there had been delay in filing of ARR by the Company in three years (2008-09, 2010-11 and 2012-13) during 2008-13 for a period ranging from 8 days to 120 days. The delay in filing of ARR by the Company had

⁵¹ As per the management (May 2012) these power stations can be restored in the shortest possible time without external power supply.

⁵² After formation of MSERC in May 2004, first tariff for 2007-08 was approved (17 December 2007) by the regulatory body.

⁵³ During 2009-10, the tariff order was issued twice; firstly w.e.f. 01 December 2009 and secondly w.e.f. February 2010.

correspondingly deferred the revision in the tariff adversely affecting the flow of transmission revenue of the Company.

4.2.18 Material Management

The key functions in material management are laying down inventory control policy, procurement of materials and disposal of obsolete inventory. The Company had not formulated any procurement policy and inventory control mechanism for economical procurement and efficient control over inventory. The Material Management Division (MMD), Shillong is entrusted with the works relating to procurement of materials for the transmission as well as for the generation and distribution functions. Under the control of the MMD, there are three Area Stores, two at Shillong⁵⁴ and third at Sumer. In addition, stores are also maintained at division level for usage mainly for project and O&M works. The Company did not follow good material management practices like ABC analysis, fixation of standards for minimum/maximum stock level or reorder level for procurement of stock.

As per the system followed by the Company, the MMD consolidates various requisitions received from different Generation, Transmission and Distribution Divisions and after approval of the Materials Management Committee; orders are placed for necessary purchases. The separate details were, however, maintained by the Company for purchases, consumption and stock position for transmission activities.

The combined details of Opening stock, purchases, issues and closing stock in respect of Generation, Transmission and Distribution Divisions of the Company for the period from 2007-08 to 2011-12 are detailed below:

Table 4.2.9

(₹ in crore)

Year	Consumption (per annum)	Consumption (per month)	Net Closing stock (as per Balance Sheet)	Closing stock in terms of months of consumption
2007-08	27.51	2.29	119.61	52.23
2008-09	36.40	3.03	117.63	38.82
2009-10	47.46	3.96	102.59	25.91
2010-11*	25.54	2.13	107.02	50.24
2011-12	NA	NA	NA	NA

Source: MeECL. * Provisional. NA: Figures for 2011-12 not available.

It can be seen from the above table that compared to monthly consumption of stores of ₹ 2.13 crore to ₹ 3.96 during 2007-11, the value of stock holding of the Company during the same period was sufficient to meet the requirements of 26 months to 53 months which indicated huge investments in surplus stock.

High increase in closing stock in terms of months of consumption may lead to excess materials becoming obsolete, expiry of warranty period, idling and blocking up of funds, higher storage expenses and increased space constraints.

It was also observed from the Physical Verification Reports (PVRs) of the Transmission and Transformation Divisions that there was no system of segregation

⁵⁴ Including one Stationery and Printing Store.

of non-moving/obsolete/unserviceable/scrap material pending for disposal, etc. The PVRs were submitted only to Accounts wing and there was no system of verifying discrepancy in the stock, if any.

The Management did not offer their comments on the above observations.

4.2.19 Energy Accounting and Audit

Energy accounting and audit is necessary to assess and reduce the transmission losses. The transmission losses are calculated from the Meter Reading Instrument (MRI) readings obtained from Generation to Transmission (GT) and Transmission to Distribution (TD) boundary metering points. As on 31 March 2012, there were 79 interface boundary metering points between TD (62) and GT (17). While all the GT points were provided with meters, only 55TD points were metered, out of which 10 meters were defective as on March 2012. The Company stated (March 2012) that all TD points were provided with 0.5s class meters while the specification of meters fitted in GT points were not furnished by the Company.

The Company did not produce any reliable record for transmission losses. The data for transmission loss which was furnished (April 2012) was later refuted (July 2012) by the Company due to the erratic information arising out of irregular metering data, defective meters and non existence of meters at certain feeders.

The energy meter readings were taken 12 hourly for each metered feeder at all the substations and monthly consumption reports indicating the feeder-wise meter readings so taken were being furnished by the substations to the Corporate Office. It was, however, observed from the monthly reports that in 11 out of 12 substations, the energy transmitted exceeded the energy received for periods ranging between 4 to 53 months⁵⁵ during 2007-12. This was indicative of the fact that the data recorded at feeder ends was erratic and not authentic. Management stated (May 2012) that this was due to old and inaccurate metering system and it had decided to prepare a detailed project report for replacement of metering equipment.

Installation, commissioning and rectification of defective meters at Grid substations are the responsibility of the Meter Relay Testing (MRT) subdivision under the System Protection Division of the Company. It was observed that during 2007-12, the Company conducted testing of energy metres in only 5 out of 13 substations. It was further observed that the testing of meters was also restricted as the testing equipments available with the MRT subdivision were not compatible with the meters installed at some of the sub-stations e.g L&T make meters at Mawlai substation could not be tested at MRT subdivision due to incompatibility with its testing equipment.

The Management stated (July/August 2012) that periodical checking of meters was difficult owing to manpower shortage and it was carrying out testing when the discrepancy in energy reading was reported to it.

⁵⁵ 132/33 KV substations of Mawlai (53 months), NEHU (4 months), NEIGRIHMS (31 months), Khliehriat (17 months), Umiam (6 months), EPIP-I & EPIP-II (6 months), Cherra(9 months), Nongstoin (31 months), Nangalbibra (22 months) and Rongkhon (6 months)

The reply was not correct as the test check results of Audit showed that in case of Umiam and Cherra substations meters lying defective were not tested by the MRT subdivision.

4.2.20 Monitoring and Control

4.2.20.1 The performance of the substations and lines of 220/132 KV on various parameters like maximum and minimum voltage levels, breakdowns, voltage profiles should be recorded /maintained as per the Grid code standards.

Audit observed that the Company did not have adequate system of monitoring and control as is evident from the following:

- The Company did not maintain and consolidate yearwise cumulative performance of the substation and lines.
- Out of 14 substations, only four substations were sending the monthly maintenance reports of equipments to corporate office.
- Monthly maintenance reports wherever sent did not contain complete details on items requiring monthly/annual plan shut down like condition of oil level gauges, terminal connections, operation counter, motor and drives, cooling pipes etc.
- Performance of the lines and substations and steps taken for further improvement of the system was not being appraised to the Board of Directors of the Company annually/quarterly/monthly.

The Management admitted (June 2012) that year-wise cumulative performance of the substation and lines were not being consolidated for evaluation of annual performance of the lines and substations.

4.2.20.2 Review of the envisaged benefits of Transmission schemes

The Company executed and commissioned 407.50 Mva Extra High Tension (EHT) substations and erected a total length of 401.55 Ckm of EHT lines during the period covered under performance audit. While approving the transmission schemes, the Company envisaged benefits in terms of enhancement in drawal capacity from the NE Grid, reduction of line losses, improvement in voltage levels, reduction in overloading of lines, enhancement in evacuation of power from generating station, to be achieved by the new schemes. It was, however, observed that the Company did not evolve any mechanism/system to assess the benefits actually derived on implementation of transmission projects after commissioning of the new projects as the Company had not formulated any system of necessary feedback from the concerned divisions.

4.2.20.3 Internal Controls and Internal Audit

Internal control is a process designed for providing reasonable assurance for efficiency of operations, reliability of financial reporting and compliance with

applicable laws and statutes. Internal Audit is designed to ensure proper functioning as well as effectiveness of the internal control system and detection of errors and frauds.

The Internal audit of the Company was carried out through a separate Internal Audit Wing functioning under the Chief Accounts Officer.

Scrutiny of the Internal Audit Reports for the period 2007-11 relating to four out of five transmission divisions (Umiam, Shillong, Tura, and Byrnihat)⁵⁶ revealed that the reports mainly focused on establishment matters rather than the core activities of the Divisions. The Internal Audit Manual (June 1998) of the erstwhile Board which Company continued to follow without any revisions till date, did not prescribe the scope, coverage, periodicity etc. and provisions for auditing the later issues like power purchase, UI drawal, payment of transmission and SLDC charges, filing of ARR and compliance to directions of MSERC etc.

The management in its reply stated (May 2012) that action was being taken to revise the manual and to strengthen the Internal Audit wing.

4.2.20.4 Audit Committee

The erstwhile Meghalaya State Electricity Board (MeSEB) was unbundled and the Company was incorporated on 14 September 2009 under the Companies Act 1956 under the administrative control of the Power Department. As per Section 292A of the Companies Act, 1956, the Company is required to constitute an Audit Committee (AC). However, the Company had not constituted an AC till date in violation of the provisions of the Companies Act, 1956.

In absence of the Audit Committee, the deficiencies existing in the functioning of Company remained unnoticed for necessary remedial action. This led to absence of a reasonable assurance for the stakeholders on the efficiency of Company's operation, reliability of its financial reporting and compliance with the applicable law/statute by the Company.

4.2.21 Conclusion

- The Company failed to prepare long term plan business plan for strengthening of the transmission system;
- The Company was not aware of the recommendations of Task Force on Transmission Projects guidelines for reduction in delays for effective execution of transmission system;
- There were delays in execution of projects due to not undertaking preparatory activities, deficient planning and project management leading to time and cost overrun;

⁵⁶ Umiam (2007-08 to 2009-10), Shillong (2007-08 to 2009-10), Tura (2007-08 to 2010-11) and Byrnihat (2007-08 to 2008-09). Internal Audit for Killing substation division (functioning from January 2011) was yet to be taken up.

- The overall transmission capacity was in excess of the peak demand (met) for every year and the burden for such excess capacity was passed on to the consumers through electricity tariff;
- The operation of the State Grid by SLDC was hampered on account of inadequate communication network between SLDC and the grid substations because of absence of RTUs in most of the substations;
- Mock Drill for black start was not carried out in five out of six major generating stations. Even in one generating station where mock drill had been carried out it was observed that the station failed to black start during the North East grid failure on July 2012;
- There is no system of segregation of non-moving /obsolete/unserviceable/ scrap material pending for disposal, etc which led to abnormal increase in closing stock;
- Old and inaccurate metering system coupled with absence of meters at a number of feeder points hampered the ability of the Company to conduct energy accounting and audit;

4.2.22 Recommendations

The Company should:

- prepare long term capacity addition plan to strengthen its transmission system.
- adhere to the latest recommendations of different government agencies like Task Force on Transmission Projects for effective management of its transmission projects;
- ensure undertaking of preparatory activities in line with project appraisal/approval phase and introduce effective monitoring system to ensure that there are no delays in completion of projects;
- adhere to the standards/norms of the MTPC/Grid Code and latest technological developments for effective functioning and maintenance of the transmission network;
- carry out mock drills for black start in all generating stations to meet any eventuality in case of any emergency and crisis;
- put in place proper system of segregation of closing stocks of materials into non-moving/obsolete/ unserviceable/scrap material pending for disposal, etc.;
- install a proper metering system to conduct energy accounting and audit for effective monitoring and control of energy losses;
- introduce a system to review the achievement of envisaged benefits of completed transmission schemes/projects.

POWER DEPARTMENT

MEGHALAYA ENERGY CORPORATION LIMITED

4.3 Non-recovery of electricity dues

Tardy action by the Meghalaya Energy Corporation Limited to recover electricity charges from one consumer resulted in the dues accumulating to ₹ 9.91 crore as of September 2012.

Section 56 of the Electricity Act, 2003 empowers the Meghalaya Energy Corporation Limited (MeECL-Company) to disconnect power supply to a consumer for non-payment of electricity charges⁵⁷. Notwithstanding this provision, the Company allowed usage of electricity to a consumer viz M/s JUD Cements Private Limited (JCPL-consumer), Wahiajer, Jaintia Hills despite repeated defaults in payment of electricity charges as per details given in the **Appendix 4.8**.

It was observed that the outstanding balance at the end of each month (during the period from March 2010 to September 2012) increased exponentially from ₹ 0.47 crore in March 2010 to ₹ 9.91 crore in September 2012 viz an increase of about 2000 *per cent* as discussed below:

- During the period from March 2010 to May 2011, the outstanding against the consumer had mounted to ₹ 9.65 crore in spite of leniency shown by the Company by allowing deferment of the payment date(s) and reschedulement of outstanding on three occasions. The consumer did not honour its commitment of payment of dues within the deferred date(s) or rescheduled date(s). During this period 11 cheques valuing ₹ 3.35 crore given by the consumer against outstanding dues bounced. Thereafter, the Company temporarily disconnected (30 June 2011) power supply to the consumer.
- Immediately after the disconnection of the power supply, the consumer requested (18 July 2011) for revision in payment schedule viz ₹ 1.00 crore every 15-20 days, which was agreed by the Company. The consumer paid ₹ 2.00 crore (26 July 2011) and its power supply was restored. The consumer

⁵⁷ Under Section 56 of the Electricity Act 2003, the MeECL is empowered to disconnect the electricity supply after serving a notice of not less than fifteen clear days if a consumer neglects to pay the electric bills.

again started defaulting in payment of electricity bills and requested the Company for extensions of due dates of payment, citing reasons of cash constraints *etc.* The Company, again allowed accumulation of outstanding balances to mount to ₹ 9.59 crore (during November 2011).

- Instead of clearing the outstanding dues, the consumer proposed (23.11.2011) revised payment schedule of ₹ 1.00 crore every 5 days w.e.f 1.12.2011 to 15.12.2011, ₹ 2 crore between 15.12.2011 to 25.12.2011, ₹ 2.00 crore between 25.12.2011 to 31.12.2011 and ₹ 3 crore between 1.1.2012 to 10.1.2012. The Company accepted the proposal subject to payment of ₹ 1.00 crore by 05.12.2011. The consumer again defaulted and the Company disconnected power supply to the consumer on 9.12.2011. The power supply was again restored on 28.12.2011 after receipt of ₹ 2.00 crore from the consumer.
- As on September 2012, the outstanding balance against the consumer had increased to ₹ 9.91 crore (including delayed payment charges of ₹ 5.04 crore) in spite of allowing of repeated revisions in the schedules of payments by the Company.

It was observed that even after revising the payment schedules, outstanding balance on account of electricity charges against the consumer had increased by ₹ 0.32 crore during the period from November 2011 to September 2012. Thus, despite repeated defaults in payment of energy charges even after allowing reschedulement of the outstanding electricity dues, the Company allowed usage of electricity to the consumer *viz.*, M/s JUD Cement Private Limited.

The Management accepted the facts and stated (September 2012) that power supply was disconnected whenever the consumer failed to pay dues. However, since the company needed a cash flow to tide over financial constraints, the power supply was not disconnected in totality. It was further stated that out of the pending amount of ₹ 7.07 crore, (August 2012), ₹ 4.66 crore related to delayed payment charges for which the consumer had requested for waiver.

The reply was not tenable, as the Company's own finances were under stress and highly depended on borrowed funds for the purchase of power. The interest and finance charges⁵⁸ of the Company, on loans taken for working capital requirement and capital investment, during 2010-11 alone was ₹ 102.76 crore. Under such a

⁵⁸ As per ARR and Tariff filed by the Company for the FY 2012-13 before Meghalaya State Electricity Regulatory Commission.

scenario, non-recovery of huge outstanding dues puts an additional interest burden on the borrowings of the Company. The Company may incur a net loss of interest in case the delayed payment charges are waived besides sending wrong signal to its other major consumers.

Shillong
The 27 April 2013



(A.W.K. Langstieh)
Principal Accountant General (Audit)
Meghalaya

Countersigned

New Delhi
The 29 April 2013



(Vinod Rai)
Comptroller and Auditor General of India