Chapter II

Performance Audits relating to Government Companies

Chapter II

SOCIAL SECTOR
URBAN DEVELOPMENT DEPARTMENT

2 Performance Audit relating to Government Companies

2.1 Functioning of City and Industrial Development Corporation of Maharashtra Limited

Executive Summary

Introduction

City and Industrial Development Corporation of Maharashtra Limited (Company) was incorporated in March 1970 by the Government of Maharashtra (GoM) as a wholly owned Government Company. The Company was assigned planning and development of Navi Mumbai Project (NMP) and New Town Projects (NTPs). Presently, the Company has six nodes in NMP and seven NTPs.

Operational Performance

Planning

The Detailed Project Reports for development of the nodes were not updated periodically. There was no system of preparation of Corporate Plan (CP)/ Annual Plan (AP) to ensure timely implementation of the projects. Land records showing details of land area acquired, developed, saleable, sold and balance available of NMP were not updated.

Infrastructure development

The Company has not formulated any Contract Management Manual to be followed at various levels of authority. Instances of lapses in the tender processing/execution such as awarding of work on single tender basis, non-transparent processing of tenders and non-levy of Compensation For Delay in completion of works were noticed.

Allotment of plots

The allotment letters did not contain any due date of payment of Delayed Payment Charges (DPC) and Miscellaneous Charges (MC), in the absence of which, the Company was deprived of revenue of ₹ 9.43 crore due to delayed collection of DPC/MC. Five plots which were situated on the side of the service road along with road having width of 32 metres were allotted without levying additional premium of ₹1.04 crore.

The Company had not levied Additional Lease Premium of ₹ 16.22 crore in two cases without examining its merit, even though there was a delay of more than 12 years in construction of buildings. In four cases, the Company granted permission for transfer of plots before execution of Lease Agreement in violation of the Land Regulations. Payment of stamp duty to the Government was avoided in this process. The Company allotted plots to 20 Co-operative Housing Society formed by CIDCO employees at lower rate, incurring a loss of ₹18.40 crore.

Sale of apartments and shops

The allottees of 17 apartments in the Seawoods NRI Housing Complex, Nerul, have not paid the balance amount of 6.24 lakh USD since December 1995. The Company has also not recovered the balance premium of ₹ 1.05 crore since 2001 from the allottees of 20 shops at Nerul Railway Station. The Company constructed 252 apartments in

October 2007 and allotted (March 2008) only 220 apartments. The balance 32 nos apartments and 23 apartments surrendered /cancelled valued at ₹60.75 crore were not allotted. There was delay in allotment of 1,344 tenements under the Mass Housing Scheme at Ulwe by more than 15-19 months which resulted in loss of interest of ₹14.13 crore.

Financial Management

The Company has not finalised its accounts from 2009-10 onwards. There was no regular system of submission of information to Board of Director (BoD) on investments in Fixed Deposits. In 243 cases (₹ 9,097.29 crore), investments for more than one year were made by delegate without BoD's approval. The Company works as an agent of GoM for NMP. The amount due to the GoM was ₹2,920.43 crore in 2011-12 and the same was not remitted to the Government.

The annual accounts of the Company and project accounts have been finalised and audited only upto 2008-09.

The outstanding Service Charges (SC) and Water Charges (WC) of Non-Navi Mumbai Municipal Corporation (Non-NMMC) nodes increased from ₹ 83.22 crore and ₹ 16.23 crore (March 2008) to ₹ 141.50 crore and ₹ 33.20 crore (March 2012) respectively and the recovery towards SC was between 6.84 and 10.80 per cent only against demand. Similarly, the outstanding SC and WC of NMMC nodes increased from ₹26.24 crore (March 2008) to ₹30.51 crore (March 2012) and the recovery was between 0.84 and 2.63 per cent against demand.

Monitoring system

MIS in the Company was inadequate and ineffective although System Application & Products had been introduced in December 2004. The Internal Audit of the Company was carried through Chartered Accountant firms for the period up to 2005-06 only.

Conclusion and Recommendations

The Company did not prepare comprehensive CP/AP. Annual Budget estimates were prepared only in financial terms and physical progress was not linked thereto. Details of land acquired, developed area, balance saleable etc. were not updated. In some cases works were awarded on single tender basis which lacked transparency. There was no system in place for timely recovery of DPCs and MCs along with the instalment dues. Compliance with Land Pricing Policy (LPP) and Land Regulations (LRs) relating to fixation of price, allotment/transfer of plots etc. was not ensured. The audit has made nine recommendations which include framing a comprehensive CP/AP in order to fix target and achievement in financial as well as physical terms including finalisation of annual accounts of the Company and project accounts and audit thereof in time, updating of Land records, formulating a Contract Management Manual, formulating proper system to recover DPCs and MCs along with the instalment dues and ensure compliance of provisions of the LPP/LRs in allotment of land. Government should ensure that the amounts due to them are received in time.

Introduction

2.1.1 City and Industrial Development Corporation of Maharashtra Limited (Company) was incorporated in March 1970 by the Government of Maharashtra (GoM) as a wholly owned Government Company. The main objectives of the Company were to develop and manage residential, commercial and industrial estates and make them available to the enterprises or any other persons and to provide facilities for residence and business of all types. The Company is governed by the Maharashtra Regional Town Planning (MRTP) Act, 1966, and New Bombay Disposal of Land Regulations, 1975, as amended in 2008. The Company generates its revenue through lease of plots, apartments, shops *etc*. and levy of service charges, water charges, development charges *etc*. The Company incurs expenditure on development and maintenance of infrastructure and social facilities.

The New Bombay Development Plan approved (August 1979) by the GoM, envisaged a city (New Bombay/Navi Mumbai Project) with self contained Township/Nodes. The Company was assigned planning and development of Navi Mumbai Project (NMP). It was also assigned planning and development of New Town Projects[28] (NTP). Presently, the Company has six nodes[29] in NMP and seven NTPs[30]. The Company has, however, retained its right on the open plots in these nodes/New Towns (NTs) transferred.

Organisational set-up

2.1.2 The Management of the Company is vested with a Board of Directors (BoD), comprising eight members, appointed by the GoM. The Company is headed by the Vice-Chairman and Managing Director (VC&MD) and supported by a team consisting of Joint Managing Director, Administrators (NTs), Chief Engineers, Chief Accounts Officer and Heads of various departments.

Scope and Methodology of Audit

2.1.3 The present Performance Audit conducted between February 2012 and June 2012 covers performance of the Company in development of infrastructure and allotment of plots during 2007-08 to 2011-12. Audit examination involved scrutiny of records of different wings at the Head Office (HO) as well as at NTs, mainly dealing with development of infrastructure and allotment of land in four nodes *viz.* Kharghar, Nerul, Kalamboli and Ulwe in Navi Mumbai and two NTPs *viz*. Aurangabad and Waluj. Nodes and NTs were selected for detailed audit on the basis of expenditure incurred on development and receipts from land allotment. The projects relating to ‘development of SEZ at Navi Mumbai’ and ‘development of International Airport’ were not taken up for audit examination as the same were at initial stages of implementation. The selection of nodes was based on the expenditure incurred on their development and receipts from land allotment. The expenditure incurred and receipt from land allotment of the four nodes selected were ₹ 896.75 crore and ₹ 2,111.44 crore which was *73 per cent* and 67 *per cent* of total expenditure and land receipts respectively of the Navi Mumbai Project. In these four nodes, 66 high value contracts were executed of which 29 contracts were selected for detailed audit. Similarly, out of 194 allotments of plots, 116 allotments were selected for detailed audit.

The methodology adopted for attaining audit objectives with reference to audit criteria consisted of explaining audit objectives to top management, scrutiny

[28]Nashik, Aurangabad, Aurangabad Fringe Area, Latur Fringe Area, Waluj, Nanded, Oras (Sindhudurg), Khopta Township, Chikhaldara Hill Station, Jalna New Town and Vasai-Virar.

[29] Kharghar, Jui-Kamothe, Kalamboli, Dronagiri, Ulwe and New Panvel.

[30]Waluj, Jalna, Chikhaldara Hill Station, Latur Fringe Area, Oras, Khopta Township and Aurangabad Fringe Area.

of records at HO and selected units, interaction with the audited entity personnel, analysis of data with reference to audit criteria, raising of audit queries, discussion of audit findings with the Management and issue of draft review to the Management/Government for comments.

Audit objectives

2.1.4 The objectives of the performance audit were to assess whether:

- action plans (development plan/corporate plan) were prepared in line with Detailed Project Reports (DPRs) of the nodes to undertake the development of the infrastructure facilities effectively;
- contracts were awarded in a transparent manner and executed economically, effectively and efficiently;
- proper system existed for fixation of price, allotment of land in transparent manner and providing for leasing land;
- financial requirements were projected realistically, identifying the sources of funds and ensuring its availability including prudential management of funds; and
- effective monitoring, quality control systems and internal control were in place.

Audit criteria

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

- provisions of Maharashtra Regional and Town Planning (MRTP) Act, 1966;
- provisions of New Bombay Disposal of Land Regulations, 1975 (Land Regulations) as amended in 2008;
- project reports of respective nodes/new towns;
- circular instructions/Notifications issued by GoM, policies and procedures pursued by the Company in relation to the Pricing and Disposal of Land;
- terms and conditions stipulated for allotment of land and award of contracts; and
- agenda notes and minutes of Board meetings.

Audit findings

2.1.6 We explained the audit objectives to the Company during an ‘Entry Conference’ held on 24 February 2012. The audit findings were reported to the Company and the State Government in July 2012. The Management replied to the audit findings in August 2012/October 2012 which was endorsed by State Government in October 2012. The audit findings were also discussed in an 'Exit Conference' held on 18 October 2012, which was attended by the VC&MD of the Company and the Desk Officer from State Government. The views expressed by the Management in their replies/meeting have been considered while finalising the performance audit report. The audit findings are discussed below:

Operational Performance

Planning

2.1.7 The development schemes of various nodes are planned by the Planning Department and execution thereof is carried out by the Engineering Department. The developed plots are allotted by Marketing/Social Department.

The core activities of the Company during the review period, included the following schemes:

- Mass Housing Schemes
- Development of Central Park
- Development of Golf Course
- Nodal Development work which includes construction/upgradation of Roads, Footpaths, SW drains, Water supply lines, *etc*.
- Construction of buildings/bhavans on deposits work basis
- Sale/Allotments of Plots
- Sale/Allotments of Apartments
- Development of SEZ
- Development of international Airport

All schemes were test checked in audit except schemes relating to development of SEZ and International Airport. The Company incurs expenditure on these core activities while major sources of revenue came from sale/allotment of land, Apartments, collection of Service charges, *etc*. The expenditure incurred by the Company on core activities *vis-a-vis* revenue generated as against the budgeted targets set during the review period is given below:

Year	Expenditure towards core activity			Receipts from core activity		
	Budgeted (₹ in crore)	Actual (₹ in crore)	Achievement in Percentage	Budgeted (₹ in crore)	Actual (₹ in crore)	Achievement in Percentage
2007-08	364.22	219.23	60.19	468.26	577.39	123.31
2008-09	558.02	466.41	83.58	1,901.55	524.92	27.60
2009-10	619.01	765.93	123.73	405.20	680.67	167.98
2010-11	692.93	982.49	141.79	508.68	352.22	69.24
2011-12	1,029.05	795.57	77.31	985.07	424.25	43.07

During 2009-10 and 2010-11 the Company incurred expenditure over the budgets for infrastructural development of land, whereas in 2007-08, 2008-09 and 2011-12 the Company could not achieve its targeted expenditure on core activities. Audit analysis revealed that this situation occurred due to non preparation of activity wise budgets and lack of monitoring. Moreover, the Company did not analyse the reasons for variance in expenditure in any year. As a result, corrective action was not taken to minimise the variation. Similarly, targeted receipt for the years 2008-09, 2010-11 and 2011-12 could not be achieved due to poor response in disposal of plots and shops. The Annual Budget estimates though prepared, were in financial terms only for development of infrastructure and allotment of land. However, physical targets there against were not indicated. Thus, there was no effective monitoring mechanism to assess the efficiency of the Company in carrying out its physical performance with reference to either targets or financial performance.

Further, it revealed the following deficiencies:

- The DPRs for development of the nodes were not updated periodically;
- There was no system of preparation of Corporate Plan (CP) or Annual Plan (AP) to ensure timely implementation of the projects;
- The Reserve Price (RP) of the land adopted with reference to Project Report of each node were not revised to compute the actual RP where significant changes[31] had taken place at a later stage;
- The land records showing details of land acquired, developed area, saleable area, area sold and balance saleable area of NMP were not updated; and
- The Company had no written/laid down policy to deal with encroachment[32] of land till December 2011 and prepared the same in January 2012.

Infrastructure development

2.1.8 The Company has not formulated any Contract Management Manual to be followed at various levels of authority. During the period under review, in all 66 high value contracts (valuing more than ₹ one crore each), were executed by the Company in the four nodes selected for detailed audit.

[31] Development of Special Economic Zone, International Airport, Golf Course, Central Park *etc*.

[32] As against 818 notices issued only 85 cases of encroachers were settled as on 31 May 2012.

Of these 29 contracts were reviewed. The following lapses in the tender processing/execution were noticed:

Nature of Lapse	No. of Cases	Contract value (₹ in crore)
Rejection/Relaxation of Pre-qualification	3[33]	19.16
Delays of one to seven months in finalisation of award of work after opening of price bids	11[34]	55.61
Delay in completion of work ranging from 3 to 30 months	14[35]	132.92

A few cases highlighting irregularities in award and execution of work are discussed below:

Mass Housing Scheme, Ulwe

Non-recovery of CFD of ₹ 4.95 crore in respect of delay in completion.

2.1.9 The scheme was envisaged to facilitate houses to economically weaker section. The Company awarded (August 2009) a lump-sum turnkey contract to BG Shirke Construction Technology Private Limited (BGSC) for design and construction of 1,344 Nos. of tenements at Ulwe with pre-fab technology at a total cost of ₹ 65.97 crore. The work which was scheduled to be completed by May 2011, was completed in October 2011 with a delay of 22 weeks. The delay in completion was condoned and Compensation for Delay (CFD) amounting to ₹ 4.95[36] crore was not levied. This fact was also not brought to the notice of BoD. Further, there was abnormal delay in marketing and allotment of apartments. The same has been discussed in para 2.1.29 supra.

The Management stated that the main reasons for delay in construction were obstruction by local villagers, non-availability of sand and water logging at site due to rains, which were beyond the control of the BGSC.

The reply is not tenable as there was no documentary evidence of protests from villagers and it was responsibility of BGSC to make sand available/ de-watering during the course of the contract. As regards non-availability of sand, the Hon'able High Court, Mumbai had banned sand mining only for one month. Further, water logging was incidental to rain and contract period of 21 months included monsoon season as well.

---

[33] Contract Agreement (CA) No.1, 3 and 4/2008-09/Golf Course.

[34] CA No. 2, 3, 4, 5, 6, 7, 8, and 11/2008-09 and CA No. 3 and 4/2009-10/Golf Course and CA No.2/2007-08/Central Park.

[35] CA No. 1, 2, 3, 4, 5, 7, 8, and 11/2008-09, CA No. 3 and 4/2009-10/GC and CA No. 2,3 & 4/2007-08/Central Park and CA No. 1/2009-10/Mass Housing/Ulwe.

[36] ₹ 65.97 crore x 7.50 *per cent (at the rate of 0.50 per cent per week for maximum 15 weeks of delay).*

Golf Course, Kharghar

Award of work on single tender basis after reducing the scope of work subsequent to invitation of tender.

2.1.10 The Company invited (June 2008) tenders for work of a 18 hole Golf Course (GC) at Kharghar at an estimated cost of ₹ 10 crore. The scope of work consisted of feature construction, supply of sand and garden soil, construction of cart path and lakes. The Company during pre-qualification found that all three firms, *viz.*, Continental Fairways (CF), SGDP Limited, and Sumedha Earthmovers were not fulfilling the pre-qualification criteria of experience in execution of 9 hole and 18 hole GC. Instead of resorting to re-tendering, the tender documents were issued only to CF (November 2008) who had experience of execution of 18 hole GC. Subsequently, CF also declined (December 2008) to submit the bid and requested to revise the scope only to feature construction including drainage and fine shaping for greens, tees, fairways, bunkers, roughs and lakes. Accordingly, the Company split the tender and changed the scope of work (December 2008) and awarded the contract to CF at ₹ 5.62 crore. This lacked transparency. The reduction of scope of work was also not brought to the notice of the Board.

The Management stated that re-invitation of tenders would have delayed finalisation of the contract and would have affected other contracts such as earthwork, grassing and irrigation which were already awarded.

However, fact remains that the Company awarded the work on single tender basis by changing the scope of work after invitation of tender which lacked transparency. Moreover, re-invitation of tender for main work would have not affected other contracts as the same had been awarded before the main work.

2.1.11 The work for supply of river sand and crushed sand were awarded (March-April 2009) to Sai Suppliers and Mahavir Road & Infra Private Limited (Contractors) at a cost of ₹ 4.73 crore and ₹ 1.21 crore respectively. Both works were scheduled to be completed by January 2010. However, as the Contractor of crushed sand was not in a position to supply the crushed sand, the Company allowed the Contractor to supply garden soil instead of crushed sand. The Company should have terminated the contract for non-supply of crushed sand and re-invited the tenders instead of changing the scope of work after award of the contract which lacked transparency. Both the works were completed by June 2010. However, inauguration and utilisation of GC was pending till date (November 2012). The Company plans to generate revenue on 'pay and play' basis and had not worked out any revenue generation model before hand**.**

Non-recovery of CFD of ₹ 51.97 lakh for delay in supply of river sand/ crushed sand.

We observed that although, the delay was mainly attributable to Contractors fault, the Company allowed time extension of three to five and half months without recovering the CFD, which worked out to ₹ 51.97 lakh[37] as per the contractual terms.

The Management stated that the supply of river sand was delayed due to rains, non-availability of sand and strike of transporters. Supply of crushed sand was

[37] ₹ 44.77 lakh for supply of river sand and ₹ 7.20 lakh for supply of crushed sand.

delayed due to time taken for carrying out modifications at the crusher plant of the contractor.

However, it was the responsibility of the Contractor to ensure the smooth supply of river/crushed sand.

Central Park, Kharghar

2.1.12 The Company invited tenders (December 2007) for construction of entrance building, food plazas *etc*. at Central Park, Kharghar at estimated cost of ₹ 9.57 crore. In response only one bidder *i.e.*, Klassic Constructions (Party) quoted its rate at the rate of 94 *per cent* above estimated cost. The Company opened the price bid in April 2008 and made negotiation in August 2008, which was approved by the BoD in October 2008.

The work was awarded (January 2009) to Party on single tender basis after negotiating the quoted price to 72 *per cent* above estimated cost *i.e.*, ₹ 16.43 crore.

Award of work on single tender basis and grant of mobilisation advance against tender conditions.

We observed that as only a single tender was received and the offer was also on higher side, the Company should have re-invited tender to get more competitive rate. Further, we observed that the Company released (January 2009) ₹ 1.60 crore mobilisation advance in violation of tender conditions. The work scheduled to be completed by May 2010 had not been completed (September 2012) and CFD of ₹ 82 lakh[38] was recoverable from the contractor, against which only an amount of ₹ 25 lakh has been recovered till June 2012. The Company had not prepared any DPR for the project hence revenue forgone could not be ascertained in audit.

Thus, awarding the contract on single-tender basis ignoring commercial prudence and grant of mobilisation advance lacked transparency.

The Management stated that the work as well as 10 *per cent* interest-free mobilisation advance was awarded with the approval of the Board. The delay in completion of work was on account of frequent stoppage of work due to thefts of construction materials from the site and protest by the local people during the period May and August 2011.

The reply is not tenable as acceptance of a single offer and allowing interest free mobilisation advance lacked transparency. Further, there was no evidence of any protest by locals.

Allotment of Plots

2.1.13 The New Bombay Disposal of Land Regulations, 1975 (as amended in 2008) notified by the GoM under the MRTP Act, 1966 prescribes the methodology to be adopted and the terms and conditions on which allotment of demarcated plots was to be made by the Company. It also specified the procedures and the timelines for the payment of instalments of

[38] Five *per cent* of contract value of ₹ 16.43 crore as per CFD clause.

Lease Premium (LP), execution of agreement to lease, construction on the plots allotted and recovery of Service Charges. Generally, the lessees are selected on tendering basis. Allotment may also be made on the basis of individual applications in respect of Government Departments/Local Bodies, Co-Operative Housing Societies *etc*. for construction of offices and residential apartments for its members.

The table given below summarises the details of plots allotted in Navi Mumbai during the five years ending 2011-12 under the two categories Non-Social[39] and Social[40].

Year	Non-Social			Social		
	Cases	Area (in m^2)	Value (₹ in crore)	Cases	Area (in m^2)	Value (₹ in crore)
2007-08	100	87,886	508.25	21	8,452	4.32
2008-09	78	1,17,662	460.52	10	50,059	10.84
2009-10	76	1,26,544	612.99	14	33,074	27.75
2010-11	13	26,161	215.05	10	12,582	7.89
2011-12	44	12,960	467.72	10	9,019	6.07
Total	**311**	**3,71,213**	**2,264.53**	**65**	**1,13,186**	**56.87**

Out of 194 cases of allotment in the four nodes selected for detailed audit, 116 cases *i.e.*, 59.80 *per cent* (80 Non-Social and 36 Social) were selected randomly for detailed review and the audit findings thereon are discussed below:

Non-adherence to Regulations

2.1.14 As per the amended Land Regulations of 2008, the intending lessees were to pay the first and second instalments of premium within 45 and 75 days respectively along with Miscellaneous Charges (MCs). The same can be extended up to 12 months by collecting Delayed Payment Charges (DPC) with the approval of the VC&MD. On payment of instalments, agreement to lease was to be executed within 30 days. In the event of default in making payment of instalments or executing the agreement to lease within stipulated time, the allotment should be terminated. Allotment letter issued to the intending lessees stipulated timeline for payment of instalments. However, the due date for payment of MCs and DPC, if any, was not mentioned. The allotment letters were also silent on the procedure for apportionment of the payments received from intending lessees first towards DPC and MC and remaining amount towards premium. In the absence of specific condition, the Company appropriated such payments towards the premium instalments and allowed the intending lessees to make the payment of DPC and the MCs at a later date.

[39]Residential, commercial or residential *cum* commercial plots.
[40]Plots for social activities such as schools, colleges, sports complex, hospitals, religious activities *etc*.

In view of the above following observations are made:

Delay in collection of DPC/MC resulting in loss of ₹ 9.43 crore.

- Out of 80 cases of Non-Social Plots the payment towards DPC and MC was delayed in 24 cases and 17 cases respectively by more than 180 days. Similarly, out of 36 cases of Social Plots, the payment towards DPC and MC was delayed in three cases and two cases respectively. In case, specific due dates for payment of MC and penal charges were incorporated, the Company could have recovered an amount of ₹ 0.65 crore towards penal charges[41] in the event of delays.

- Similarly, if a condition as to the appropriation of payments towards DPC first and then towards principal instalments was stipulated, the Company could have recovered additional interest of ₹ 8.78 crore[42] in 116 cases treating the principal as arrears instead of the DPC.

- The timeline for execution of Agreement to Lease from the date of allotment was complied in only 20 cases. In remaining 96 cases, the agreement was executed between a) 121 days and 365 days in 29 cases, b) 366 days and 730 days in 36 cases, c) above 731 days in 24 cases and d) in balance seven cases execution of agreements were still awaited (September 2012). Due to delay in execution of agreement, the construction period got extended by default and followed by postponement of payment of annual Service Charges. The revenue loss to the Company could not be ascertained as the actual period of construction of buildings may vary**.**

The Management stated that it had not evolved a specific policy to fix time schedule for payment of MC. As such penalty could not be recovered. It was further stated that MCs would be recovered along with the payment of second installment and DPC would be adjusted first and balance amount if any would be adjusted against the principal amount.

Delay in Construction of Buildings/Structures

2.1.15 As per Lease Agreement (LA) the lessee shall construct the building within the stipulated time. In case of default in commencement and completion of construction, the Company, vide clause nine of Land Regulations, has the power to terminate the agreement or allow the lessee to continue on payment of Additional Lease Premium (ALP).

We observed that the Company had not evolved a system to monitor and take timely action against the defaulted lessees for either recovery of ALP or termination of allotments. As per practice in vogue, the ALP has been recovered only when the intending lessees approached for either Commencement/Occupancy Certificate for the buildings.

---

[41] Penal charges calculated for the period from the date of payment of second instalment to the actual date of payment of MC (the penal charges include ₹ 1.35 lakh from Social Plots)**.**

[42] Interest loss is calculated on delayed period at the rate of 12 *per cent* for the period up to 90 days and 16 *per cent* for the period above 90 days (interest loss includes ₹ 22,000 from Social Plots)**.**

We also noticed that in eight cases[43] (3 cases in Social and 5 cases in Non-Social plots) the lessees could not complete the construction within prescribed time and the delay ranged between 4 and 28 months (June 2012). The Company has not yet collected any ALP which worked out to ₹ 16.43 lakh.

No proper mechanism existed for timely collection of ALP for delay in construction

The Management admitted that the lapses were due to incomplete computerisation of land details, as such there was no monitoring system over the lessees. It further stated that action had been initiated to computerise the same. Besides, the Management has now issued (August 2012) notices to the aforesaid eight defaulters as pointed out by Audit.

Similarly, in case of NT-Waluj, we noticed that in 19 cases the lessees could not complete the construction within prescribed time limit and delay ranged between 2 and 7 years (March 2012). The Company has not yet collected any ALP which worked out to ₹ 64.75 lakh.

While accepting the observation, the Management stated that the total amount of ALP in respect of defaulters from the five NTs[44] worked out to ₹ 53.25 crore and demand notices would be issued to the defaulted lessees.

Non-recovery of Additional Premium

2.1.16 The BoD decided (March 2004) to charge additional premium of 10 *per cent* over and above the base price for the plots abutting roads having width of 11 metre to 30 metre and 20 *per cent* for the plots abutting roads having more than 30 metre width. In case of corner plots 25 *per cent* was to be charged as additional premium.

Additional premium of ₹ 1.04 crore towards road frontage not recovered.

We observed that five[45] plots (Social-3 Plots and Non-Social-2 Plots) which were situated on the side of the service road along with road having 32 metre width were allotted without levying any additional premium which worked out to ₹ 1.04 crore.

The Management stated that the plots are not directly accessible from Main road and are only accessible from service road, thus, locational advantage was not loaded on the base rate of the said plots.

The reply is not tenable as the Company in another case[46] at Kharghar charged 20 *per cent* as additional premium despite the plot not having vehicular access from abutting 40 metre road width. Thus, on similar grounds the Company should have charged additional premium of ₹ 1.04 crore.

---

[43] Plot No.105 and 146 - Sector 20 and 3 and 23A - Sector 8 at Kharghar, (4 Nos.), Plot No.2 – Sector 48A, No.67/68 – Sector-44A and No.48-Sector-48 at Nerul (3 Nos.) Plot No.6B – Sector-6E at Kalamboli (1 No.).

[44] Aurangabad, Waluj, Nashik, Nanded and Nagpur.

[45] Three cases at Kharghar-Plot No.8 and 9, Sector 22, Plot No.9, Sector 6-₹ 55.32 lakh and two cases at Nerul-Plot No.94, Sector 27 and Plot No.29, Sector 25- ₹ 48.58 lakh.

[46] Plot No.76, Sector 21,Kharghar allotted to Sir Shapurji Billimoria Foundation.

Allotment of Non-Social Plots

Inordinate delay in recovery of DPC, non-termination of land allotment by forfeiting EMD and premium of ₹ 35.82 crore.

2.1.17 The Company allotted two plots[47] to Shah Group Builders (Party), being highest bidder in May 2007 at ₹ 134.75 crore and the Party was to pay second instalment premium of ₹ 65.96 crore which was not paid by the Party till May 2009. The Party requested for grant of extension in payment of installment along with reduction of DPC from 16 to 9 *per cent***.** Accordingly, the Company proposed (July 2009) to the GoM to extend the time period in 13 cases including the instant case citing recession in the realty sector as the ground for extension. The GoM accorded (March/July 2010) approval for extension in time limit up to December 2010 without any reduction in the rate of DPC**.** Out of 13 cases, allotments were cancelled in six cases as instalments were not paid by allottees; in five cases instalments were paid during extended period. However, in respect of two plots (instant case) though instalments were paid, DPC amounting to ₹ 32.02 crore remained unpaid till date (September 2012). Resultantly, lease agreement was not executed and the Party could not start construction work. However, the Company has also not taken action as per the provisions of allotment letter to terminate the allotment by forfeiting the Earnest Money Deposit (EMD) and 25 *per cent* of the premium paid by the Party which worked out to ₹ 35.82 crore[48].

The Management stated that Show Cause Notice will be issued to the Party for recovery of the dues. However, the facts remained that the Company neither recovered the DPC of ₹ 32.02 crore nor terminated the allotment as per the provisions of allotment letter.

Transfer of Plots

2.1.18 As per LA the lessee shall construct the building within the stipulated time. In case of default in commencement and completion of construction, the Company, vide clause nine of Land Regulations, has the power to terminate the agreement or allow the lessee to continue on payment of ALP.

The Company entered (1995/1996) into agreements to lease two plots at Kharghar to Dewan Housing Finance Corporation Limited (DHFL) for construction of staff quarters for their employees and its Corporate Office. The Company received ₹ 4.82 crore as lease premium. As per the provisions of agreement, DHFL was to construct the building in four years and in case of default the DHFL was liable for ALP. However, we observed that DHFL did not start the construction work till December 2005. The Company had not collected ALP of ₹ 6.10 crore[49] from DHFL. Further, the Company allowed DHFL to transfer these plots by recovering the transfer charges of ₹ 6.66 lakh to private builders *viz.* Sai Shirdi Construction (SSC) and Green Valley Homes Developers (GVHD) at ₹ 11.05 crore in December 2005 thereby earning a profit of ₹ 6.23 crore.[50]

---

[47] Plot No.23-24 and 25-26 in Sector-20 at Kharghar.
[48] EMD of ₹ 2.84 crore *plus* ₹ 32.98 crore.
[49] LP of ₹ 3.24 crore x 115 *per cent* for six years (₹ 3.73 crore) **+** LP of ₹ 1.58 crore x 150 *per cent* for seven years (₹ 2.37 crore) = ₹ 6.10 crore.
[50] Sale price of two plots ₹ 11.05 crore (-) LP ₹ 4.82 crore.

After transfer of plots to SSC and GVHD, CIDCO allowed the extension of the construction period up to March 2012 and November 2008 respectively without charging any ALP which worked out to ₹ 10.12 crore.[51] The construction of building on the plot allotted to SSC was completed in March 2012 and that of GVHD in May 2012.

ALP of ₹ 16.22 crore was waived off unjustifiably.

Thus, non levy of ALP for two plots amounting to ₹ 16.22 crore (₹ 6.10 crore *plus* ₹ 10.12 crore) is in violation of Land Regulations and tantamounts to a favour to private builders.

The Management while accepting the fact stated that the plots were transferred as prescribed in the pricing policy by collecting transfer charges. It was also stated that considering the slack in the then real estate market, it was decided by BoD in September 1998 to extend the construction period without payment of ALP.

The reply is not tenable as the Board had taken conscious decision in September 1998 to grant extension in construction period after examining each case on merit. However, extending a similar concession in this case in 2005 without examining its merit was not justified as DHFL had earned profit of ₹ 6.23 crore.

2.1.19 As per the Land Regulations (clause 10) the intending lessee shall not transfer wholly or partly the rights, benefits and interest he derives in respect of the plot before execution of agreement to lease. We observed that in the following four, out of 116 cases, the Company granted permission for transfer of plots before execution of LA.

(₹in crore)

Sl. No.	Name of the allottee	Location	Lease premium paid	Name of transferee	Transfer charges recovered
1.	Metropolis Hotel	Nerul	282.40	Shishir Realtors Limited	1.15
2.	Atul Agrawal & Sons	Nerul	17.33	Sagarganga Developers Limited	0.03
3.	Lakshmiwadi Mines & Minerals Limited and Shah Group Builders	Kharghar	70.85	Shah Group Builders	0.04
4.	Lakshmiwadi Mines & Minerals Limited and Shah Group Builders	Kharghar	63.90		

Transfer of plots before execution of agreement to lease led to avoidance of payment of stamp duty.

Thus, grant of transfer of plots before execution of agreements was in violation of the Land Regulations. The transferee also avoided payment of stamp duty to the Government in this process.

The Management stated that notices were issued (December 2010) in first two cases for cancellation/recovery of stamp duty. In case of remaining two cases

[51]LP of ₹ 4.82 crore x 210 *per cent* for six years = ₹ 10.12 crore.

(Sl. No.3 and 4), transfer of lease to third party was not involved since plots were jointly allotted to Lakshmiwadi Mines & Minerals and Shah Group Builders and former had withdrawn before execution of agreement to lease.

The reply is not tenable as in first two cases, the Company did not initiate any concrete action other than issue of notices. In other two cases, change in the constitution of intending lessee by withdrawing its interest in the plots is regarded as transfer which was not permissible before execution of LA. The action of the Company was in violation of the Land Regulations and also deprived the Government from recovering its revenue as stamp duty and registration charges that would have arisen in case of execution of lease agreement with the original allottee and then transferring it to other party.

Incorrect Pricing of Plots

2.1.20 As provided in the Land Regulations, the company has been allotting plots to Co-operative Housing Societies (CHS), formed by the employees of Government Departments/Institutions and PSUs, at a specific price prevailing on the date of issue of letters of allotment. Twenty CHS[52] (18 at Kharghar and two at Nerul) formed by CIDCO employees, approached (2004-05) the Company for allotment of plots. In the Letter of Intent (LoI) issued (2004-05) by the Company, it was stipulated that EMD reckoned at 10 *per cent* of Lease Premium (LP) should be paid within 15 days from the date of its receipt and that the letter of allotment would be issued only after completing the formalities of the scheme. The balance amount was to be paid within two months from the date of allotment.

Allotment of plots to CHS of CIDCO employees at lower rate led to loss of ₹ 18.40 crore.

We observed that even though all these 20 CHS paid (2004-05) the EMD, a decision for allotment of plots was not taken till November 2008 for the reasons not on record. The Company issued letter of allotment in December 2008/January 2009 with the instruction to pay the balance LP at old rates in two instalments. The Societies paid the two instalments and executed Agreement to Lease during the period between November 2009 and May 2011. However, allotments should have been made at prevailing rate at the time of issuing allotment letter. This resulted in loss of revenue of ₹ 18.40 crore[53].

The Management stated that the allotments were made with the approval of the Board (December 2008).

The reply is not tenable as the Board Resolution did not direct the Company to allot plots at the old rates.

[52] Sangharsh, Nilkamal, Priyesh, Atharva, Ajinkya, Ashtavinayak, Sai Kripa, Parate, Siddivinayak, Shree Ganesh, Saraswati, Vighna Harta, Ekveera, Akash Deep, Sai Prasad, Akshay, Om Sai Savali, Nath Valley, Jai Ganesh and Shree Krupa.

[53] Difference in base rate of 2008-09 and 2004-05 multiplied by area allotted.

Incorrect Pricing of Additional FSI

2.1.21 As per the pricing policy, the Company can allot plots for residential with one Floor Space Index (FSI)[54] at the rate of 250 *per cent* and Residential-cum-Commercial (R+C) with 1.5 FSI at 450 *per cent* of reserve price. If an allottee of residential plot with one FSI applies for change of use to R+C with enhancement of FSI to 1.5, the applicant would be charged additional lease premium at the rate of 225 *per cent* of base rate (*i.e.* 50 *per cent* of 450 *per cent* of reserve price) for R+C on additional 0.5 FSI.

Enhancement of FSI coupled with change in use of land at lower ALP led to loss of revenue of ₹ 14.73 crore.

We observed that in allotment of additional FSI with change of usage from residential to R+C with 1.5 FSI, the Company should have charged at 450 *per cent* on entire area instead of 225 *per cent* for additional 0.5 FSI only. The Company would have thus generated higher revenue in three cases which worked out to ₹ 14.73 crore.[55]

The Management stated that the grant of additional FSI did not involve the allotment of additional land. The framework of policy was to charge the ALP to the extent of the area made available for additional construction and not on entire plot area.

The reply is not tenable as the entire area was available for use as R+C, therefore, ALP should have been charged on the entire area.

Allotment of Social Plots

2.1.22 As per the Land Pricing and Disposal Policy, 2007, the Company can allot a maximum of five Hectare (Ha) of land for setting up of sports complexes to the following categories of allottees through open tenders:

Category of Allottee	Rate
Public Charitable Trust formed by Navi Mumbai residents.	90 *per cent* of allotted area at 20 *per cent* of RP and balance 10 *per cent* area at 100 *per cent* of RP.
Other Public Charitable Trust/ Companies/ Private Bodies.	267 *per cent* of RP.

The Company invited (September 2008) tenders to lease a four Ha. land at Ulwe to 'Charitable Trusts (CT) formed by Navi Mumbai residents' for setting up of Sport Complex. The offer of Ramseth Thakur Samajik Vikas Mandal (RTSVM) at ₹ 4.09[56] crore was accepted by the Company being the only eligible bidder, out of two bidders. However, considering the poor response, the Company should have resorted to re-tendering.

[54] Floor space index, fixed by local authority, is the *ratio* of the combined gross floor area of all floors, excluding area specifically exempted, to the total area of the plot.
[55] Sai Shirdi Construction-₹ 5.18 crore, Raj Homes S.V Developers-₹ 1.48 crore at Kharghar and Neel Sidhi Developers-₹ 8.07 crore at Kalamboli.
[56] (₹ 3,645 per m^2 x 4,000 m^2 + ₹ 730 per m^2 x 36,000 m^2).

Allotment of excess plots for setting up of Sport Complex in violation of Land Pricing Policy.

We observed that on allotment of plot, RTSVM requested the Company to allot additional land of 2.7 Ha. for setting up an international standard Sport Complex and other amenities. The Planning Department of CIDCO had opined (February 2009) against allotment of additional land of 2.7 Ha. as this land was reserved for Mass Housing Scheme, Composite School Play Ground and Public Parking. Meanwhile, RTSVM approached (February 2009) the then Chief Minister who directed (May 2009) the Company to consider its request for allotment of 2.7 Ha. land. The Company allotted (November 2009) the additional land at ₹ 2.76 crore[57]. The work commenced in November 2011 and had reached the plinth level as on date (September 2012).

Thus, in all RTSVM was allotted 6.7 Ha. of land (4 Ha. in January 2009 and 2.7 Ha. in November 2009). This was in violation of land pricing policy which states that the Company can allot a maximum of five Ha. of land for setting up of Sports Complexes.

The Management stated that the plot was allotted as per the Land Pricing and Disposal Policy. Regarding additional excess area, it was stated that RTSVM had intention to develop world class international Sports Complex, hence, the Board decided to allot the additional plot. This was also approved by the Government.

The reply is not tenable as the scope was restricted by allotment being made on a single tender basis and the policy guidelines allowing an allotment of only 5 Ha. were flouted.

2.1.23 As per the Land Pricing and Disposal Policy, plots to be used for educational purpose under 'Research/Training Institute' could be allotted at base price of 300 *per cent* of RP and plots for 'Regional, social welfare' such as religious, spiritual, cultural activities *etc.* at 100 *per cent* of RP. Further, increase in FSI can be granted on payment of 50 *per cent*[58] of LP.

Loss of revenue of ₹ 4.92 crore on allotment of plot for Non-Conventional Education, Training and Research Centre and grant of additional one FSI at lower rate.

The Company allotted (July 2008) land admeasuring 3,000.25 m^2 in Kharghar to Sir Shapurji Billimoria Foundation with one FSI for setting up a 'Non-Conventional Education, Training and Research Centre' at 100 *per cent* of RP along with road frontage charges considering it for 'Regional, social welfare'.

We observed that the Company should have allotted land at the rate of 300 *per cent* of RP since it was meant for educational purposes and not for social welfare activities as envisaged in the policy. However, this was not done which resulted in loss of revenue of ₹ 3.04[59] crore. Further, the Company allowed (August 2009) to enhance the FSI from one to two FSI at 35 *per cent* of the LP paid instead of 50 *per cent* of LP. This resulted in loss of revenue of ₹ 1.88[60] crore. Thus, there was a total loss of revenue of ₹ 4.92 crore to the Company.

57 (₹ 3,645 per m^2 x 2,700 m^2 + ₹ 730 per m^2 x 24,300 m^2).
58 35 *per cent* prior to October 2008
59 ₹ 18,270 x 3,000.25m^2 *less* actual receipt of ₹ 2.44 crore = ₹ 3.04 crore.
60 50 *per cent* of ₹ 18,270 *i.e.* ₹ 9,135 x 3,000.25 m^2 *less* actual receipt of ₹ 0.86 crore = ₹ 1.88 crore.

The Management stated that the agreement to lease would be amended to incorporate educational activities for children with disabilities as well to categorise the same for social welfare. Besides, additional one FSI was allotted in accordance with the policy framed thereto.

The reply is not acceptable as amendment in intended purpose is an afterthought. Further, the price fixed for allotment of additional FSI was contrary to the decision taken (October 2008) by the BoD wherein the Board decided to allot additional FSI at 50 *per cent* of base rate.

Other cases

Fixation of Reserve Price

2.1.24 The Company has to recoup all its land development expenditure including administrative charges through allotment/sale of land. The Company had evolved a method whereby all the expenditure towards land development which was divided by the saleable area to derive the 'breakeven cost'. This is termed as RP of the land.

The Company revised the RP of Kharghar node in 2004 due to the introduction of SEZ and other schemes. Thereafter the RP was annually increased by percentages ranging between 10 and 25 *per cent* till 2011-12.

We observed that the RP was not scientifically calculated from 2004 onwards. The RP was to be updated from time to time when there are major changes in development of infrastructure. The project report for Kharghar node was prepared in 2004-05 and in case of other nodes, project reports were prepared prior to 2001-02. Due to not reviewing the upcoming projects, the accuracy of RP adopted could not be ascertained.

The Management stated that the matter of revising the Project Report of new nodes would be considered in future since very little saleable land was left in developed nodes.

Operation of Truck Terminal at Kalamboli on BOT basis

2.1.25 The Company awarded the Truck Terminal (TT) contract to S.R. Poojari at a premium of ₹ 25 lakh per annum from August 2002 to July 2004. The Company had not maintained/incurred any expenditure on TT during this period. The condition of TT deteriorated due to its non maintenance. The Company after a delay of 46 months decided (June 2008) to invite the tender for work of repair, maintain, operate and transfer the TT on Built, Operate and Transfer (BOT) basis at a project cost of ₹ 11.25 crore with the concession period of 20 years on land admeasuring 6.4 Ha.

The Company entered into an agreement (March 2009) with the highest bidder Thakur Infraprojects Private Limited (TIPL) for the project. The bidder agreed to pay ₹ 5.05 lakh every year for 20 years to the Company and the construction work completed in October 2010. TIPL earned annual revenue through parking fee in the year 2011-12[61] which was ₹ 2.43 crore.

We observed that CIDCO took 46 months in deciding to invite the tender for the above work. However, no revenue forecast was worked out before inviting tender. The only criteria for selection of the bidder was lowest quote of Viability Gap Funding. Further, the Company took 53 months in awarding the work on BOT basis. While the revenue receipt of TIPL for 2011-12 through parking fees was ₹ 2.43 crore, the Company's revenue from the project was ₹ 5.05 lakh only. Further, the Company's revenue of ₹ 5.05 lakh *per annum* would remain constant for next 20 years even though the receipts of TIPL would increase by 10 *per cent* every two years as per agreement.

Thus, there was inordinate delay in deciding to outsource the activity. Secondly, fixing the Company's revenue of ₹ 5.05 lakh for 20 years was not in the financial interest of the Company. The Company's revenue should have also increased in the proportion of increase in parking fee.

The Management stated that promoting privatisation in infrastructure projects also make the projects sustainable. Besides, it stated that revenue collected earlier through 'pay and park' was not adequate to maintain the facility.

However, the Company did not elaborate on the reasons for the time taken in awarding the work on BOT basis. Moreover, the Company did not work out any revenue maximisation model before inviting the tender for the above work.

Sale of apartments and shops

During the review period, the Company constructed 4,180 Nos. of apartments in three nodes[62]. Out of these, 352 apartments remained un-allotted. Besides, 17 apartments pertaining prior to 1998 though allotted were not handed over for want of unpaid premium. Similarly, 20 shops were handed over under hire purchase prior to 2000, however, balance payments were still pending for 11 years. The observations in detail are discussed below:

2.1.26 The apartments in the Seawoods Estate NRI Housing Complex at Nerul were constructed in 1997. Out of 1,134 apartments constructed, 611 apartments were kept under NRI Scheme of which 17 apartments were allotted to NRI during the period August 1993 to April 1998. The intended allottees had to pay 90 *per cent* of lease premium in six instalments till December 1995 or till the date of handing over the possession of apartments.

Non-recovery of balance lease premium from 17 apartments.

We noticed that 17 apartments, for which EMD and instalments were partly paid (5.72 lakh USD) by intending lessees, the balance amount of 6.24 lakh USD was not paid till date (September 2012). Considering the value of dollar at ₹ 53.02/USD (30 September 2012), the present value of 17 apartments worked out to ₹ 6.34 crore. Due to non payment of balance LP, the agreement

[61] Parking fee to be increased by 10 *per cent* every two years.
[62] Nerul-692 Nos., Kharghar-2,144 Nos. and Ulwe-1,344 Nos.

was not executed and these apartments remained idle since 1997. Navi Mumbai Municipal Corporation (NMMC) also raised demand of ₹ 3.50 crore towards property tax and maintenance charges to these 17 apartments.

We also observed that as per the provisions of the letter of allotment, if the payment of any instalment is delayed for a period of six months or more from the due date, the booking will stand cancelled and the EMD will stand forfeited. The Company had not revoked the allotment by forfeiting the EMD as per the provisions of the allotment.

Non-termination of allotment of apartments even after a lapse of 15 years of their allotment.

Non-termination of allotment even after a lapse of 15 years was detrimental to the financial interest of the Company and non-occupation of the apartments may also result in deterioration in the conditions of the apartments.

The Management while accepting the fact of non-payment of LP due to the outburst of gulf war and global recession, stated that there was no timely correspondence from CIDCO as well as from the allottees. Therefore, the issue remained unresolved for many years. Thereafter, due to non-availability of records, a suitable decision in this regard could not be taken. It was also stated that the Company has now proposed either to cancel or regularise these apartments as per the prevailing price.

2.1.27 The Company sold 23 shops at Nerul Railway Station through hire purchase by fixing the repayment period of seven years during the period from 1998 to 2001. However, out of 23 allottees, 20 allottees defaulted and the last payments were made by these allottees during the period from 1998 to 2001.

Non-recovery of balance lease premium of ₹ 1.05 crore.

We observed that out of ₹ 1.50 crore of lease premium due, the Company received only ₹ 0.45 crore (including ₹ 0.20 crore towards EMD) and the balance of ₹ 1.05 crore is still pending (September 2012). As per the provisions of the agreement, if the intending lessee fails to pay the outstanding instalments of the premium, the Company shall be entitled to terminate the agreement without any notice to the intending lessee and entire amount paid by the intending lessee shall stand forfeited to the Company. Reasons for not revoking the allotment even after a lapse of 11 years were not on record.

It was also observed that eight shops with area of 6,502.50 square feet valuing ₹ 78.03 lakh (minimum sale value in 2004 at the rate of ₹ 1,200 square feet) at Nerul station, constructed in June 1998, remained unsold as effective steps to dispose off the shops were not taken.

The Management stated that the notices were issued to the defaulters in 2004 and subsequently action was not taken for termination. It was also stated that the Company has decided to review all allotments and take suitable action on defaulters.

2.1.28 The Company constructed (October 2007) 252 Luxury apartments at Seawoods Phase-II part-II housing scheme at a cost of ₹ 85 crore. The scheme was for high net worth group people which was to be allotted through Book Building process[63] at ₹ 7,500 per square feet.

[63] Predetermined price band fixed by Company between ₹ 5,200 and ₹ 7,500 per square feet.

We observed that the Company allotted 220 apartments to successful bidders in March 2008 of which 17 apartments were surrendered by allottees. The Company forfeited EMD and 10 *per cent* of balance amount paid by allottees. Six apartments were cancelled due to non-payment of instalment amount. The balance 32 apartments still remained unsold. Reasons for non-allotment of the balance 32 apartments valuing ₹ 34.90 crore[64] were not on record. Further, 23 apartments (17 surrendered and six cancelled) valued at ₹ 25.85 crore[65] were also kept vacant/idle without any effective step to dispose the apartments.

The Management stated that out of 63 apartments kept for sale under reservation category earlier, only 12 apartments have been sold so far. In case, the company is unable to dispose off all these apartments, the same will be disposed off under general category by advertising through a separate scheme.

Inordinate Delay in Marketing and Allotment of Apartments

2.1.29 While approving (August 2009) the placement of work order on BGSC for construction of 1,344 apartments under the Mass Housing Scheme (MHS) at Ulwe, the Board gave directions for simultaneous marketing of the MHS in order to generate demand/revenue. However, it was noticed that the pricing of the MHS was finalised in February 2010. The MHS was advertised in July 2010 *i.e.*, almost one year from the Board's approval. The lottery drawal had taken place in December 2010 and the allotment letters were issued in September 2011.

Inordinate delay in marketing /allotment of apartments led to loss of interest of ₹ 14.13 crore.

Out of 1,344 applicants, the allotment letters were issued to 693 applicants in September 2011 and 354 applicants in March 2012 only. Allotment to the remaining applicants (297) were kept pending (September 2012) due to disputes and non-submission of required documents. The Company could recover ₹ 81.55 crore only so far (September 2012) from the 1,047 applicants. It is yet to recover ₹ 31.84 crore from the 693 applicants and from pending allotments to 297 applicants. Thus, the delay in finalisation of allotment by more than 15-19 months resulted in loss of interest of ₹ 14.13 crore.

The Management stated that delay was due to finalisation of a bank for sale of applications, collection of registration fees *etc.* as it was outsourced. The verification of documentary proofs of those who were selected on drawal of lottery was also delayed.

The reply is not tenable as Company could have avoided the abnormal delay by finalising the marketing scheme along with award of work order as per Board's directives.

Financial Management

2.1.30 The Company has not finalised its accounts from 2009-10 onwards, in the absence of which the Government's investment in the Company remains

[64] ₹ 7,500 per square feet x 46,527 square feet.
[65] ₹ 7,500 per square feet x 34,467 square feet.

outside the scrutiny of the State Legislature. Further, delay in it may also result in risk and fraud and leakage of public money.

The financial position drawn on the basis of audited accounts up to 2008-09 and provisional accounts from 2009-10 to 2011-12 is given below:

Financial position ***(₹ in crore)***

(A) Sources of funds						
Sl. No.	**Shareholders' funds**	**2007-08**	**2008-09**	**2009-10**	**2010-11**	**2011-12**
1	Authorised capital	5.00	5.00	5.00	5.00	5.00
2	Issued, subscribed and Paid-up capital	3.95	3.95	3.95	3.95	3.95
3	Reserves and surplus	64.52	62.38	59.74	65.41	71.04
(B)	**Loan funds**					
4	Secured loans	93.07	8.18	104.20	161.56	61.53
5	Unsecured loans	169.32	138.17	79.87	31.26	25.55
	Total:- [(2 to 5)]	**330.86**	**212.68**	**247.76**	**262.18**	**162.07**
	Application of funds					
(C)	**Fixed assets**					
6	Net block	15.35	22.52	14.93	15.09	14.57
7	Investments	201.81	214.71	201.90	201.90	201.90
8	Fixed deposits	3,546.22	4,782.91	5,758.87	5,627.77	5,833.87
9	Other current assets	754.37	852.49	850.03	904.16	928.88
10	Loans and advances	905.50	996.89	835.14	939.74	1,035.50
11	Current liabilities and provisions	5,092.39	6,656.84	7,413.11	7,426.48	7,852.65
12	Net current assets (8+9+10-11)	113.70	(-) 24.55	30.93	45.19	(-)54.40
	Total:- [6+7+12]	**330.86**	**212.68**	**247.76**	**262.18**	**162.07**

It would be seen from above that despite increase in investment of surplus funds in Fixed Deposits (FDs) from ₹ 3,546.22 crore (2007-08) to ₹ 5,833.87 crore (2011-12), the secured loans also increased from ₹ 93.07 crore in 2007-08 to ₹ 161.56 crore in 2010-11 due to availing of short term overdraft facilities against the FDs. This has also resulted in increase in incidence of interest expenses from ₹ 1.79 crore (2007-08) to ₹ 7.06 crore (2010-11).

Though, the unsecured loan liabilities reduced from ₹ 169.32 crore (2007-08) to ₹ 25.55 crore (2011-12) the current liabilities and provisions of the Company increased from ₹ 5,092.39 crore (2007-08) to ₹ 7,852.65 crore (2011-12). This was mainly due to non-payment of Government dues of ₹ 2,920.43 crore (2011-12) and liabilities on account of partial receipts of lease premium where agreements to lease were pending was ₹ 4518.15 crore (2011-2012).

Investment of Surplus Funds

2.1.31 The GoM in its guidelines (March 2006) for investment of surplus funds stipulated that the investment for a period up to three years should be made only with BoD's approval. For investment up to one year with prescribed ceiling limit may be delegated by BoD. In addition, there should be a proper system of automatic internal reporting to BoD at its next meeting in all cases and that investment decisions should follow proper commercial evaluation.

We observed that BoD passed (July 2006) a Resolution adopting the GoM guidelines, but did not specify the ceiling limit, up to which investment decisions could be taken by delegated authority. The Chief Account Officer (CAO) takes the investment decisions with the approval of the VC&MD. There was no regular system of submission of quarterly information to BoD on investments in FDs. Deficiencies noticed in investment of surplus funds are discussed below:

Investment in FDs without BoD's approval, avoidance of investment for longer terms and delay in investment in FDs.

- In 243 cases (₹ 9,097.29 crore), investments for more than one year were taken by the CAO with the approval of VC and MD but without BoD's approval.

- Term deposits up to one year which were renewed for further one year increased from ₹ 1,002.01 crore (2008) to ₹ 5,628.05 crore (2012). These investments were made without assessing possibility of investment for more than one year to generate higher returns.

- In 17 cases of matured FDs (₹ 665.60 crore) timely action was not taken to reinvest. This has resulted in loss of interest of ₹ 88.35 lakh.

The Management while accepting the facts, stated that quarterly information on investments made in FDs was submitted with effect from August 2012 to the BoD. Further, CIDCO stated that deposits up to one year were made due to emergency requirement of funds and reinvestment of matured FDs were made, after getting administrative approval of VC&MD.

However, the fact remained that by virtue of extending the term deposits for further periods, the funds were available for investment on long-term basis and there was delay in getting administrative approval for re-investment of matured FDs.

Working Results

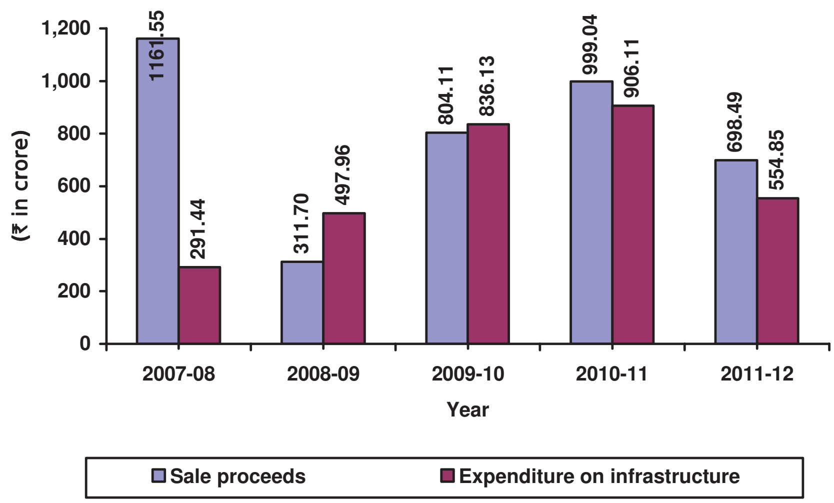
The details of working results of Navi Mumbai Project and New Town Projects drawn on the basis of audited accounts up to 2008-09 and provisional accounts from 2009-10 to 2011-12 is summarised below:

Navi Mumbai Project ***(₹in crore)***

Particulars	2007-08	2008-09	2009-10	2010-11	2011-12
Receipts					
Sale proceeds *etc.*	1,161.55	311.70	804.11	999.04	698.49
Interest received	319.75	558.16	536.44	479.83	567.01
Other receipts[66]	116.95	103.77	94.63	132.94	138.45
Total:-Receipts	**1,598.25**	**973.63**	**1,435.18**	**1,611.81**	**1,403.95**
Expenditure					
Expenditure on infrastructure/Projects	291.44	497.96	836.13	906.11	554.85
Administrative and employees cost	123.28	124.39	115.08	153.87	141.68
Repairs and maintenance	59.37	89.94	130.30	100.80	95.51
Other expenses	51.05	31.07	43.96	75.81	99.48
Total:-Expenditure	**525.14**	**743.36**	**1,125.47**	**1,236.59**	**891.52**
Excess of receipts over expenditure for the year	1,073.11	230.27	309.71	375.22	512.43
Total balance amount payable to the GoM	1,464.00	1,694.27	2,032.78#	2,408.00#	2,920.43#
# As per provisional accounts.					

[66] Other receipts includes receipts pertaining to projects, water charges Hetwane, receipts from Navi Mumbai SEZ *etc.*

During the last five years ending 2011-12, the sale proceeds *vis-a-vis* expenditure on infrastructure of NMP is given in graph below:



It would be seen from above that while the expenditure on infrastructure increased from ₹ 291.44 crore in 2007-08 to ₹ 554.85 crore in 2011-12, the sale proceeds realised on allotment of plots/apartments decreased from ₹ 1,161.55 crore to ₹ 698.49 crore during the same period.

The Company works as an agent of GoM for NMP. The Company prepares its accounts showing the excess of receipt over expenditure as payable/due to the Government. The amount due to the Government was ₹ 1,464 crore in 2007-08 which increased to ₹ 2,920.43 crore in 2011-12. However, the same was not remitted to the Government.

The Management clarified that the amount shown as payable was not final and would be settled at the end of the Project.

The reply is not tenable as surplus funds were retained without obtaining any approval from GoM.

New Town Projects ***(₹in crore)***

Particulars	2007-08	2008-09	2009-10	2010-11	2011-12
Total Income	75.04	57.03	54.74	50.92	49.74
Total expenditure	73.92	59.17	49.02	45.23	44.09
Profit/(Loss) for the year	1.12	(2.14)	5.72	5.69	5.65
Accumulated profit	64.52	62.38	68.10	73.79	79.44

It would be seen from above that profit of the Company from NTPs increased from ₹ 1.12 crore (2007-08) to ₹ 5.65 crore (2011-12) except loss of ₹ 2.14 crore incurred in 2008-09.

Recovery Position of Service and Water Charges

2.1.32 As per Land Regulations, 'the lessee shall, during the lease period, pay service cost to the Company towards maintaining civic amenities such as roads, water, drainage and conservancy for the demised land'.

The total outstanding Service Charges (SC) and Water Charges (WC) of Non-NMMC nodes increased from ₹ 83.22 crore and ₹ 16.23 crore (March 2008) to ₹ 141.50 crore and ₹ 33.20 crore (March 2012) respectively.

We observed that recovery position of the Company towards SC ranged between 6.84 and 10.80 *per cent* only during review period. The recovery performance towards WC reduced from 71.47 *per cent* (2007-08) to 63.03 *per cent* (2011-12).

Similarly, the total outstanding SC and WC of NMMC nodes increased from ₹ 26.24 crore (March 2008) to ₹ 30.51 crore (March 2012). The recovery position of the Company as against the total demand was between 0.84 and 2.63 *per cent*. Though, the nodes were handed over to NMMC prior to 1995, the balance in arrears even after a lapse of 18 years, towards SCs and WCs was ₹ 30.51 crore (March 2012).

It was noticed that the Company has not been raising any individual demand for payment. There was no effective system to issue notices to defaulters and monitor its recovery regularly.

The Management accepted the lapses in not raising demand in time and attributed lack of computerised system as the reason for the same. Further, it stated that they have started (October 2012) issuing quarterly bills to lessees to recover the dues speedily.

Monitoring System

2.1.33 The Company plays an important role in the development of the NMP and NTPs in the State. For such an organisation, to succeed in operating economically, efficiently and effectively, there should be documented Management systems of operations to achieve targets. An integrated and efficient Management Information System (MIS) would enable effective monitoring of activities by the Top Management. Further, there has to be a system to report on achievement of targets both in physical as well as financial terms. The achievements need to be reviewed to address deficiencies and to set targets for subsequent years.

We observed that:

- The MIS in the Company was inadequate and ineffective although SAP[67] had been introduced in December 2004 at a cost of ₹ 2.77 crore to integrate various functions.

[67] System Application & Products.

- No system was in place to analyse the delay in completion of projects and recover CFD in case of delay attributed to the contractors, so as to ensure timely completion of projects.

- Periodical performance reports regarding allotments, pending collection of instalments *etc.,* were not generated and submitted to Top Management for ascertaining timely disposal.

- No proper system existed to monitor the land developed and sold; land available for development and saleable at a given point of time. Besides, the applications related to sale of plots/apartments received, cleared and pending for allotment were also not maintained and submitted to Top Management to ascertain timely disposal of cases.

- No mechanism to ensure timely action against the intending lessees for non-compliance of provisions of the Letter of Allotment, Lease Agreement and Land Regulations.

- Irregular in submission of quarterly information on the investments made in Fixed Deposits to the BoD, in line with the Government's directions.

- No adequate system to monitor demand of service charges and water charges from lessees, dues outstanding and their timely collection.

- The Internal Audit of the Company was carried through Chartered Accountant firms for the period up to 2005-06 only.

Acknowledgement

2.1.34 Audit acknowledges the co-operation and assistance extended by different levels of the Management at various stages of conducting of the Performance Audit.

Conclusions

- **The Company did not have a system of preparing comprehensive Corporate/Annual Plan. The annual Budget estimates were being prepared only in financial terms and physical progress was not linked thereto.**

- **Details of land acquired, developed area, balance saleable *etc*. were not updated.**

- **The Company has not formulated any Contract Management Manual to be followed at various levels of authority with regard to tendering and execution of work/supply orders.**

- **In some cases, works were awarded on single tender basis which lacked transparency.**

- **There was no system in place for timely recovery of Delayed Payment Charges (DPCs) and Miscellaneous Charges (MCs) along with the instalment dues.**

- **Compliance with Land Pricing Policy (LPP) and Land Regulations (LRs) relating to fixation of price, additional FSI, allotment/transfer of plots *etc.* was not ensured.**

- **The apartments/shops remained un-allotted for longer periods and there were no concerted efforts for their allotments.**

- **Information on investments in Fixed Deposits (FDs) was not regularly submitted to Board of Directors (BoD). Instances of delays in re-investment of matured FDs were observed.**

- **The annual accounts of the Company and project accounts have been finalised and audited only upto 2008-09.**

- **Recovery of the dues such as Service Charges (SCs), Water Charges (WCs) *etc*. from lessees was not monitored.**

Recommendations

- **The Company may frame a comprehensive Corporate/Annual Plan in order to fix target and achievement in financial as well as physical terms including finalisation of annual accounts of the Company and project accounts and audit thereof in time to enable effective monitoring of the activities by top management;**

- **Land record details may be updated and maintained properly;**

- **Formulate Contract Management Manual for various levels of authority with regard to tendering and execution of work/supply orders; to ensure award of contract in a transparent manner.**

- **Formulate proper system to recover DPCs and MCs along with the instalment dues, to avoid delay in receipt of DPCs and MCs;**

- **Ensure compliance of provisions of the LPP/LRs in allotment of land and its utilisation with regard to the activity related to fixation of price, allotment of land, additional FSI and transfer of plots;**

- **Un-allotted apartments/shops should be disposed off in a time bound manner;**

- **Ensure regular submission of information to the BoD on investments in FDs;**

- **Pursue vigorously the recovery of outstanding dues such as SCs and WCs; and**

- **Government should ensure that the amounts due to them are received in time.**

ECONOMIC SECTOR
INDUSTRIES, ENERGY AND LABOUR DEPARTMENT

2.2 Functioning of Maharashtra State Electricity Transmission Company Limited

Executive Summary

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 required adequate and timely investment besides efficient and coordinated action to develop a robust and integrated power system for the country.

During 2007-08 energy transmitted by the Company was 89,189.88 MUs which increased to 1,12,638.67 MUs in 2011-12, i.e. an increase of 26.29 per cent during a span of five years. As on 31 March 2012, the Company had transmission network of 39,765 Circuit kilometers (Ckm) and 557 Sub-stations (SSs) with installed capacity of 91,444 MVA.

Planning and Development

Against the targeted construction of 101 Extra High Tension (EHT) SSs and laying of 6,858 Ckm of EHT lines, the Company constructed 71 EHT SSs and 4,138 Ckm EHT lines during the five year period (2007-12) (achievement of 70 and 60 per cent respectively). The transmission capacity added was 33,731 MVA as against 39,362 MVA during the five year period ending 2007-12.

Project management

The Company did not allot the packages to different contractors which culminated in abnormal delays in execution of the projects. Delays were noticed in 28 cases with time overrun ranging from two to 50 months leading to cost overrun of ₹ 93.73 crore in 16 projects. The Company incurred an expenditure of ₹ 111.42 crore on incomplete interlink line projects.

Mismatch between Generation capacity and Transmission facilities

The Company had created its transmission network in excess of availability of generation. There was no requirement of creating additional capacity during 2008-09 to 2011-12.

Operation and Maintenance

The Company is adopting predictive/ proactive maintenance practices with modern state of art testing and measuring equipments so that functionality and health of various EHV equipment and transmission lines could be monitored. As a result, the transformer failure rate decreased from 2.68 per cent (35 Nos.) to 1.20 per cent (17 Nos.) during review period.

Transmission losses

The transmission losses remained within the permissible limits prescribed by MERC except during 2008-09 when it was marginally higher.

Infrastructure for load monitoring

The Company did not evaluate its requirement before placing the order of RTU resulting in abnormal delays.

Disaster Management

As a part of Disaster Management programme mock drill for starting up generating stations during black start operations was not carried out by the Company. The Company had not taken concerted efforts with Home Department, GoM to declare its EHV SSs as "Prohibited Area". Further, in close vicinity of its Load Despatch Centre, Kalwa, high rise buildings were permitted by town planning authorities exposing high risk to the strategic installation of the Company.

Financial management

The Debt Equity Ratio increased from 0.92:1 to 2.72:1 during 2007-12 due to increase in borrowings from ₹ 2,486.91 crore (2007-08) to ₹ 6,765.91 crore (2011-12). The percentage of Return on Capital Employed increased from 5.78 per cent in 2007-08 to 10.08 per cent in 2011-12.

Conclusions and Recommendations

Plans for capacity additions/augmentation were not prepared by the Company keeping in view the anticipated availability of power/peak demand and existing transmission capacity resulting in excess transmission capacity over the years. Even though year wise plan was prepared for addition of SSs and lines, there were delays in commercial commission of SSs and lines due to delay in completion of associated lines, delays in land acquisition and RoW problems. The Company had not provided BBPP at all SSs. Due to predictive and proactive measures transmission losses remained within MERC norms except for 2008-09. Installation of ABT meters, communication network and Remote Terminal Unit's was delayed as a result the intended benefits were not derived. Audit has made six recommendations which include preparing plans for capacity additions/augmentation keeping in view the peak demand and existing transmission capacity; ensuring completion and commercial commissioning of SSs as per schedule by proper planning of the activities relating to land acquisition, construction of associated transmission lines, civil works/electrical works; ensuring installation of BBPP at all SSs for safety of the equipments; and pursue timely installation of ABT meters, communication network and RTUs for monitoring efficiency of transmission system.

Introduction

2.2.1 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 required adequate and timely investment besides efficient and co-ordinated action to develop a robust and integrated power system for the country. It also, *inter-alia* recognised the need for development of National and State Grid with the co-ordination of Central/State Transmission Utilities. Transmission of electricity and Grid operations in Maharashtra are managed and controlled by Maharashtra State Electricity Transmission Company Limited (Company) which is mandated to provide an efficient, adequate and properly co-ordinated Grid management and transmission of energy. The Company was incorporated in May 2005 under the Companies Act, 1956.

2.2.2 The Management of the Company is vested with Board of Directors (BoD) comprising five Directors appointed by the State Government. 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 Director (Finance), Director (Projects), Director (Operation), Executive Director (Human Resources) and Company Secretary. The Company has seven zones and 29 Circle Offices headed by Chief Engineers and Superintending Engineers respectively. During 2007-08 energy transmitted by the Company was 89,189.88 MUs which increased to 1,12,638.67 MUs in 2011-12, *i.e.* an increase of 26.29 *per cent* during a span of five years. As on 31 March 2012, the Company had transmission network of 39,765 Circuit kilometers (Ckm) and 557 Sub-Stations (SSs) with installed capacity of 91,444 MVA. The turnover of the Company was ₹ 2,314.74 crore in 2011-12. The Company had 12,686 employees as on 31 March 2012.

Scope and Methodology of Audit

2.2.3 The Performance Audit conducted during March to May 2012 covers performance of the Company during 2007-08 to 2011-12. Audit examination involved scrutiny of records of different wings at the Head Office (HO), State Load Despatch Centre (SLDC), five Zones[68] and 20 Circles.

The Company constructed 71 SSs (capacity: 5,727 MVA) and 217 lines (capacity: 4,138 Ckm) as well as augmented existing transformation capacity by 28,004 MVA during 2007-12.

The methodology adopted for attaining audit objectives with reference to audit criteria consisted of explaining audit objectives to top management, scrutiny of records at HO and selected units such as review of Agenda notes and minutes of Company, annual reports, accounts, loan files, physical and financial progress reports, scrutiny of records relating to project execution, interaction with the auditee personnel, analysis of data with reference to audit criteria, raising of audit queries, discussion of audit findings with the Management and issue of draft review to the Management/Government for comments.

Audit objectives

2.2.4 The objectives of the performance audit were to assess whether:

- ❖ Perspective Plan was prepared in accordance with the guidelines of the National Electricity Policy (NE)/Plan and Maharashtra Electricity Regulatory Commission (MERC) and assessment of impact of failure to plan, if any;
- ❖ The transmission system was developed and commissioned in an economical, efficient and effective manner;
- ❖ Operation and maintenance of transmission system was carried out in an economical, efficient and effective manner;
- ❖ Effective failure analysis system was set up;
- ❖ Disaster Management System was set up to safeguard its operations against unforeseen disruptions;
- ❖ Efficient and effective energy conservation measures were undertaken in line with the NE Plan and establishment of Energy Audit System;
- ❖ Effective and efficient Financial Management system existed with emphasis on timely raising and collection of bills and filing of Aggregate Revenue Requirement (ARR) for tariff revision in time;

[68] Aurangabad, Amravati, Karad, Pune and Vashi.

- ❖ Efficient and effective system of procurement of material and inventory control mechanism was in place; and
- ❖ Monitoring system was in place for reviewing existing/ongoing projects, enabling corrective measures to overcome deficiencies, if any and adequacy of Internal Audit.

Audit criteria

2.2.5 The source of audit criteria for assessing the achievement of the audit objectives were:

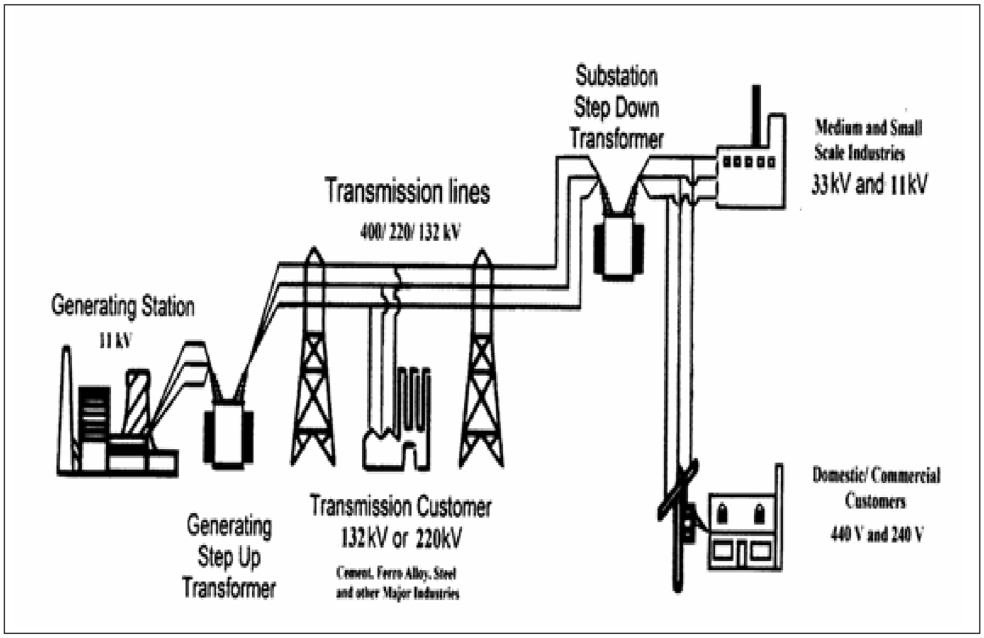
- ❖ Provisions of National Electricity Policy/Plan and National Tariff Policy;
- ❖ Perspective Plan and Project Reports of the Company;
- ❖ Directions from State Government/Ministry of Power (MoP);
- ❖ Norms/Guidelines issued by MERC/Central Electricity Authority (CEA);
- ❖ Standard procedures for award of contracts with reference to principles of economy, efficiency and effectiveness;
- ❖ Manual of Transmission Planning Criteria (MTPC); and
- ❖ ARR filed with MERC for tariff fixation, Circulars, Manuals and Management Information System (MIS) reports.

Brief description of transmission process

2.2.6 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 with a view to reduce the loss in transmission and to increase efficiency in the Grid. Sub-stations (SSs) 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 SSs at the generating stations use transformers to increase the voltages for transmission over long distances.

Transmission lines carry extra high voltage electric power. The step down transmission SSs thereafter decreases 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:



Audit findings

2.2.7 We explained the audit objectives to the Company during an 'Entry Conference' held on 27 February 2012. The audit findings were reported to the Company and the State Government in August 2012 and discussed in an 'Exit Conference' held on 22 October 2012 which was attended by the Chairman and Managing Director and Principal Secretary (Energy) from State Government. The views expressed by the Management in the meeting and their replies received on 19 October 2012 have been considered while finalising the performance audit report. The audit findings are discussed in subsequent paragraphs.

Planning and Development

National Electricity Policy/Plan and planning by Company

2.2.8 The Central Transmission Utility (CTU) and State Transmission Utilities (STUs) have the key responsibility of network planning and development based on the NE Plan in co-ordination with all concerned agencies. In Maharashtra, the Company, based on its load and evacuation, made its own plan with regard to transmission network.

The Company's transmission network at the beginning of 2007-08 consisted of 486 Extra High Tension (EHT) SSs with a transmission capacity of 57,713 MVA and 35,627 Ckm of EHT transmission lines. The transmission network as on 31 March 2012 consisted of 557 EHT SSs with a transmission capacity of 91,444 MVA and 39,765 Ckm of EHT transmission lines.

Transmission network and its growth

2.2.9 The transmission capacity of the Company at EHT level during 2007-08 to 2011-12 is given below:

Sl. No.	Description	2007-08	2008-09	2009-10	2010-11	2011-12	Total
A. Number of Sub-stations (Numbers)							
1	At the beginning of the year	486	498	512	517	533	486
2	Additions planned for the year	14	21	11	31	24	101
3	Added during the year	12	14	05	16	24	71
4	Total sub-stations at the end of the year **(1+3)**	498	512	517	533	557	557
5	Shortfall in additions **(2-3)**	02	07	06	15	0	30
B. Transformers capacity (MVA)							
1	Capacity at the beginning of the year	57,713	61,530	66,118	73,791	82,619	57,713
2	Additions/augmentation planned for the year	3,842	8,037	8,108	11,300	8,075	39,362
3	Capacity added during the year	3,817	4,588	7,673	8,828	8,825	33,731
4	Capacity at the end of the year **(1+3)**	61,530	66,118	73,791	82,619	91,444	91,444
5	Shortfall in additions/augmentation	25	3,449	435	2,472	(-) 750	5,631
C. Transmission lines (Ckm)							
1	At the beginning of the year	35,627	36,287	36,717	37,134	38,069	35,627
2	Additions planned for the year	1,211	847	647	2,487	1,666	6,858
3	Added during the year	660	430	417	935	1,696	4,138
4	Total lines at the end of the year **(1+3)**	36,287	36,717	37,134	38,069	39,765	39,765
5	Shortfall in additions **(2-3)**	551	417	230	1,552	(-) 30	2,720

The Company constructed 71 as against 101 EHT SSs and 4,138 Ckm as against 6,858 Ckm lines and transmission capacity added was 33,731 MVA as against 39,362 MVA during 2007-12.

Against the targeted construction of 101 EHT SSs and laying of 6,858 Ckm of EHT lines, the Company constructed 71 EHT SSs and 4,138 Ckm EHT lines during the five year period (2007-12) (achievement of 70 and 60 *per cent* respectively). The transmission capacity added was 33,731 MVA as against 39,362 MVA planned during the five year period ending 2007-12.

We observed that Engineering Procurement and Commission (EPC) contract for 25 SSs alongwith associated lines was awarded (2009) to a single contractor *i.e.* ECI Shanghai with scheduled dates of completion during December 2009-2011. Since progress of work was behind schedule, the contractor was instructed to improve the progress and the works were to be commissioned by March 2012. However, no improvement was observed during the extended period and the progress achieved by the contractor was 60 *per cent* only. The work was terminated (May 2012) due to slow progress of work. The contractor referred the matter to the arbitrator who gave the opportunity to the contractor to complete the work by March 2013. Thus, the Company could not complete execution of transmission network as planned. Had these works been awarded to various contractors the delay could have been minimised.

The particulars of voltage-wise capacity additions planned, actual additions, shortfall in capacity, *etc*., during review period are given in the **Annexure-7.**

Project management of transmission system

2.2.10 A transmission project involves various activities from concept 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 task force on transmission projects constituted by GoI recommended (July 2005) the following remedial actions to accelerate the completion of Transmission systems.

- ❖ Undertake various preparatory activities such as surveys, design and testing, processing for forest and other statutory clearances, tendering activities *etc*. in advance/parallel to project appraisal and approval phase and go ahead with construction activities on Transmission Line Project approval;
- ❖ Break-down the transmission projects into clearly defined packages so as to implement the same with least co-ordination/interfacing as also cost effective procurement; and
- ❖ Standardise designs of tower fabrication so that 6-12 months can be saved in project execution.

2.2.11 We observed that the Company had broken down the transmission projects into packages. However, the Company did not allot the packages to different contractors which culminated in abnormal delays in execution of the projects. As a result, the Company failed to execute several SSs including Lines in time during 2007-12. The particulars of SSs constructed, delays in construction leading to time and cost overrun are given below.

Capacity in KV	Total no. SSs constructed	No. test checked by Audit	Delay in construction (Numbers)	Time overrun[69] (range in months)	Cost overrun (₹ in crore) (No. of projects)
400	4	4	2	26 to 32	8.87 (2)
220	36	21	17	02 to 50	59.01 (7)
132	28	9	9	04 to 27	19.45 (6)
110	3	1	--	--	6.40 (1)
Total	**71**	**35**	**28**	**02 to 50**	**93.73 (16)**

Delays in 28 cases with time overrun ranging from two-50 months and cost overrun of ₹ 93.73 crore.

It could be seen from the above that delays were noticed in 28 cases with time overrun ranging from two to 50 months, of which cost overrun of ₹ 93.73 crore was noticed in 16 projects. We observed that the delays were mainly attributed for time taken in obtaining Statutory clearances (3 cases), Right of Way (RoW) (9 cases), Land acquisition (2 cases) *etc*.

[69] Test checked in audit.

The Management stated (October 2012) that the project was stuck-up at various levels such as revenue authority, Court of laws, RoW problem *etc*.

Irregularities noticed in award of contract, idling and non-utilisation of assets are discussed below:

Idling of Sub-stations

2.2.12 The Company awarded (June 2008) contract to ABB Limited for the establishment of 220/132/33 KV Balapur SS for ₹ 41.46 crore on turnkey basis. The SS was proposed for evacuation of power from 2 x 250 MW expansion of Paras Thermal Power Station. The SS was constructed and equipments were installed and test charged on 31 December 2011.

We observed that although the SS was constructed and test charged (December 2011), the proposed outgoing transmission line was not operational from the SS till March 2012 resulting in idling of Balapur SS.

The Management stated that the work for connecting lines was in progress and likely to be commissioned soon so that the load on 220 KV Balapur can be taken.

However, the facts remained that the SS remained idle due to delay in awarding contracts for construction of transmission lines.

2.2.13 The existing Chandrapur SICOM 220/66 KV Transmission SS with transformer capacity of 50 MVA was feeding power to Chandrapur Taluka through 66/11 KV Shashtri Nagar Distribution SS. Maharashtra State Electricity Distribution Company Limited (MSEDCL) proposed to convert Shashtri Nagar SS into 33/11 KV SS as envisaged in NE Plan, 2003. In line with the MSEDCL's proposal the Company created (February 2008) additional 220/33 KV line/SS departmentally with 50 MVA transformer capacity in its existing Chandrapur SICOM 220/66 SS at a total cost of ₹ 2.91 crore. However, no formal agreement was entered into between MSEDCL and the Company for this purpose. MSEDCL had not created evacuation arrangements so far in its Shashtri Nagar SS.

The Management confirmed (October 2012) that asset remains idle and stated that the same would be put to use in due course.

Award of work without land acquisition

2.2.14 PERT/CPM chart for various activities helps in timely execution of any project. Land acquisition being a time consuming process, the time required cannot be estimated with any degree of certainty. In the absence of control over acquisition date, the completion of project in time becomes uncertain and may lead to escalation payments to the contractors and blockage of funds.

The Company awarded (June 2009) construction work without prior acquisition of land by inviting tender to Cobra Limited for ₹ 17.27 crore for

220 KV SS at Kudus. The possession of 7.46 acres land was taken over in September 2009 and the same was encroached completely at that point of time. Therefore, the land could not be cleared for construction till October 2010. We observed that though the Company was aware of non availability of land it released interest free mobilisation advance of ₹ 1.55 crore (September 2009) and had to incur interest loss of ₹ 31.96 lakh (the project was financed by Power Finance Corporation at the rate of 11.75 *per cent*).

Non recovery of cost of land

2.2.15 The Company was in search of land for construction of 220 KV SS in and around Muddal Thittha for catering the load of Kagal, Budhargad and Radhanagari Talukas since 2003-04. Dudhaganga Vedganga Sahakari Sakhar Karkhana Limited (DVSSK) offered the Company a plot admeasuring 34,900 square metres in their premises for construction of SS. This would have benefited DVSSK for evacuation of power for its 20 MW Bagasse based Captive Power Plant (CPP) in their sugar factory at Bidri. This land was acquired by DVSSK from Shri Pandurang Vasant Shetty for setting up of cooperative sugar factory for social purpose. The Company agreed with the proposal and entered (October 2008) into a Lease Agreement (LA) for 99 years. In the LA, DVSSK misrepresented the fact that they were the absolute owner of the land having marketable title. Consequently, a writ petition (No.20/2009) was filed (December 2008) with Bombay High Court by Shri Pandurang Vasant Shetty, challenging the change in use of the land. On the basis of the decree passed (February 2009) by the High Court, the Company paid (October 2010) compensation of ₹ 97.18 lakh. The proposed SS was constructed in January 2012. However, the Company did not recover the amount from DVSSK.

The Management stated (October 2012) that appropriate action for recovery of cost of land from DVSSK would be initiated.

Excess payment to contractors

Overpayment of ₹ 1.59 crore disregarding actual work done.

2.2.16 The EHV Construction Circle, Amravati invited quotations on 5 November 2009 for 'Emergency Restoration System' (ERS) on Collapse of a tower of 400 KV Parli Circuit II and III DC line on 4 November 2009. The Letter of Intent (LoI) was issued on 6 November 2009 to the two Contractors and the system was restored on 10 November 2009. However, the estimates were prepared belatedly on 19 November 2009 for ₹ 0.25 crore. The Contractors submitted (December 2009) the total claim for ₹ 2.12 crore. We observed that the concerned Division recommended payment of ₹ 0.12 crore on the basis of actual work done by the Contractors. Subsequently, the Contractors revised their claim to ₹ 1.79 crore. The entries in the measurement book were made after receipt of invoice from the Contractors. The concerned Circle Office in March 2010 approved the work order for ₹ 1.74 crore and payment of ₹ 1.71 crore were made. Thus, overpayment of ₹ 1.59 crore was made to the contractors. Subsequently, the Company referred (June 2010) the irregularities in award/execution of work to the Vigilance Officer for investigation. The enquiry report concluded that there was a connivance between Superintendent Engineer and the contractors which led to preparation of a manipulated work order and loss of ₹ 1.59 crore to the Company.

The Management stated (October 2012) that action has been initiated against the erring officials.

Incomplete transmission lines for want of statutory clearance/ROW

2.2.17 In Aurangabad circle, nine works contract for interlink lines costing ₹ 465.94 crore are yet to be completed for want of clearance from forest department and land acquisition. The Company has incurred an expenditure of ₹ 111.42 crore on these incomplete projects till date as detailed below:

(₹ in crore)

Sl. No.	Name of the Scheme	Name of executing agency/ contractor	Awarded cost	Actual cost incurred	Work order No. and date	Scheduled date of completion	Reason for non completion
1	132 KV Padegaon Sawangi Pishore LILO Pt Line (42.608 Km)	Bajaj Electricals, Mumbai	14.70	1.41	T-801 A/17057 & 17058 24.12.08	24.12.09	Pending with Principal Chief Conservator of Forest, Nagpur
2	132 KV Sawangi Khultabad Line (15.36 Km)	Bajaj Electricals, Mumbai	4.01	2.74	T-801 A/17057 & 17058 24.12.08	24.12.09	Pending with Deputy Conservator of Forest, Aurangabad
3	220 KV Jalna-Chikhali Line (74.69 Km)	Bajaj Electricals, Mumbai	22.08	20.45	T-708 /7975 & 7974 19.06.08	20.06.09	RoW Problem
4	220 KV Sawangi-Bhokardan DCDC Line (66.55 Km)	B.G. Shirke, Pune	25.38	20.07	T-806 B/683 13.01.10	12.02.11	Pending with Principal Chief Conservator of Forest, Nagpur and permission from Irrigation department
5	LILO on 400 KV Waluj-BSL Line Abad-II for Ckt-I (99 Km)	KEC	113.80	16.31	5416(A) 5416(B) 06.04.11	05.10.12	RoW Problem
6	400 KV BBLR-Abad-DC Quad Line (122 Km)	KEC	253.43	31.71	5416(A) 5416(B) 06.04.11	05.04.12	RoW Problem

Sl. No.	Name of the Scheme	Name of executing agency/ contractor	Awarded cost	Actual cost incurred	Work order No. and date	Scheduled date of completion	Reason for non completion
7	132 KV Sillod Bhokardan DCDC Line (21.389 Km)	Kalpataru	1.97	7.32	LL1A-11675 27.08.09	26.08.12	RoW Problem
8	132 KV Bhokardan-Rajur SCDC Line(26 Km)	Kalpataru	10.14	4.96	LL1A-11999 1.09.09	31.10.10	RoW Problem
9	132 KV Beed-Raimoha line	Maxwell Construction, Jalgaon	20.43	6.45	30.07.2001	29.11.2001	Heavy RoW Problem from Land owners work has been cancelled.
Total			**465.94**	**111.42**			

Mismatch between Generation Capacity and Transmission facilities

2.2.18 National Electricity Policy envisaged augmenting transmission capacity taking into account the planning of new generation capacities, to avoid mismatch between generation capacity and transmission facilities. The transmission facilities provided by the Company to match with the generation capacity at 220 KV level is given below:

Year	Availability of power (MVA)	Company's Transmission capacity at 220 KV after considering 30 *per cent* towards margin (MVA)	Excess in Transmission capacity (MVA)
2007-08	11,862	17,893	6,031
2008-09	12,014	19,634	7,620
2009-10	12,731	22,110	9,379
2010-11	13,449	25,170	11,721
2011-12	14,587	27,970	13,383

It is observed from above that the Company had created its transmission network of 13,383 MVA in excess of the availability of generation. The Company had planned additional transmission network anticipating 5,953 MVA of additional availability of generation during 2010-11 and 2011-12. However, actual availability of generation for 2010-11 and 2011-12 was only 1,856 MVA. Even if remaining 4,097 MVA of generation anticipated but not achieved is considered the Company created excess transmission capacity of 9,286 MVA at the end of March 2012. Therefore, there was no requirement of creating additional transmission capacity during 2008-09 to 2011-12. However, considering the peak demand the excess transmission capacity created at the end of 2011-12 worked out to 5,963 MVA which has been discussed in **Paragraph 2.2.20** *infra.* This indicates improper planning in creation of evacuation facilities.

Better availability of transmission system above the norms led to award of an incentive of ₹ 61.94 crore by MERC.

The Management in its reply stated that excess creation of transmission capacity resulted in better availability of its High Voltage Alternate Current (HVAC) and High Voltage Direct Current (HVDC) transmission network against the norms fixed by MERC. This led to award of incentive of ₹ 61.94 crore to the Company by MERC.

Performance of transmission system

2.2.19 The performance of the Company mainly depends on efficient maintenance of its EHT transmission network for supply of quality power with minimum interruptions. In the course of operation of SSs 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 is discussed in the succeeding paragraphs.

Transmission capacity

2.2.20 The Company, in order to evacuate the power from the Generating Stations and to meet the load growth in different areas of the State, constructs lines and SSs at different EHT voltages. A transformer converts AC voltage and current to a different voltage and current. 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 220 KV and above SSs. The transmission capacity (220 KV) created *vis-a-vis* the transmitted capacity (peak demand met) at the end of each year by the Company during the five years ending March 2012 are as follows:

Transmission capacity (in MVA)				
Year	**Total installed capacity**	**Company's Transmission capacity at 220 KV after considering 30 *per cent* towards margin**	**Peak demand**	**Excess/ shortage (-)**
2007-08	25,561	17,893	19,358	(-) 1,465[70]
2008-09	28,049	19,634	19,023	611
2009-10	31,585	22,110	20,126	1,984
2010-11	35,957	25,170	20,804	4,366
2011-12	39,957	27,970	22,007	5,963

From the above table it could be observed that the overall transmission capacity as against the peak demand was in excess of requirement for last four years. Thus, the excess creation of 5,963 MVA at the end of March 2012 was indicative of unscientific planning. This resulted in avoidable expenditure of

[70] Load shedding was carried out during 2007-08.

₹ 240 crore (₹ 4 crore per 100 MVA PTR) which was a burden passed on to consumers.

Adequacy of Sub-stations

2.2.21 Manual on Transmission Planning Criteria (MTPC) stipulates the permissible maximum capacity for different SSs *i.e.*, 1,000 MVA for 400 KV, 320 MVA for 220 KV and 150 MVA for 132 KV SSs. Scrutiny of records regarding the maximum capacity levels of SSs revealed six numbers of 400 KV, 45 numbers of 220 KV and 10 numbers of 132 KV SSs exceeded the permitted levels at the end of March 2012. We observed that this situation needed creation of additional transformer capacity to meet the voltage levels.

Similarly, as per MTPC every SS of capacity 132 KV and above should have at least two transformers. However, we observed that at 15 numbers 132 KV SSs only one transformer was installed as on March 2012.

The Management stated (October 2012) that appropriate action for installation of additional transformer would be taken.

Adherence to standards in Sub-stations

Voltage management

2.2.22 The licensees using intra-state transmission system should make all possible efforts to ensure that grid voltage always remain within limits. As per Indian Electricity Grid code, the Company should maintain voltages ranges between 380-420 KV, 198-245 KV and 119-145 KV in 400 KV, 220 KV and 132 KV line respectively. On test check of records pertaining to 220/132 KV bus voltages in Circles Offices at Panvel, Bhusawal, Padghe, Kalwa, Aurangabad, Nagpur, Kolhapur and Satara for the year 2011-12 revealed that in 13 SSs the voltages recorded ranged between 116 and 368 KV (minimum limit) while in seven SSs voltage recorded ranged between 146 and 438 KV (maximum limit) as shown below:

Category of S/S in KV	Exceeded the minimum limit				Exceeded the maximum limit			
	No. of S/S	No. of feeders	No. of Occurrences	Range	No. of S/S	No. of feeders	No. of Occurrences	Range
400	5	5	8	368	12	25	229	438
220	17	24	52	190	4	6	7	248
132	49	54	234	116	20	25	78	146

The Company should ensure that the maximum and minimum voltages are maintained as per the norms.

The Management stated (October 2012) that it will endeavour to maintain maximum and minimum limit of voltage as per norms.

Bus Bar Protection Panel (BBPP)

2.2.23 Bus bar is used as an application for interconnection of the incoming and outgoing transmission lines and transformers at an electrical SS. BBPP limits the impact of the bus bar faults on the entire power network which prevents unnecessary tripping and selective to trip only those breakers necessary to clear the bus bar fault. As per Grid norms and Best Practices in Transmission System, BBPP is to be kept in service for all 220 KV SSs to maintain system stability during Grid disturbances and to provide faster clearance of faults on 220 KV buses. We observed that out of 540 of 220 KV SSs (462 were single bus SSs and 78 were double bus SSs) where BBPP is required to be installed, Company provided the panel at 216 SSs and in the remaining 324 SSs the BBPP was not yet provided. Further, out of 216 SSs where BBPP was available, 205 were in service and remaining 11 were not in working condition. In view of the mandatory requirement, BBPP should have been installed at all Bus Bars to ensure the safety of equipment.

The Management stated (October 2012) that installation of BBPP requires longer duration of outages and the same will be installed in due course.

The fact remained that the Company could have explored possibility of installing BBPP in the SSs by diverting the load since the grid in the State is integrated.

Maintenance

Performance of Power transformers

2.2.24 Power Transformers (PTs) are one of the most important and cost-intensive components of electrical energy supply networks. Thus, it is of special interest to prolong their life duration while reducing their maintenance expenditure.

Adoption of predictive and proactive maintenance practices resulted in decreased of transformer failure rate from 2.68 *per cent* to 1.20 *per cent* during review period.

The Company is adopting predictive and proactive maintenance practices with modern state of art testing and measuring equipments so that functionality and health of various EHV equipment and transmission lines can be monitored. To facilitate the above, the Company utilises EHV line fault Analyser, Dissolved Gas Analyser, Capacitance and Tan-Delta Test Kit, Corona Camera, Puncture Insulator Detector *etc*.

As a result of above, the transformer failure rate decreased from 2.68 *per cent* (35 Nos.) to 1.20 *per cent* (17 Nos.) during review period.

Working of hot lines division/sub divisions

2.2.25 Regular and periodic maintenance of transmission system is of utmost importance for its un-interrupted operation. Apart from scheduled patrolling of lines, following Hot Line Techniques (HLT) were used for maintenance of lines:

- Hot Line Maintenance (HLM)
- Hot Line Washing (HLW).

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

The HLT envisages attending to maintenance works like hot spots, tightening of nut and bolts, damages to the conductor, replacement of insulators *etc*. of SSs and lines without switching off. This includes thermo scanning of all the lines and SSs towards preventive maintenance. As on April 2007 the Company had 11 hotline divisions with manpower strength of 84 which increased to 13 hotline divisions and 96 manpower strength as of March 2012. Further, the Company also outsourced this activity.

In violation of the Head Office directives, field Offices outsourced HLM work of ₹ 23.56 crore

The Company, with a view to reduce the maintenance cost and to strengthen its departmental HLM units, directed (September 2009) its field offices to stop outsourcing of HLM works. We observed that, in violation of the Head Office directives, the Field Offices outsourced HLM work of ₹ 23.56 crore during 2010-11 and 2011-12.

The Management stated (October 2012) that due to insufficient HLM staff and equipment the work was executed by outsourced agencies.

Transmission losses

2.2.26 While energy is carried from the generating station to the consumers through the Transmission & 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 DISCOMs. Central Electricity Authority (CEA) has prescribed norms of transmission loss at the rate of four *per cent* whereas MERC has fixed the same at 4.85 *per cent*. The details of transmission losses from 2007-08 to 2011-12 are given below:

Particulars	Unit	Year				
		2007-08	2008-09	2009-10	2010-11	2011-12
Power received for transmission	MUs	93,557.27	95,477.94	1,01,873.00	1,07,808.00	1,17,532.57
Net power transmitted	MUs	89,189.88	90,815.82	97,181.00	1,03,160.00	1,12,638.67
Actual transmission loss	MUs	4,367.39	4,662.12	4,692.00	4,648.00	4,893.90
	Percentage	4.67	4.88	4.61	4.31	4.16

It would be seen from above that transmission losses remained within the permissible limits prescribed by MERC except during 2008-09 when it was marginally higher. The Company has been able to contain the losses within the norms by adopting best practices such as comprehensive predictive/proactive maintenance of switchyard equipments, consistent patrolling of transmission lines by adopting HLM, HLW, Thermo scanning *etc*. Moreover, the Company has introduced the concept of performance linked rewards for Operation and Maintenance (O&M) of SS and transmission lines.

Grid Management

Maintenance of Grid and performance of SLDC

2.2.27 Transmission and Grid Management are essential functions for smooth evacuation of power from generating stations to the DISCOMs/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. The Maharashtra State Load Despatch Centre (SLDC), a constituent of Western Region Load Despatch Centre (RLDC), Mumbai (Santacruz), ensures integrated operation of power system in the State. The State Government notified in June 2005 that the SLDC shall be operated by the Company. The SLDC is assisted by two Area Load Despatch Centres (ALDCs) for data acquisition and transfer to SLDC and supervisory control of 132 KV and 33 KV equipments. The SLDC levies and collect such fees and charges from the generating companies and licensees engaged in intra-state transmission of electricity as specified by the MERC.

Delay in commissioning of infrastructure for load monitoring

2.2.28 Remote Terminal Units/Sub-station 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 SSs. There were 557 SSs and 222 generators as on 31 March 2012. The Company awarded (May 2008) the work of supply, erection, testing and commissioning of Energy Management System[71] (EMS) to Siemens Limited for ₹ 30.33 crore. The work was scheduled to be completed on 30 November 2009. The completion period was extended from time to time as the scope of work was revised twice (May 2010 and 2012) due to increase in the number of protection signals. This increased the cost from ₹ 30.33 crore to ₹ 37.34 crore. The work had not yet been completed (October 2012).

Thus, the failure to evaluate the requirement before placing the order resulted in abnormal delay of 30 months thereby defeating the purpose of installation of RTU.

The Management stated (October 2012) that the delay was due to voluminous data configuration and end to end testing of different RTU locations.

Delay in implementation of Communication Network of Data and Voice

2.2.29 MERC had directed to implement the Availability Based Tariff (ABT) billing system for the implementation of Balancing and Settlement System.

---

[71] RTU and Data Concentrators (DC) at 140 EHV SSs and Supervisory Control and Data Acquisition (SCADA)-at SLDC, Kalwa and ALDC, Ambazari.

For accurate and continuous online monitoring of ABT parameters for its entire network, Company was required to install Communication Network of Data and Voice (CND&V) from EHV SS to load despatch centre. Accordingly, the Company awarded the above work CND&V to Tulip IT (TIT) Services, Mumbai in June 2007 for ₹ 15.22 crore. The contract provided for 99 *per cent* availability of communication network. The contract was still incomplete and the Company had paid ₹ 12.50 crore for the same (June 2012).

We observed that the availability of communication was below 99 *per cent* for the reasons not on record and the Company had recovered ₹ 81.13 lakh up to March 2012. Further, the Voice Internet Protocol (VoIP), RTU SCADA has not been implemented so far and the Company is presently using its old sinnaut based RTU system.

The Management stated (October 2012) that VoIP at 14 locations still need to be implemented. Further, it agreed to recover the penalty from TIT in the subsequent bills.

Grid discipline by frequency management

2.2.30 As per 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 January 2010). Due to various reasons such as shortages in generating capacities, high demand, Grid indiscipline in maintaining load generation balance, inadequate load monitoring and management, Grid frequency goes below or above the permitted frequency levels. To enforce the Grid discipline, RLDC issues violation messages to the concerned SLDC which in turn issues three types of violation messages (A, B, C) to its constituents[72]. Message A is issued when the frequency is less than 49.2 Hz and over-drawl 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-drawl 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 drawl is more than 100 MW or 10 *per cent* of the schedule whichever is less. We observed that the SLDC received the ABC type messages from RLDC as under:

Year	Number of messages			
	A	B	C	Total
2010-11	210	44	11	265[73]
2011-12	132	77	29	238[74]

It would be seen from above that there was decrease in the receipt of A type messages, however, there was increase in the receipt of B and C type

[72] Power Generation and Distribution Companies.
[73] Less availability from Chandrapur TPS and outage of Koyna Hydro Power Station-Stage-IV was the cause.
[74] Acute shortfall of power in Maharashtra.

messages during 2011-12. However, the Company had maintained the grid discipline by resorting to corrective measures in time by way of issuing backing down instruction *etc*.

Disaster Management

2.2.31 Disaster Management (DM) aims at mitigating the impact of a major break down 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 equipments, skilled and specialised manpower.

DM Centre, National Load Despatch Centre, New Delhi will act as a Central Control Room in case of disasters. As against 17 major generators in the State, black start facilities[75] were available in five generators only. This indicated inadequacy in the preparedness for DM. We observed (May 2012) that as a part of DM programme mock drill for starting up generating stations during black start[76] operations was not carried out periodically.

The Management stated (October 2012) that the black start operation have been carried out at Ghatghar and Koyna generating stations. However, the fact remains that the black start operations were not carried out periodically at all the five generators.

Inadequate facilities for DM

2.2.32 Government of Maharashtra issued a Government Resolution in November 1999 to identify strategic and important locations declaring as "Prohibited Area". The Company in August 2008 took up the matter with Principal Secretary (Special) to declare its EHV SSs as "Prohibited Area". We observed that the Company had not taken concerted efforts to follow up the same with Home Department. Similarly, the State Load Despatch Centre (SLDC) plays an important role in monitoring grid discipline in both quality and quantitative terms. SLDC comprises data centres for monitoring of all the generating stations, distribution licensees, EHV SSs. Hence it is an important and sensitive installation of the Company.

We observed that in close vicinity of its SLDC, Kalwa high-rise buildings were permitted by the town planning authorities exposing it to high risk.

The Management accepted the audit contention and assured to take up the issue of safety of SLDC with the State Government.

Energy Accounting and Audit

2.2.33 Energy accounting and audit is necessary to assess and reduce the transmission losses. The transmission losses are calculated from the Meter

[75]Comprising mainly of local diesel generator set for restoration under black out condition.
[76] The procedure necessary to recover from partial or a total black out.

Reading Instrument (MRI) readings obtained from Generation to Transmission (GT) and Transmission to Distribution (TD) Boundary metering points. MERC issued September 2006 directives for establishment of energy accounting centre by installing ABT meters at interface points. With a view to determine feeder wise losses for having better control over the system, the Company decided (January 2007) to install ABT meters not only at interface points but also in each feeder and accordingly placed (January 2007) an order for supply, erection, testing and commissioning of 9,090 ABT/MFM meters at a total cost of ₹ 61.71 crore. We observed that there was delay in installation of the ABT meters due to lack of detailed survey of the locations, shifting of the 11 KV switch gear from indoor to outdoor, non-availability of meters *etc.* Though, the agency had completed the work at maximum locations the meter data could not be made available to SLDC due to non-availability of communication links by TIT as discussed in **Paragraph 2.2.29** *supra*.

The Company levied a penalty of ₹ 2.81 crore for non-completion of the projects, the same has not been recovered so far.

The Management stated that the data from the ABT/MFM meters installed in interface points are used by Engineers to determine feeder-wise losses, loading of feeders, transformers *etc*. besides energy accounting.

However, the facts remains that the purpose for which the meters were installed had not been achieved so far, since data from ABT meters could not be made available to SLDC for want of communication links.

Financial Management

2.2.34 One of the major objectives of the National Electricity Policy 2005 was ensuring financial turnaround and commercial viability of Power Sector. The financial position of the Company for the five years ending 2011-12 is as under:

(₹ in crore)

Particulars	2007-08	2008-09	2009-10	2010-11	2011-12
A. Liabilities					
Paid up Capital	2,696.04	2,696.04	2,696.04	2,696.04	2,696.04
Reserves & Surplus (including Capital Grants)	713.41	140.54	385.55	714.89	1,285.26
Deferred Tax	0.00	658.02	717.05	804.22	939.92
Borrowings (Loan Funds)	2,486.91	2,809.54	3,966.37	5,943.76	6,765.91
Current Liabilities & Provisions (CL)	1,347.99	2,156.54	2,440.48	2,567.79	3,641.79
Total	**7,244.35**	**8,460.68**	**10,205.49**	**12,726.70**	**15,328.92**

Particulars	2007-08	2008-09	2009-10	2010-11	2011-12
B. Assets					
Gross Block	9,885.91	10,445.48	11,569.65	13,918.61	16,138.35
Less: Depreciation	5,318.08	5,614.02	5,869.37	6,172.12	6,594.51
Net Block	4,567.83	4,831.46	5,700.28	7,746.49	9,543.84
Capital Works-in-Progress (CWIP)	1,174.85	1,855.88	3,095.14	3,683.98	3,921.10
Investments	0.00	15.22	15.22	30.27	230.16
Current Assets, Loans and Advances (CA)	1,498.51	1,753.06	1,382.06	1,226.25	1,594.63
Assets not in use	1.32	5.06	12.79	39.16	39.19
Miscellaneous expenditure not written off	1.84	0.00	0.00	0.55	0.00
Total	**7,244.35**	**8,460.68**	**10,205.49**	**12,726.70**	**15,328.92**
Debt equity ratio	0.92:1	1.04:1	1.42:1	2.18:1	2.72:1
Interest (net of IDC[77] capitalised)	221.23	256.15	209.99	283.00	405.63
Total return	295.82	551.28	578.02	794.90	882.58
Capital Employed	5,116.48	5,854.46	8,042.80	10,392.21	12,779.54
% Return on Capital Employed	5.78	9.42	7.19	7.65	10.08
Manpower (No. of employees)	10,108	10,338	11,545	12,319	12,686

It would be seen from above that Debt Equity Ratio increased from 0.92:1 to 2.72:1 during 2007-12 due to increase in borrowings from ₹ 2,486.91 crore (2007-08) to ₹ 6,765.91 crore (2011-12). On the other hand percentage of Return on Capital Employed increased from 5.78 *per cent* in 2007-08 to 10.08 *per cent* in 2011-12.

2.2.35 The details of working results like revenue realisation, net surplus/loss and earnings and cost *per* unit of transmission are given below:

Sl. No.	Description	2007-08	2008-09	2009-10	2010-11	2011-12
1	**Income**					
(a)	Revenue (₹ in crore)	1,586.75	1,869.94	1,599.73	2,097.78	2,314.74
(b)	Other income including interest/ subsidy (₹ in crore)	66.62	61.35	108.37	50.45	306.30
	Total Income (₹ in crore)	**1,653.37**	**1,931.29**	**1,708.10**	**2,148.23**	**2,621.04**

[77] Interest during construction.

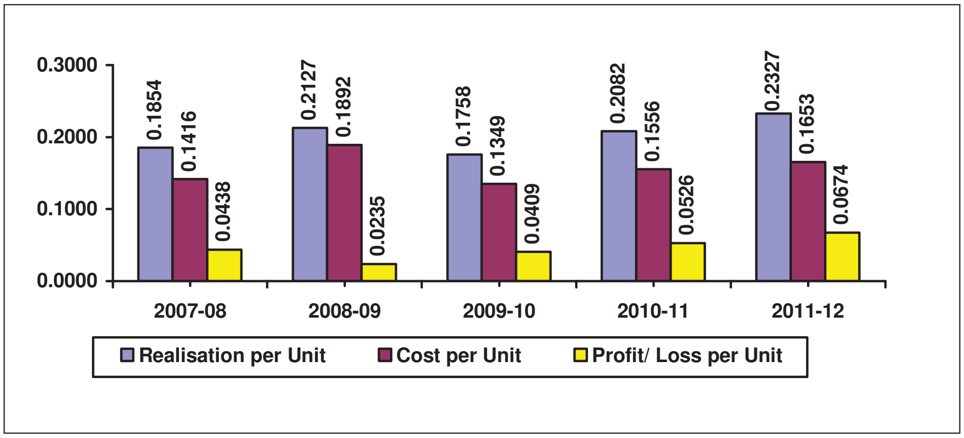
Sl. No.	Description	2007-08	2008-09	2009-10	2010-11	2011-12
2	**Transmission**					
(a)	Installed capacity (MVA)	61,530.00	66,118.00	73,791.00	82,619.00	91,444.00
(b)	Power received from generation units (MUs)[78]	93,557.27	95,477.94	1,01,873.00	1,07,808.00	1,17,532.57
(c)	Power purchased (MUs)	0.00	0.00	0.00	0.00	0.00
	Total	**93,557.27**	**95,477.94**	**1,01,873.00**	**1,07,808.00**	**1,17,532.57**
(d)	Loss in transmission (MUs)	4,367.39	4,662.12	4,692.00	4,648.00	4,893.90
	Net power transmitted (b)+(c)-(d) in MUs	89,189.88	90,815.82	97,181.00	1,03,160.00	1,12,638.67
3	**Expenditure**					
(a)	**Fixed cost**					
(i)	Employees cost	260.37	603.58	393.97	529.03	579.40
(ii)	Administrative and General Expenses	39.49	143.22	103.44	136.68	238.09
(iii)	Depreciation	494.65	321.75	299.62	368.64	422.06
(iv)	Interest and Finance charges (net after capitalisation)	221.23	256.15	209.99	283.00	419.12
	Total fixed cost	**1,015.74**	**1,324.70**	**1,007.02**	**1,317.35**	**1,658.67**
(b)	**Variable cost -** Repairs and Maintenance	247.05	393.53	304.33	287.77	203.73
(c)	**Total cost 3 (a) + (b)**	**1,262.79**	**1,718.23**	**1,311.35**	**1,605.12**	**1,862.40**
4	Realisation (₹ per unit)	0.1854	0.2127	0.1758	0.2082	0.2327
5	Fixed cost (₹ per unit)	0.1139	0.1459	0.1036	0.1277	0.1473
6	Variable cost (₹ per unit)	0.0277	0.0433	0.0313	0.0279	0.0181
7	Total cost (₹ per unit) (5+6)	0.1416	0.1892	0.1349	0.1556	0.1654
8	Contribution (₹ per unit) (4-6)	0.1577	0.1694	0.1445	0.1803	0.2146
9	**Profit (+)/Loss(-) (4-7) (₹ per unit)**	**0.0438**	**0.0235**	**0.0409**	**0.0526**	**0.0673**

It may be seen from the above that though the realisation per unit increased from ₹ 0.19 (2007-08) to ₹ 0.23 (2011-12) (21.05 *per cent*), the cost per unit increased from ₹ 0.14 to ₹ 0.17 (21.43 *per cent*) during the corresponding period. Further, the contribution per unit had increased by 31.25 *per cent* during the period 2007-12.

[78] Including private generation.

Recovery of cost of operations

2.2.36 During the last five years ending 2011-12, the profit/loss per unit as given in the graph below:



It is observed from above that the Company earned profit in all the years during review period. The profit per unit increased from ₹ 0.04 to ₹ 0.06 during 2007-08 to 2011-12.

Collection of SLDC/surcharge from DISCOMs

2.2.37 The SLDC charges were introduced from 2006 onwards. The Company levied and collected the SLDC charges amounting to ₹ 231.31 crore during 2007-12 through DISCOMs. Further, the Company raises monthly transmission bills on MSEDCL, Brihan Mumbai Electric Supply and Transport Undertaking (BEST), TATA and R-infra on the allocated capacities at the rates specified in the Tariff Orders. The bills are to be paid within 14 days from the date of issue. The transmission agreement between the Company and MSEDCL, BEST, TATA and R-infra provided for opening of irrevocable revolving Letter of Credit (LC) in favour of the Company. In the event of failure to make payment within 14 days from the due date the demand notices contained the provision for levy of surcharge at 1.25 *per cent* per month.

We observed that BEST, TATA and R-Infra had been paying regularly. However, MSEDCL was making staggered payment since November 2010 and had arrears of ₹ 41.27 crore towards transmission charges and ₹ 1.47 crore towards late payment surcharge as of May 2012**.**

The Management stated (October 2012) that penal charges for the delay in payment have been levied on MSEDCL.

Failure to invest in Government securities

2.2.38 The Company availed (November 2009) loan of ₹ 623 crore from Japan International for its capital projects. The State Government had stipulated (November 2011) that the loss/gain on account of Foreign Exchange Variation (FEV) would be borne by the Company. The FEV worked out to

The Company did not invest ₹ 123.67 crore in Government securities as stipulated by MERC .

₹ 123.67 crore[79] during the review period and the same was claimed through ARR.

MERC allowed the exchange rate variation as per books with the condition that equal amount should be invested in Government securities till such expenditure matures. However, the Company did not make any such investment as stipulated by MERC.

The Management accepted the fact.

Non-recovery of cost of deposit works

2.2.39 The Railway authorities in October 2008 approached the Company to take up the work of shifting of 100 KV underground power cable from Vasai SS on Out Right Contribution (ORC) basis as deposit work.

In turn, the Company awarded the work to Ravin Cables Limited (May 2009) at a cost of ₹ 1.51 crore. The work was executed during August 2009 to January 2010. However, the Company had not recovered ₹ 1.51 crore from the Railways till date.

Material Management

2.2.40 The key functions in material management are laying down inventory control policy, procurement of materials and disposal of obsolete inventory. The Company had formulated procurement policy and inventory control mechanism for economical procurement and efficient control over inventory.

Scrutiny of the records of four major stores of the Company revealed the following:

The details of Opening stock, issues and closing stocks for the period from 2007-08 to 2011-12 are detailed below:

(₹in crore)

Year	Opening stock	Consumption during the year	Closing stock	Closing stock in terms of months consumption
2007-08	96.32	277.79	182.33	8
2008-09	182.33	330.92	233.39	8
2009-10	233.39	635.44	201.07	4
2010-11	201.07	556.05	215.75	4
2011-12	215.75	162.00	435.16	32

From the above it is observed that the Company reduced its closing stock in terms of monthly consumption from eight months in 2007-08 to four in 2010-11. Audit scrutiny of inventory statements revealed that during 2007-08 to 2010-11, the Company did not take into consideration its material at site at

[79]Exchange rate variation resulted in profit of ₹ 9.73 crore (2009-10) and losses of ₹ 52.56 crore (2010-11) and ₹ 80.84 crore (2011-12).

different location as part of inventory. The Company booked this expenditure as consumed under work in progress.

While implementing System Application & Products (SAP) in January 2012, the Company considered the material at site as part of its inventory. Therefore, the closing stock increased manifold to 32 months consumption in 2011-12.

The Management accepted the audit observation.

Monitoring and Control

2.2.41 The performance of the SSs and lines of 400/220/132 KV on various parameters like Maximum and Minimum voltage levels, breakdowns, voltage profiles should be recorded/maintained as per the Grid code standards. The field Divisions of Transmission Line and SS units compile the monthly Management Information System (MIS) reports indicating the performance of the units as well as equipments installed.

The field level offices prepare Monthly Progress Report (MPR) which consists of details pertaining to capital works, maintenance, failure of equipment, line interruptions, energy accounting, life extension schemes, augmentation works, outages, line load, availability *etc*. These reports are consolidated at Head Office and are reviewed by the Managing Director in its review meeting with zonal heads (Chief Engineers). Thus, effective monitoring had resulted in achieving 99 *per cent* of network availability and contain its transmission loss within the norms.

Internal Audit

2.2.42 Internal auditing bridges the gap between Management and the Board of Directors with a view to assess the ethical climate and the effectiveness/ efficiency of operations. Internal auditors should be independent so as to render impartial and unbiased judgment in the conduct of their work. The Company should ensure independence of the Internal Audit Wing for reporting directly to the Board/Management.

We noticed that the Company had not created an independent audit wing. The Internal Audit work is outsourced to Chartered Accountant firms. The Internal Audit Reports are submitted to the Chief General Manager (F&A) of the Company. However, these reports were not submitted to the Board/ Management for effective management.

Acknowledgement

2.2.43 Audit acknowledges the co-operation and assistance extended by different levels of the Management at various stages of conducting of the performance audit.

The matter was reported to the Government (August 2012); their reply had not been received (December 2012).

Conclusions

- **Plans for capacity additions/augmentation were not prepared keeping in view the anticipated availability of power/peak demand and existing transmission capacity. Hence, excess transmission capacity increased over the years.**

- **Even though year wise plan was prepared for addition of Sub-stations (SSs) and lines, there were delays in commercial commission of SSs and lines due to delay in completion of associated lines, delays in land acquisition and RoW problems.**

- **The Company had exceeded the minimum and maximum limit of voltage ranges in test checked SSs.**

- **The Company had not provide BBPP at all SSs.**

- **Due to predictive and proactive measures transmission losses remained within MERC norms except for 2008-09.**

- **The Company had not taken concerted efforts to declare its EHV SSs as prohibited area.**

- **Installation of ABT meters, communication network and Remote Terminal Unit's was delayed as a result the intended benefits were not derived.**

Recommendations

The Company needs to:

- **Prepare plans for capacity additions/augmentation keeping in view the peak demand and existing transmission capacity;**

- **Ensure completion and commercial commissioning of SSs as per schedule by proper planning of the activities relating to land acquisition, construction of associated transmission lines, civil works/electrical works;**

- **Ensure that the maximum and minimum voltage ranges are maintained as per the norms;**

- **Ensure installation of BBPP at all SSs for safety of the equipments;**

- **Ensure protection of its important and strategic installations; and**

- **Pursue timely installation of ABT meters, communication network and RTUs for monitoring efficiency of the transmission system.**