CHAPTER II

PERFORMANCE REVIEWS RELATING TO GOVERNMENT COMPANIES

2.1 Performance of hotels including infrastructure development of Madhya Pradesh State Tourism Development Corporation Limited

Highlights

The Company was incorporated (May 1978) with a view to promote and develop tourism in the State. The Company could not achieve its objective as number of tourists availing its facilities declined due to poor infrastructural facilities and non availability of professional manpower.

(Paragraph 2.1.7)

The Company has not fixed break even occupancy for its hotels. The Company could not even achieve acceptable average occupancy of 60 *per cent* resulting in loss of potential revenue of Rs. 16.12 crore during five years ending March 2007.

(Paragraph 2.1.9)

The Company has fixed limits of cost of raw materials and fuel cost on the basis of menu rates without carrying out any cost analysis. The Company incurred extra expenditure of Rs. 7.93 lakh on food and fuel with reference to the norms fixed by the Company.

(Paragraph 2.1.12)

Failure to evolve any advertisement policy and failure to formulate meaningful media plan adversely affected the growth of tourism in the State.

(Paragraph 2.1.14)

The Company utilised only 39.48 *per cent* of the funds made available for creation of infrastructural facilities resulting in development of inadequate tourist infrastructure in the State.

(Paragraph 2.1.16)

Introduction

2.1.1 The Madhya Pradesh State Tourism Development Corporation Limited was incorporated (May 1978) as a wholly owned Government company for development of tourism in the State by providing accommodation to tourists, developing places of tourist interest, providing transport services to tourists and adopting methods and devices necessary to attract tourists in large numbers.

The Company is engaged in the construction, maintenance, operation of hotels and motels (45[23]), cafeteria, restaurants, and wayside amenities (5), water sports complexes (4), sound and light shows (2) and provision of transport facilities to the tourists. The Company has six marketing offices at Ahmedabad, Hyderabad, Kolkata, Mumbai, Nagpur and New Delhi.

The Management of the Company is vested in a Board of Directors (BoD) consisting of eleven Directors including a Managing Director (MD) and a Chairman appointed by the State Government. The Managing Director is the Chief Executive Officer and is assisted by an Executive Director (Marketing), a Chief General Manager (Operations), three General Managers (Administration, Fairs and Festivals, Accounts), a Chief Engineer, and a Deputy General Manager (Planning). During the period of review, there were nine changes in the incumbent of the post of Managing Director. This resulted in absence of an effective monitoring system on a continuous basis at the top level for achieving the objectives set out in the Tourism Policies of the Government of India / State Government.

The performance of the Company was last reviewed in the Report of the Comptroller and Auditor General of India (Commercial) for the year 1998-99 – Government of Madhya Pradesh. The Committee on Public Undertakings (COPU) discussed (August 2001) the review and its recommendations are contained in its 136th Report (April 2002). The main recommendations, of the COPU, *inter alia*, were:

- Fixing responsibility of the officers responsible for delay in finalisation of accounts.
- Action taken by the Company for privatisation of units.
- To stop diversion of funds received from Government of India without permission of the GOI.

Scope of Audit

2.1.2 The performance review covering the performance of hotels including development of infrastructure by the Company during 2002-07 was conducted

[23] *Including one hotel under renovation (Maikal Resort-Bargi).*

from March to May 2007. Ten[24] out of 56 units (hotels, motels, cafeteria, highway treats, sound and lightshows, water sports complexes etc.) were selected for detailed scrutiny.

Audit objectives

2.1.3 Performance review was conducted with a view to ascertain whether:

- the tourism policies of the GoI/State Government were implemented effectively;
- the objectives of the Company were achieved economically, effectively and efficiently;
- the funds received from the GoI/State Governments were utilized effectively and economically for the purpose for which they were received;
- deployment of manpower was as per the norms fixed by the Company/ Hotel Association of India/State Government;
- the Company has complied with the recommendations contained in the Report of the COPU; and
- internal control/internal audit was effective.

Audit criteria

2.1.4 The audit criteria considered for achieving the audit objectives were:

- tourism policies of the State Government and the GoI;
- guidelines issued by the State Government for sponsored schemes for up-gradation and renovation;
- occupancy norms fixed by the Company/Hotels Association of India/ State Government for its hotels; and
- norms fixed by the Company/Hotels Association of India/State Government for cost of food offered in its restaurants.

Audit methodology

2.1.5 The audit methodology adopted for attaining the audit objectives with reference to the audit criteria were examination of:

---

24 Highway treats at Biora and Dodi, Gateway Retreat (Sanchi), Gateway Cafetaria (Sanchi), Rail Restaurant (Bhopal), Hotel Palash (Bhopal), Winds and Waves (Bhopal), Sheesh Mahal (Orcha), Betwa Cottage (Orcha) and Tansen Residency (Gwalior).

- tourism policies formulated by the GOI and the State Government, Memorandum of Understanding (MOU) signed by the Company with the State Government;
- Agenda and minutes of BoDs;
- Company's annual performance reports and those of the units;
- files relating to proposals submitted for sanction of schemes for taking up new projects / schemes,
- files relating to sanction, receipt and utilization of grants received from the GoI and the State Government;
- guidelines issued by State Government for execution of centrally sponsored schemes; and
- interaction with Management and issue of audit queries.

Audit findings

The Audit findings were reported (July 2007) to the Management/ Government and discussed (5 October 2007) in the meeting of Audit Review Committee for State Public Sector Enterprises (ARCPSE). The Secretary, Tourism Department and the MD of the Company attended the meeting. The views expressed by the members in the meeting have been taken into consideration while finalising the performance review. The audit findings are discussed in the succeeding paragraphs.

Performance of hotels

State Tourism Policy 1995

2.1.6 Madhya Pradesh Tourism Policy 1995, (Policy) framed (January 1995) by the State Government envisaged creation of an environment conducive to attracting increased private investment in tourism sector and a more meaningful role for the State Government. The Policy made it clear that the primary task of the Company was not to operate hotels and transport services but to set up infrastructural facilities in untapped areas of tourist interest. The role of the Company as a nodal administrative agency, in addition to the State Tourism Department, envisaged private sector investment, formation of Joint Venture companies and preparation of master plans for selected areas. The Company was to gradually disinvest its properties. The Policy also emphasised that the Company should concentrate more on promotional activities through national/international marketing to attract more tourists to places of tourist interest in the State.

The State Government decided (June 1999) to give units of the Company to private parties on lease for 30 years. Based on this decision, the Company invited (December 1999) tenders for privatising 42 units. The Company received (February 2000) quotations from 68 parties. The committee constituted (June 2000) by the State Government, however, decided (August

2000) not to accept these quotations since the parties did not have adequate experience in managing the hotel industry.

The BoDs again decided (29 September 2003) to look into the possibilities of privatisation of the Company's hotels. The BoD also decided (February 2006) to include the units, which the Company was not able to run, in the list of hotels to be leased and directed the Management to prepare the terms and conditions of lease. However, the Management took no action as of September 2007. Further, the Company did not consider privatising the seven[25] hotels which were incurring losses (Rs 67.17 lakh) continuously for the last five years as on 31 March 2007.The Management stated (October 2007) in the ARCPSE meeting that strategies for restructuring the loss incurring hotels were being explored. The reply is not convincing as no action has been taken since June 1999 either in the direction of privatisation or restructuring. The Management, also, did not substantiate the deviation from the declared policy of privatisation.

Besides the above general policy, the State Government evolved (i) Eco and Adventure Tourism Policy – 2001 and (ii) Heritage Tourism Policy – 2002. Though the State Government have identified 21 potential tourist places in five segments under this sector, the Company developed only three Water Sports Complex at Orcha (October 2005), Bhopal (December 2005) and Jabalpur (October 2006).

Growth of Tourism

2.1.7 The Company was incorporated (May 1978) with a view to promote and develop tourism in the State. Despite being a haven for multi attraction tourism, the Company had not adopted any independent mechanism for collecting and compiling data regarding tourists arrival (both domestic and foreign) to assess the growth of tourism in the State. The number of tourists who visited India and the State during the last five years upto 2006-07 and those who availed the Company's accommodation during these years is given below:

(Numbers in lakh)

Particulars	2002-03	2003-04	2004-05	2005-06	2006-07	Total
No. of foreign tourists who visited India	24.54	25.69	36.38	40.57	45.70	172.88
Tourists who visited Madhya Pradesh						
Domestic	46.66	62.93	88.61	79.97	146.90[26]	425.07
Foreign	0.75	1.10	1.62	1.68	2.13	7.28
Total	47.41	64.03	90.23	81.65	149.03	432.35
Percentage of foreign tourists visiting the State to total tourists	3.06	4.28	4.45	4.14	4.66	4.21

25 *Tourist Bunglow-Indore, Hotel Payal-Khujraho, Hotel Rahil-Khujraho, Café Nowgaon, Tourist Motel-Piparia, Tourist Motel-Datia, Tana Bana- Chanderi.*

26 *Increase in the tourist inflow in 2006-07 was due to a religious gathering in Chitrakoot during the last quarter of the year.*

Particulars	2002-03	2003-04	2004-05	2005-06	2006-07	Total
Number of tourists who availed accommodation in Company's Hotels						
Domestic	0.82	0.94	0.99	1.12	1.25	5.12
Foreign	0.06	0.07	0.09	0.10	0.10	0.42
Total	0.88	1.01	1.08	1.22	1.35	5.54
Percentage of tourists (both domestic and foreign) who availed Company's facilities to total tourists						
Total	1.86	1.58	1.20	1.49	0.91	1.28

***Source:** The data are compiled from inputs obtained from the offices of Archaeological Survey of India and National Parks located in the State.*

Due to poor basic infrastructural facilities and non availability of professional manpower, the number of tourists availing the Company's facilities declined during the period.

It will be seen from the above that the percentage of tourists (both domestic and foreign) visiting the State and availing the Company's facilities declined from 1.86 *per cent* in 2002-03 to 0.91 *per cent* in 2006-07 despite spending Rs.18.66 crore on publicity and business promotion during the period. The Management stated (October 2007) that the decline in the number of tourists availing the facilities of the Company was due to poor basic infrastructural facilities and non-availability of professional manpower to render quality service. The reply is not tenable as funds were not a constraint for creating the required infrastructure and attracting the necessary trained and professional manpower. The reply is also self defeating as the main objective of the Company was promotion of tourism and in the absence of quality and professional services such approach would only have a negative effect.

Operational performance

2.1.8 The table below summarises the operational performance of various units (hotels, motels and other catering units) for the five years ended 31 March 2007.

(Rupees in crore)

Sl. No.	Particulars	2002-03	2003-04	2004-05 (Provisional)	2005-06 (Provisional)	2006-07 (Provisional)
1.	Number of units operated	49	46	50	50	50#
2.	Income from core activities (accommodation and catering)	8.04	9.82	11.57	18.05	22.95
3.	Operating Expenses	7.30	8.46	9.05	14.24#	17.99
4.	Operating profit	0.74	1.36	2.52	3.81	4.96

\# ***Does not include a restaurant (Shan-e-Bhopal) as it started functioning from March 2007.***

***Source:** Figures for 2002-03 and 2003-04 are based on audited accounts and for 2004-05, 2005-06 and 2006-07 based on provisional accounts.*

As will be seen from above that the units of the Company were earning profits in all the years. The Company enhanced (September 2004) the tariff ranging from 10 to 25 *per cent* over the tariff of March 2004. The tariff of September 2004 was again increased (January 2005) by 10 to 96 *percent*. It was observed that the increase in income was mainly due to increase in tariffs since there was no significant change in the occupancy.

Occupancy levels

The Company has not fixed break even occupancy for its hotels. The Company could not even achieve acceptable average occupancy of 60 *per cent* resulting in loss of potential revenue of Rs. 16.12 crore.

2.1.9 The Company had not fixed break even occupancy norms for its hotels. However, as compared to acceptable average occupancy norms of 60 *per cent* in the hotel industry, the occupancy of various hotels and motels run by the Company during the period of five years ended 31 March 2007 was not satisfactory as is evident from the following:

Year	Number of units (Hotels and Motels)	No. of rooms	No. of beds	Occupancy				
				Below norms			Total	Above norms
				Below 20 *per cent*	Between 20 and 39 *per cent*	Between 40 and 59 *per cent*		60 *per cent* and above
2002-03	40	N.A	N.A	6	15	16	37	3
2003-04	40	562	1271	3	17	14	34	6
2004-05	40	565	1335	3	16	17	36	4
2005-06	42[27]	605	1371	2	19	18	39	3
2006-07	42	648	1481	1	16	19	36	6

Source: Performance Statements prepared by the Management.

It was observed that though most of the units of the Company were located at prime locations in important tourist places, yet 34 to 39 hotels of the Company could not achieve the acceptable occupancy norm of 60 *per cent* during 2002-07. The loss of potential revenue due to non-achievement of acceptable occupancy norms worked out to Rs.16.12 crore (calculated with reference to the revenue actually earned during the year) during the period 2002-07.

Further analysis of the occupancy of the hotels located in the following places of tourist importance revealed that these hotels could attract only 1.80 *per cent* to 15.79 *per cent* of the tourists visiting these places.

Year	Khajuraho			Sanchi			Kanha			Mandu		
	A	B	*Per cent* of B to A	A	B	*Per cent* of B to A	A	B	*Per cent* of B to A	A	B	*Per cent* of B to A
2002-03	1.58	0.13	8.23	0.77	0.03	3.90	0.57	0.08	14.04	2.06	0.04	1.94
2003-04	1.70	0.06	3.53	0.82	0.03	3.66	0.57	0.09	15.79	2.60	0.06	2.31
2004-05	2.18	0.13	5.96	0.89	0.05	5.62	0.72	0.08	11.11	2.68	0.08	2.99
2005-06	2.18	0.14	6.42	0.89	0.05	5.62	0.77	0.10	12.99	2.92	0.07	2.40
2006-07	2.55	0.16	5.27	1.03	0.06	5.83	0.86	0.12	13.95	3.33	0.06	1.80

Source: Statement of traffic inflow of tourist centres and occupancy statements of the hotels furnished by the Management.
A: Number of tourists in lakh who visited the tourist centre.
B: Number of tourists in lakh who availed the facilities of the Company.

[27] *Accounts of Hotel Hill Top Bunglaw and Hotel Club View Pachmarhi are included in Amaltas and Hotel Glenview respectively from 2005-06 onward.*

The reasons for low occupancy and unsatisfactory services as analysed in audit were:

- delay in upgradation and renovation of rooms by 12 months to 22 months during 2002-03 to 2004-05;
- delay in installation of generators for uninterrupted power supply i.e. the same were installed as late as October 2004 in all the hotels;
- non-provision of facilities like STD, health club, internet, indoor games and credit card usage in hotels of the Company;
- absence of on-line reservation system; and
- shortage of professionally qualified staff including reorientation training.

The Management accepted (October 2007) that the decline in the occupancy levels was due to poor basic infrastructural facilities, less/ no delegation of powers to the managerial staff, non-availability of professional manpower, etc.

Fixation of tariff

2.1.10 The Management had not framed any uniform policy for fixation of room rent. There was no system of periodical review of tariff with reference to prevailing market trend and need for quality services as per requirements of the tourism industry. The tariff was being fixed on the recommendations of the unit Managers keeping in the view the expenditure incurred on renovations. It was noticed that in 33[28] hotels, the room tariff for single occupancy and double occupancy of the room was the same.

The Company did not review the tariff to arrest decline in occupancy.

The Company increased (September 2004) tariff ranging from 10 to 25 *per cent* over the tariff of March 2004. The tariff of September 2004 was again increased (January 2005) by 10 to 96 *per cent*. It was observed that increase in tariff also contributed to decline in occupancy in eight[29] hotels (which are located at important places of tourist interest and where occupancy was already below the norms) by 3 to 25 *per cent* during the year 2005-06 as

---

28 *Holiday Homes-Amarkantak;, Motel Marble Rocks-Bhedaghat; Tourist Bungalow-Chitrakoot; Tansen Residency-Gwalior; Tourist Motel-Datia, Jhabua, Katni, Khalghat, Mandla, Pipariya; Hotel Jhankar, Hotel Payal, Hotel Rahil-Khajuraho; Narmada Retreat- Maheshwar; Hotel Surbahar-Maihar; Malwa Resort, Malwa Retreat-Mandu; Narmada Resort-Omkareshwar; Betwa Retreat, Sheesh Mahal-Orchha; Amaltas, Club View, Glen View, Hilltop Bungalow, Rock-end-Manor, Panchvati, Satpura Retreat -Pachmarhi; Highway Treat-Dodi, Rookhad; Hotel Bharhut-Satna; Tourist Village-Shivpuri; Shipra Residency, Hotel Avantika (Yatri Niwas)-Ujjain.*

29 *Gateway Retreat-Sanchi, Hotel Shipra-Ujjain,Kipling Court-Pench, White Tiger Forest Lodge-Bhandavagarh, Satpura Retreat-Pachmarhi, Tourist Lodge-Shivpuri, Hotel Payal-Khajuraho, Baghira log Huts-Kisli.*

compared to occupancy levels in 2003-04. The Management did not initiate any measures to review the tariff to arrest decline in the occupancy.

2.1.11 Further, the Company was allowing off-season discounts (July to September) every year to attract more tourists. It was noticed that the rate of discount was fixed every year by the MD of the Company, on ad-hoc basis, without any study of the tourist potentiality during the season.

The Company allowed, off season discounts in 13 units viz. 8 units in Pachmarhi (30 per cent), Bhedaghat- Motel Marvel Rock (30 per cent), Amarkantak-Holiday Home (25 per cent), Bhandhavagarh-White Tiger Lodge, Pench-Kipling Court and Mukki-Kanha Safari Lodge (50 per cent). A comparison of the monthly occupancy levels as is evident from details in ***Annexure-7*** in the company's hotels at the above mentioned three places of tourist importance revealed that there was no improvement in the occupancy levels in spite of the discount offered. This indicates that the discounts did not improve the occupancy of the hotels since the Company's hotels lacked basic infrastructure facilities as discussed in para 2.1.9.

Catering

The Company has fixed limits of cost of raw materials and fuel cost on the basis of menu rates without carrying out any cost analysis. The Company incurred extra expenditure Rs. 7.93 lakh on food and fuel with reference to the norms fixed by the Company.

2.1.12 The Company had been maintaining catering facilities at 50 units (4 units were added in the last five years) as on 31 March 2007 **(*Annexure-8)***. The rates of food items offered at these units are revised periodically by the Head office. The overall cost of food items was controlled by fixing limits of cost of raw material for each hotel with reference to its menu rates without carrying out any cost analysis. Limits are also imposed on fuel costs on the same basis. In case the expenditure on food or fuel cost exceeds the prescribed limit, the hotel manager was liable to bear the excess cost. The Company did not follow rate contract system for procuring raw material to enable an effective control over the input cost. Audit analysis of the system of pricing food items revealed that the Company did not fix profit ratio in selling the food items. Further the Company was not able to exercise effective control over the overheads since a systematic cost based study was not undertaken before fixing the menu rates.

- The Company fixed (August 2003) the percentage of food and fuel cost between 29.5 and 44 *per cent* of the sale prices and impressed upon all the personnel incharge of catering units to ensure that the costs were kept within the prescribed limits. The menu rates were increased (December 2004) by 20 *per cent*. However, a test check by Audit of the food cost reports for the year 2005-06 (records prior to and after 2005-06 were not available) furnished by the units revealed that 23 hotels ***(Annexure-9)*** incurred extra expenditure of Rs.7.93 lakh on food and fuel cost with reference to the norms fixed by the Company. The Company had not analysed reasons for extra expenditure till date despite recommendations (April 2002) of COPU. The Management stated (October 2007) that as the Head office fixed selling price, it was difficult for the hotel managers to contain food cost within the norms and added that agreements have been entered into with sellers of food stuff for supply at uniform rates at a particular place. The reply clearly indicates that norms for the consumption of raw material and fuel were not fixed after analysis of the cost. Due to this, the Company could not adhere to the norms fixed by it.

- It was further observed that in the case of other 23 hotels, percentage of food and fuel cost ranged from 24.46 *per cent* to 30.54 *per cent* as against the norms ranging from 27 *per cent* to 40 percent. This indicated that the norms fixed for cost of food items were not based on any sound costing principle. Although the personnel concerned were directed (June to September 2006) by the Management to explain the reasons for incurring extra expenditure, effective steps to recover the extra amount from them as envisaged were not taken.

  While discussing the matter regarding recovery of Rupees seven lakh from Manager, Hotel Palash on account of excess food cost as pointed out in Report of the Comptroller and Auditor General of India for the year 1998-99, the COPU recommended (April 2002) that recovery should be effected within three months of receipt of the report from the Chartered Accountant to whom the matter was referred by the Company. Action taken by the Company in this regard was not communicated to Audit (September 2007).

- The feed back from the guests on the quality of food served and services in the form of a questionnaire designed for this purpose has been introduced in 2007-08 only. It was seen that the Company had not evolved a system to ensure that the opinions or suggestions put forth in the feed back form are analysed and implemented

Performance of bars

2.1.13 The Company was not maintaining separate accounts of its bars. However, the profit /loss of bars as worked out by Audit from the figures available in the ledgers revealed that out of 19 to 23 bars run by the Company during the period of five years ended 31 March 2007, five to nine bars were incurring losses as per details given below: -

(Rupees in lakh)

Year	Total No. of bars	Loss incurring bars			
		Number	Income	Expenditure*	Loss
2002-03	21	5	6.03	11.03	5.00
2003-04	23	7	10.03	17.73	7.70
2004-05	15	5	7.86	12.29	4.43
2005-06	19	9	16.47	24.35	7.88
2006-07	20	7	18.03	28.35	10.82

******* ***The expenditure does not include salary of bar staff, expenditure on electricity, ice and handling charges etc.***

Source: Figures for 2002-03 and 2003-04 are based on audited accounts and for 2004-05, 2005-06, 2006-07 based on provisional accounts.

The fixation of sale price of liquor and beer was not based on any proper costing system.

It was observed that four bars at Khajuraho (average occupancy-26.2 *per cent*), Sanchi (average occupancy-43.8 *per cent*), Orchha (average occupancy-61 *per cent*) and Pachmarhi (average occupancy-59 *per cent*) were consistently incurring losses for five years up to 2006-07 ***(Annexure-10)***. The earnings of the two bars at Khajuraho and Pachmarhi could not even meet the expenditure on licence fee paid to the Government. The Company did not analyse the reasons for losses despite recommendations of COPU.

Audit analysis revealed that one of the main reasons for losses suffered by bars was that the fixation of sale price of liquor and beer was not based on any proper costing system and taking into account the overheads (salary of staff, electricity expenses, handling charges etc) in the cost. The Management agreed (October 2007) to fix liquor rates after considering the overhead charges.

Marketing

Failure to evolve any advertisement policy and failure to formulate meaningful media plan adversely affected the growth of tourism in the State.

2.1.14 The Company spent major portion of its funds earmarked for "Marketing" on publication of advertisements in various journals/magazines and newspapers etc. and also on printing of publicity material. It was noticed that the Company, without evolving any advertisement policy and formulating a meaningful media plan after taking into account the circulation of newspapers and magazines, released advertisements on ad-hoc basis. This ad-hocism in the advertisement did not have any positive impact on tourist arrival which declined during the period.

During 2002-07, the Company received grants of Rs.18.54 crore for publicity under the plan[30] grant and Rs.8.10 crore under non-plan[31] grant from the State Government. As against this, the Company spent Rs.18.66 crore under the plan grant and Rs.8.10 crore under non-plan grant. The expenditure on Advertisement and Publicity incurred every year ranged from 9.09 *per cent* to 37.15 *per cent* of the total expenditure. It was observed that;

- the Company did not have any separate budget allocation of its own resources for Advertisement and Publicity. It was fully dependant on the plan and non-plan grants from the State Government.
- the Company closed (September 2006) its marketing office at Agra even though it was receiving non plan grant for maintenance of marketing offices.
- the non plan grants are to be used for meeting the expenditure on the salary and allowances of the personnels directly connected with the

---

[30] *Plan funds are utilised for advertising, publicity and conducting of road shows, exhibitions, fairs, etc*

[31] *Non-plan funds are utilised for payment of salary/wages of staff members of marketing and publicity, officers at different locations.*

marketing. It was however, noticed that the Company incurred expenditure of Rs.2.57 crore from non plan grant on the Pay and allowances of its Regional Offices, whose duties are to control the hotels and co-ordinate with head office.

- the instructions (1982) of the State Government to route all advertisements through the State owned Publication 'Madhyam' were not followed.

- no substantial impact of the considerable expenditure incurred on publicity and marketing, was felt by way of increase in tourist arrivals in the State. In fact, the number of tourists (both domestic and foreign) who visited the State dropped from 90.23 lakh in 2004-05 to 81.65 lakh in 2005-06 as discussed in ***para 2.1.7.***

- no procedure has been laid down for printing of publicity material.

Thus, the brand image of the State in the tourism sector as being promoted by the Company was hardly inspiring.

Manpower

The shortage of qualified manpower resulted in deprival of good service in the core activities of the Company.

2.1.15 The Company assessed (October 2006) its manpower requirement at 2,153 on the basis of the industry norm of 1:2 (bed:employee) and worked out the shortfall as 996. The shortfall was 86.08 *per cent* of the Company's own (615) and the outsourced (542) manpower available (March 2007). The performance in tourism and hospitality sector is dependent upon the quality and professional service being offered. Though it is a known fact that this industry's existence is dependent on quality and efficient services to customers, it was noticed that the Company did not have qualified professional staff. The shortage of qualified manpower resulted in deprival of quality services in the core activities of the Company. The Management stated (October 2007) in the ARCPSE meeting that steps are being taken to impart training to its employees. However, the fact is that the Company did not have a time bound programme to recruit adequate qualified and trained manpower. No reasons were given by the Company why this area had not been addressed since 1978.

Development of Infrastructure

Schemes and sources

2.1.16 The Company being a nodal agency, received funds from MoT, Finance Commission and the State Government for development of infrastructure for tourists. The details of funds received and amount spent during 2002-07 is given below:

(Rupees in crore)

S. No.	Name of scheme	No. of works	Sanctioned	Released	Expenditure incurred
1.	Schemes sanctioned by MoT	39	91.21	64.92	19.75
2.	As recommended by Eleventh Finance Commission	16	10.84	10.65	10.79
3.	As recommended by Twelfth Finance Commission	6	12.75	12.75	0.96
4.	State Capital Budget	45	5.58	5.56	5.56
	Total	**106**	**120.38**	**93.88**	**37.06**

Source: Data furnished by Management.

The Company utilised only 39.48 *per cent* of the funds made available for creation of infrastructural facilities resulting in development of inadequate tourist infrastructure in the State.

It would be seen from the above that the Company spent only 39.48 *per cent* of the funds released by various agencies for development of tourist infrastructure facilities in the State, resulting in inadequate development of tourist infrastructure in the State. The inadequate tourist infrastructure adversely affected the growth of tourism in the State. It was noticed that unutilised funds were kept by the Company in its common bank accounts. The Company has utilised the interest earned (amount not quantifiable) on investment of these funds to meet its working capital requirements.

Audit scrutiny of the schemes revealed the following:

Government of India schemes

2.1.17 National Tourism Policy was formulated (2002) with a view to develop tourism in India in a systematic manner, position it as a major engine for economic growth and to harness its direct and multiplier effects for employment and poverty eradication in an environmentally sustainable manner. For this purpose the MoT, in addition to providing regular assistance to the State Governments under centrally financed schemes, decided (May 2002) to implement special schemes for Destination Development, Integrated Development of Tourist Circuits, Rural Tourism and for Information Technology Projects.

Audit noticed several instances of delay in implementation of projects/ schemes, diversion of funds, abandonment of projects without adequate reasons and non-adherence to the instructions of the MoT. These deviations resulted in non-achievement of targets of development of infrastructure, with adversely affecting the performance of the Company in its redefined role of paving way for privatisation. Some illustrative cases of irregularities are discussed in the succeeding paragraphs.

Destination Development scheme

2.1.18 Under this scheme, important tourist destinations in the State were taken up for development after careful consideration of the tourist potential.

Master Planning of these destinations had to be undertaken so as to develop them in an integrated holistic manner. The Master Plan was supposed to tie up all backward and forward linkages, including environmental considerations. The scheme included activities right from preparation of master plans to their implementation. The MoT was to bear full project cost of such development works. The Company received (2002-03 to 2006-07) Rs.30.90 crore for development of ten destinations[32] in the State through the State Government. The details regarding the funds sanctioned, received and spent together with due dates of completion and the physical and financial progress made upto August 2007 is given in ***Annexure-11***. The sanction orders issued by the MoT mentioned different components of works to be carried out together with the completion schedule. It also stipulated that utilisation certificates (UCs) were to be submitted on completion of works and any unspent balance was to be surrendered to the MoT. Further, any escalation due to delay in completion of works was to be met by the State Government from its funds.

Cost overrun in respect of works could not be assessed since the Company has not prepared detailed estimates.

It could be seen from Annexure 11 that out of ten destinations, only one destination (Amarkantak) had been completed so far (August 2007). The Company had not prepared detailed estimates of cost of works to be undertaken under this scheme. In the absence of detailed estimates, the cost overrun due to delay in completion of works could not be quantified in audit. The Management stated (October 2007) that all pending projects would be completed as per targets before March 2008. The fact remains that the delay in completion of these projects resulted in non-achievement of targeted upgradation of tourist infrastructure, thereby affecting the growth of tourism in the State.

Development of Amarkantak

2.1.19 Amarkantank is primarily a religious tourist destination having 12 temples. The Narmada and Sone Rivers originate here. In addition, Amarkantak is basically a green sub-mountainous resort with wide open, well watered meadows and sunlit sal forests alive with springs and brooks. Amarkantank has a tourist potential of one lakh tourists every year.

Based on the estimates prepared (November 2003) by the Company, the MoT sanctioned (March 2004) Rs.4.90 crore and released (April 2004 and December 2005) Rs.3.92 crore. The balance amount was to be released after completion of the scheme. The scheme was divided into eight[33] components:

---

32 Amarkantank, Omkareshwar, Maheshwar, Indore, Burhanpur, Mandu, Panna, Jabalpur, Maihar, Bhopal.

33 Preparation of Master Plan for the town (Rs.5 lakh), extension of Narmadha Temple campus (Rs.104.90 lakh), laying of marble stone inside the temple (Rs.84 lakh), development of tourist points and forest trek (Rs.35.90 lakh), augmentation of public utilities (Rs.79.80 lakh), works relating to saving Narmadha Dam from pollution (Rs.60 lakh), development of recreation centre (Rs.80 lakh) and renovation of holiday home (Rs.40 lakh).

Out of the eight works covered in the scheme, the Company took up (January 2005 to March 2007) seven works except preparation of master plan and spent (March 2007) Rs.2.02 crore on these works. In addition, the Company transferred (2004-05) Rs.2.46 crore to the District Collector, Anuppur for carrying out other related works. The works were stated to have been completed (January 2007). It was noticed that:

The Company did not prepare a master plan which was to serve as the primary guide for development.

- the Company completed (January 2007) the works without preparing a master plan, as envisaged in the sanction order, which was to serve as the primary guide indicating the proposed development of the destination in a holistic manner,
- the Company did not prepare any detailed project report for the works to be executed,
- detailed estimates were not prepared and technical sanction was not obtained with the result cost over run could not be assessed,
- the expenditure incurred by the Company included Rs.1.59 crore diverted to other works not included in the sanction order (Development of Chouraha, Gazibo Sonmuda, Gazibo Kapil Dhara, Development of Kapil Dhara, highmast and metal handle lamp signages and signboards, construction of entrance door of the temple, construction of ghat at Pushkar dam),

The Company diverted Rs.1.59 crore for works not included in the sanction order.

The Company submitted utilisation certificate for Rs.2.46 crore transferred to the Districts Collector without ascertaining the utilisation

- utilisation certificate for Rs.2.46 crore, transferred to the District Collector, Anuppur for carrying out other works was not obtained. The Company, however, submitted (January 2007) the utilisation certificates for the sanctioned amount (Rs. 4.90 crore) without ascertaining the utilisation of funds of Rs.2.46 crore transferred by it to the Collector.

In view of the above, the outcome of this expenditure as well as utilisation could not be vouchsafed in audit. The Management stated (October 2007) in the ARCPSE meeting that utilisation certificates would be submitted as per actual expenditure.

Scheme for integrated development of tourist circuits

2.1.20 The MoT approved (September 2005 and December 2005) three circuits viz. Gwalior-Orcha-Khajuraho, Gwalior-Shivpuri-Chanderi and Sanchi-Bhopal-Pachmarhi with a view to develop tourist circuits (a route on which at least three major tourist destinations are located). The amount sanctioned by the MoT, amount received and spent upto August 2007 on the development of these circuits are given below:

(Rupees in lakh)

S. No.	Name of circuit	Date of sanction / release	Amount sanctioned	Amount released	Expenditure incurred	Date of completion as per sanction order
1.	Development of view point at Korighat, Hoshangabad under heritage, nature and wildlife circuit	24/12/2002	47.15	47.15	@	December 2004
2.	Gwalior-Orcha-Khajraho	09/09/2005	461.09	368.87	81.27	September 2006
3.	Sanchi- Bhopal-Bojpur-Bhimbetk-Pachmarhi	21/12/2005	715.45	572.00	298.28	December 2007
4.	Gwalior-shivapuri-Chanderi	21/12/2005	72.90	58.32	38.00	December 2007
	Total		**1296.59**	**1046.34**	**417.55**	

Source: Data furnished by Management (from sanction orders).
@ The work is yet to be taken up (September 2007).

The Company utilised only 39.91 *per cent* of funds made available.

It was observed that though funds were not a constraint, the Company could utilize Rs.4.18 crore only (39.91 *per cent* of the amount released) on these works upto August 2007 indicating poor progress, which were attributable to:

- delay of 15 months in allotment of land required for executing the circuit related work (Gwalior-Orcha-Khajuraho circuit);
- delay of six months in inviting tenders (Sanchi-Bhopal-Bhojpur-Bhimbetk-Pachmarhi circuit); and
- other procedural delays viz., obtaining approval of BoD (10 months in Sanchi-Bhopal-Pachmarhi circuit, 10 months in Gwalior-Shivpuri-Chanderi circuit).

Thus, the delay in completion of these projects resulted in non- achievement of intended benefits of the development of infrastructure.

Capacity building for service providers

2.1.21 With a view to improve the quality of tourist service providers in the unorganised sector, the implementing agencies were required to devise and arrange short term training programs for persons who came in direct contact with the tourists and submit proposals to MoT for providing funds. The Company did not make any arrangements for such trainings and, thus, could not achieve the objective of providing training to eligible people associated with the tourism industry. The Management accepted (October 2007) the facts and informed that steps were being taken to arrange for such training.

Scheme of financial assistance for organization of tourism related events

2.1.22 Under this scheme, the MoT extended financial assistance for organising festival and fairs highlighting cultural values of the region as part of promoting Tourism. During 2002-03 to 2006-07, the MoT and State Government sanctioned Rs.0.50 crore and Rs.1.75 crore and released Rs.0.48 crore and Rs.1.68 crore respectively for 29 events. The Company utilised the funds for organising the fairs and festivals. Audit observed that during 2006-07, the company could utilise only Rs.43.36 lakh out of Rs.50.50 lakh released. The Company did not refund the unspent balance of Rs. 7.14 laks so far (September 2007).

Scheme for central financial assistance for Information Technology projects

2.1.23 With a view to encourage the State Tourism Departments to take major Information Technology (IT) initiatives (for improved channels of making available the tourist information and facilitation as well as marketing and publicising of their tourist products), a scheme was formulated (2002) by the GoI to extend financial assistance in the form of grants on 50:50 basis to the State Governments. The scheme was intended to enable the states to adopt widespread use of IT in their tourism related products and services.

The Company sought (March 2004 and March 2005) central financial assistance with a view to connect all its booking and tourist offices, accommodation units and administrative offices through the latest Information technology and creating a Payment Gateway for reaching a wider audience. It also proposed upgradation of its existing website and initiation of effective steps towards internet marketing and for providing other facilities. The Company received (2003-04 and 2004-05) Rs.1.65 crore (Rs.96.60 lakh from State Government and Rs.68.38 lakh from GoI). The Company spent (2003-07) Rs.1.78 crore for completion of the scheme in two phases by supplementing the grant releases with Rs.12.65 lakh from their own resources.

It was observed that the intended objective of using IT in tourist information and other purposes could not be fully achieved by the Company as:

- the computer hardware procured (April 2004 to September 2006) by the Company for Rs.52.72 lakh (against sanction of Rs.39.30 lakh) could not be put to intended use due to non-availability of application software and networking as of September 2007. Procurement of hardware items before arranging the software is indicative of the Company's defective planning.

The Company submitted utilisation certificates without actually utilising the funds.

- the video conferencing equipment (Rs.32 lakh) acquired (May 2007) had not been installed (September 2007). The V-Sat facility (Rs.8.44 lakh) was also not established due to refusal of permission by the Forest Department for erecting towers in the forest area. However, utilisation certificates for Rs.40.44 lakh sanctioned for V-Sat and

Video conferencing facilities was submitted (April 2005 and January 2007) to the GoI/State Govt.;

- out of two Handy Audio Reach Kits (HARK) purchased (December 2004 and January 2005) for Rs.13.78 lakh, the Kit meant for use at Islamnagar has not been working properly and the one earmarked for Gohar Mahal, Bhopal has not been commissioned (September 2007);

- the Interactive Voice Response System, (IVR system) for which Rs.7.92 lakh was shown as utilised, has not yet been installed (September 2007);

- the touch screen kiosks were acquired (April 2007) and installed (April 2007) at a cost of Rs.7.02 lakh in contravention of directives of MoT not to install these in view of poor monitoring and maintenance; and

- the payment gateway essential for online reservation of accommodation and other facilities (Rs.5.17 lakh) was not made operational (September 2007).

Thus, the Company failed to utilise the funds available to upgrade and modernise the facilities to improve tourist inflow. In the absence of these facilities the Company's hotels lost a lot of business to private hotels.

Upgradation of highway treats

2.1.24 Biaora is an important junction at the connection point of NH3 and NH12. Since the Highway Cafeteria (Treat) run by the Company at this place was making losses, the MoT sanctioned (December 2002) a grant of Rs.53.67 lakh for its up-gradation by construction of six suites (Rs.15 lakh), purchase of furniture and kitchen equipment (Rs.2.50 lakh), landscaping of the area (Rs.8 lakh), construction of compound wall (Rs.2.50 lakh), setting up of two information counters (Rs.2.50 lakh), two shops (Rs.0.50 lakh) etc. The Company received (December 2002) Rs.53.67 lakh from the MoT and the work was to be completed within two years (December 2004). It was observed that without taking up the main component of the work viz. construction of six suites, the Company spent Rs.13.77 lakh (upto April 2007) on purchase of furniture, painting and electrification. The delay in upgradation of this treat aggravated the dismal performance of the unit as the loss of Rs.0.92 lakh suffered by the unit in 2002-03 increased to Rs.3.32 lakh in 2006-07. It was also noticed that the Company submitted (April 2005) utilisation certificate for the entire amount of Rs.53.67 lakh to the MoT. Thus, the Company failed to utilise the funds available to upgrade and modernise the highway treats.

Delay in upgradation of highway treat affected the profitability of the Company

The Company diverted funds to unremunerative works.

2.1.25 Similarly, the MoT sanctioned (August 2003) a grant of Rs.54 lakh for upgradation of highway treat at Dodi. The work, *inter-alia*, included upgradation of existing cafeteria area (Rs.10.10 lakh), construction and furnishing of four new suites (Rs.14.01 lakh), landscaping (Rs.8 lakh), construction of compound wall (Rs.2.50 lakh) and purchase of kitchen equipment (Rs.5 lakh), etc. The Company spent Rs.38.80 lakh on the work, but submitted (June 2005) utilisation certificate for the entire amount of grant to the MoT. It was noticed that the Company did not take up the work relating to construction and furnishing of new suite and landscaping. An amount of Rs.13.39 lakh was spent on construction of compound wall as against estimate of Rs.2.50 lakh. The Company spent Rs.6.41 lakh on construction of staff quarters not provided in the sanction order issued by the MoT.

Thus, deviation from the approved plans adversely affected the envisaged development of these highway treats. Further, as the Company did not improve these two highway treats, these treats failed to attract tourists. The Company accepted (October 2007) the facts and stated that proper monitoring of the expenditure incurred on the projects would be implemented.

Development of water sports complexes

2.1.26 With a view to introduce water sports facility in the State, the MoT / the State Government sanctioned (August 2003 and March 2004) financial assistance for setting up water sports complexes at Jabalpur (Rs. 2.01 crore) and Gwalior (Rs.1.21 crore). The water sports complexes were scheduled for completion by October 2004 and March 2005 respectively. The Company received (August 2003) Rs. 2.01 crore for Jabalpur and Rs.55 lakh (March 2004) for Gwalior.

It was noticed that:

- the work on the complex at Gwalior could not be taken up (August 2007) by the Company due to non-receipt of clearance from the Forest Department. The Management stated (October 2007) that the work has now been taken up. However, the Management did not state whether sanction had been renewed by the State Government and what would be the revised cost.

Delay in supply of boat resulted in loss of potential revenue Rs.0.51 crore

- Water Sports Complex at Bargi, Jabalpur constructed at a cost of Rs.2.26 crore commenced its operations in May 2005. The Cruise Boat, proposed to be introduced in the complex, was to be received (March 2005) from the manufacturer. It was, however, received and operated from October 2006. The delay of 19 months in its operation resulted in a loss of potential revenue of Rs.50.73 lakh (calculated on the basis of average monthly revenue earned after start of the cruise boating).

Introduction of Lake Cruise Boat in the Upper lake, Bhopal

2.1.27 On the basis of the proposal submitted (July 2004) by the State Government, the MoT sanctioned (September 2004) Rs.2.34 crore for introduction of two lake cruise boats in the Upper Lake, Bhopal and released (September 2004) the first instalment of Rs.1.87 crore. The work was to be completed by March 2005. On the basis of the tenders received (August 2004), the Company placed (October 2004) supply order on Hyderabad Boat Builders for supply of two boats for Rs.99.18 lakh (Rs.49.59 lakh each), which were scheduled to be delivered by April 2005 and July 2005 respectively.

It was noticed that:

- One boat was received (November 2005) late and was commissioned (January 2006). The delay of six months in receiving the boat resulted in loss of potential revenue of Rs.23.08 lakh

Non-refund of unutilised excess grant of Rs.0.88 crore to GOI.

- The other boat was to be received by July 2005. The Company directed (November 2006) the manufacturer to despatch it to Bargi, Jabalpur. The boat is yet to be received (September 2007). The Company paid (August 2006) Rs. 20 lakh as advance to the manufacturer. However, the Company did not refund the excess amount of Rs.87.82 lakh received from MoT for purchase of boats so far (September 2007). The Management stated (October 2007) that the unutilised amount meant for purchase of second cruise Boat for Bhopal would be refunded to GoI.

Construction of sports and recreation centre and tourist reception centre

2.1.28 The Company received (March 2000) Rs.55 lakh from the MoT / State Government for construction of a Sports and Recreation Centre (SRC) at Bhopal. The centre was proposed to be built in the vicinity of the Upper Lake, Bhopal where a centre for water sports was already under development. The work was to be completed by September 2001. As the State Government did not make the land available to the Company; the work was yet to be taken up. Meanwhile the Company received (October 2001) another grant of Rs. 98 lakh from MoT/ State Government for construction of Tourist Reception Centre (TRC) at Bhopal. The Company decided (May 2002) to construct both SRC and TRC at another location in Bhopal and incurred an expenditure of Rs.2.72 crore by augmenting the funds available (Rs.1.53 crore) partly by diversion from other schemes and partly out of its own funds. The work was completed by August 2006.

Building constructed for use as Tourist Reception Centre and Sports and Recreation Centre has been converted into the Company's Head office and Tourist Reception Centre.

It was observed that instead of utilising the building constructed for housing TRC and SRC with facilities like indoor sports, recreation, banking, cafeteria, railway reservation etc. for the benefit of tourists, the Company which was functioning in a rented building and paying Rs.2.68 lakh per annum as rent shifted (July 2006) its head office to the building The Management stated (October 2007) in the ARCPSE meeting that the ground floor of the building was being utilised partly as TRC and other floors as Head office. The reply is not acceptable as the Company did not create the SRC for which funds were provided. The use of building as Head Office was in contravention of sanction and defeated the purpose for which the funds were provided. Further, it also tantamounted to diversion of funds in contravention of recommendations (April 2002) of COPU.

Non taking up of development works

Failure to provide detailed design and drawings for Tourist Complex at Burhanpur resulted in delay of more than six years in creation of Tourist facilities.

2.1.29 It was noticed that despite release of funds by the MoT/ the State Government, the Company did not take up the following infrastructure development works:

- Based on the proposal of the Company, MoT sanctioned (March 2001) construction of Tourist Complex at Burhanpur at a cost of Rs.61.50 lakh (MoT Rs.47.50 lakh; GoMP Rs.14 lakh) and released first (March 2001) instalment of Rs.14.25 lakh. The State Government also released (June 2001) Rs.14 lakh for the purpose. The Company awarded (September 2003) the work for construction of the complex to a contractor at a cost of Rs.51 lakh. Since the Company failed to provide detailed design and drawings, the contractor backed out (September 2004). Thereafter, the Company had not been able to award the work to some other contractor so far (September 2007) because the architectural consultant (Environmental Planning Co-ordination Organisation-a State Government agency) engaged (May 2001) by the Company had not provided the detailed design and drawings for this work (September 2007). No action was taken against architectural consultant for the delay.

- The work of construction of wayside amenities at Deor Kother (Rewa), for which the MoT sanctioned (February 2002) Rs.28.32 lakh and released (February 2002) first instalment of Rs.6.80 lakh, was not taken up by the Company on the plea that adequate source of drinking water was not available at the proposed site. Audit, however, noticed that the report of Geological Survey of India (May 2003) confirmed availability of sufficient water in the area.

The Management stated (October 2007) that proposals for dropping the work were under active consideration of the Company. Since the Company did not take up these works (September 2007), the intended objective of development of these important tourist places could not be achieved.

Special financial assistance as recommended by 11th Finance Commission

2.1.30 In addition to funds sanctioned by the MoT under its regular schemes for development of infrastructure in the States in consonance with the National Tourism Policy, 11th Finance Commission recommended (July 2000) special financial assistance for development of infrastructure in certain circuits of tourism including eco-tourism. For this purpose, the Company received during (March 2002 to February 2005), Rs.10.65 crore as detailed in ***Annexure-12***, against the sanctioned amount of Rs.10.84 crore. The Company has spent Rs.10.79 crore, so far against the above amount. Audit scrutiny revealed the following:

Construction of Tourist Reception Centres (TRCs)

The Company did not construct tourist reception centres with facilities as per guidelines.

2.1.31 It was observed that the Company did not construct TRCs as per the guidelines stipulated in the sanctions issued (March 2002) by the MoT at three places (Satna, Mandla and Pench) as discussed below:

- At Satna, the Company spent (March 2002 to June 2003) the total amount of grant of Rs. one crore on construction of seven new rooms and renovation of existing rooms in Hotel Bharhoot.
- TRC Mandla was constructed (October 2003) in the campus of Wayside Amenities, Mandla at a cost of Rs. one crore. The twelve rooms constructed and earmarked for providing basic facilities as per MoT guidelines were provided with furniture like beds etc. and converted (October 2003) into a hotel.
- The Company spent Rs. one crore meant for construction of TRC at Pench for expansion of its existing hotel and provided furniture like double beds, side tables etc. in these rooms. It was noticed that even after incurring huge expenditure, the occupancy of Hotel at Pench declined from 39 *per cent* (2002-03) to 35 *per cent* (2006-07).

The Company resorted to diversion of funds in contravention of the recommendations (April 2002) of the COPU, which explicitly forbade diversion of funds received from GoI for purposes other than those for which these were sanctioned. It was further observed that the Company furnished (February 2005) utilisation certificates to the MoT for the entire amount certifying no deviations from the plans approved by the State level Empowered Committee. The Management stated (October 2007) that the tourist reception centres were being constructed with facilities like ATMs, First Aid etc. The reply is not tenable as by diverting the funds meant for the construction of TRCs, the Company could not achieve the objective of providing basic amenities to the tourists visiting these areas.

Fleet augmentation

The buses meant for tourist facilities are being operated on commercial routes.

2.1.32 It was noticed that the vehicles purchased from the financial assistance as recommended by 11th Finance Commission were not being used for providing facilities to tourists but diverted for other uses as mentioned below:

- Two AC buses purchased (2005) at a cost of Rs.51.60 lakh were meant for use on Jabalpur-Bandhavgarh and Satna-Bandhavgarh routes for providing better facilities to tourists visiting Bandhavgarh National park. Instead these were deployed on Bhopal-Indore route, thus deviating from the purpose for which MoT provided financial assistance.
- Instead of purchasing one tourist viewing bus (costing Rs.25 lakh) for Bandhavgarh, the Company purchased three Travera vehicles (Rs.21.78 lakh) for use at its office at Bhopal.

- One mini bus purchased for Rs.13.80 lakh in lieu of 22 seater bus (Rs.10 lakh) for use at Kanha was deployed on Bhopal-Pachmarhi route.

The Management accepted (October 2007) that the vehicles were deployed on other routes in view of their poor viability on the routes for which the vehicles were initially purchased. The reply of the Management is not tenable since the operation of the vehicles for the purposes other than that prescribed in the sanction order resulted in non provision of basic facilities to the tourists.

Transfer of assets without approval of MoT

While transferring assets created for tourism purpose to local body, the Company did not retain even preferential right to use the asset.

2.1.33 The MoT sanctioned (March 2001) a project for construction of a day shelter at a cost of Rs.30 lakh (MoT: Rs.24 lakh and State Government: Rs.6 lakh) and Rs.25 lakh for construction of Dharamshala (March 2002) at Barmanghat (Narsingpur). The Company constructed (November 2003) a tourist bungalow in place of day shelter with facilities for public use and a Dharmshala with ten living rooms, a reception centre and three halls at a total cost of Rs.44.59 lakh. These assets created for the development of tourism were transferred (December 2003) to the local panchayat on the ground of profitability without obtaining prior approval of the MoT. While transferring the asset, without mentioning period of retention by the transferee, the Company did not retain the right of preferential use of the asset. The Company did not surrender the balance grant of Rs.10.41 lakh to the MoT, so far (September 2007). The Management stated (October 2007) that the assets were not transferred; but only the operational rights were given on user charges. The reply is not acceptable as the Company did not have any mechanism to ensure that the facility was being used for tourists as envisaged in the sanction of project.

Renovation/up gradation of hotels and other units under the State budget

2.1.34 The State Government was extending financial assistance to the Company from 2002-03 to 2006-07 for renovation and upgradation of its existing hotels and other units with a view to introduce better facilities and amenities for the tourists. The assistance requested, received and utilised for the period under review are as below:

(Rupees in lakh)

Year	Amount requested	Sanctioned and released	Expenditure incurred
2002-03	150.00	150.00	150.19
2003-04	150.00	150.00	150.00
2004-05	300.00	162.50	162.50
2005-06	51.95	51.95	51.95
2006-07	41.40	41.40	41.40
Total	**693.35**	**555.85**	**556.04**

Source: Data furnished by the Management (sanction orders).

It was observed that the Company incurred expenditure out of these funds without proper planning and resorted to their diversion. In this regard, following deserve mention:

- The Company's proposals were based on ad-hoc estimates. Subsequently detailed estimates were not prepared for comparison of the works executed to ascertain the cost overrun if any involved.
- No mechanism was in place to monitor the timely submission of the renovation/upgradation proposals, receipt of funds and execution of works.
- The State Government sanctioned (November 2003) financial assistance of Rs.14.64 lakh in 2003-04 for upgradation of Tourist Complex, Katni. Despite an assurance to the State Government that the money would be spent for the purpose for which it was sanctioned, the Company diverted, (during 2003-04) this amount for upgradation of its hotels Rahil, Payal and Jhankar at Khajurao. It was observed that the occupancy at Katni unit declined from 32 *per cent* in 2003-04 to 28 *per cent* in 2005-06 and at the same time the occupancy of hotels at Khajurao did not improve.
- the loss suffered by Winds and Waves, Bhopal could not be contained even after spending Rs.12 lakh out of the above amount on its renovation during 2002-03. The Management had not analysed the reasons for continuous losses

The Management stated (October 2007) in the ARCPSE meeting that the utilisation of the State Government grants were to be viewed with overall improvements of the units. The Government representative added that ex-post facto approval would be accorded for any excess or diversion of funds. The replies indicate that there was lack of planning in utilization of funds. This resulted in non achievement of the objectives for which these funds were provided.

Internal control and internal audit

Internal control

2.1.35 Internal Control System is an essential part of the Management activity. An efficient and effective Internal Control System helps the management to achieve its laid down objectives. The following deficiencies in the Internal Control System were noticed by Audit:

- The Company neither maintained details of project wise expenditure nor scheme wise. Verification of unspent balances of grants at the end of each financial year with a view to seek permission from the competent authority for their adjustment or refund could not be carried out.

- Stores Ledgers in hotels/units for recording receipt and issue of material along with losses/wastage were not maintained properly. Kitchen consumption registers were not maintained.

- Computerised bills for lodging in Hotel Palash, Bhopal were not serially numbered and kitchen order ticket was not enclosed with the bills for verification with a view to rule out manipulation.

Internal Audit

2.1.36 The Internal Audit Wing of the Company comprising two Internal Audit Officers functions under the General Manager (Finance). It was noticed that the officers had not conducted internal audit of any unit during the period under review. The officers were instead deployed for compilation of accounts.

Since the Company's employees handle cash and stores, weak internal controls coupled with non-existent Internal audit may lead to risk of frauds and misappropriations remaining unnoticed by the Management.

The Management accepted (October 2007) to keep in place an internal audit wing commensurate with the size and nature of business of the Company.

Conclusion

The Company could not achieve its primary objective of promoting tourism in the State. The percentage of tourists availing its facilities was negligible. Poor basic infrastructural facilities and non availability of professional staff to render quality services were the main reasons for poor patronage of its hotels by the tourists. Publication of advertisements in newspapers, journals and magazines without evolving an Advertisement Policy did not have any impact on tourist arrivals. In its redefined role under the MP State Tourism Policy, 1995 the Company did not perform well in improving the infrastructural facilities with a view to facilitate and preparation of master plans for selected areas. Delay in implementation of or not taking up various projects/schemes even after availability of sufficient funds, diversion of funds and non adherence to the instructions of GoI were primarily responsible for non-achievement of intended objectives. The Utilisation Certificates furnished to the Government did not correctly reflect the actual work done and amount spent out of the grants received by the Company for specific purposes. Though the State is a haven for multi attraction tourism and a promising brand, it is no where close to Brand building. Brand positioning is essentially about perceptions and to get the market's acuity about the State in total, the selected approach needs to be taken to the market. Fact is that Madhya Pradesh is a major player in the 'Incredible India' concept.

Recommendations

The State has tremendous tourism potential to showcase itself as a domestic as well as global brand because of its multi attraction tourism destinations. As such, the Company must

- **ensure it gets a major share of wildlife and Eco tourism, culture, heritage and village tourism, adventure tourism and pilgrim tourism;**
- **provide quality and professional services as well as infrastructural facilities if it has to get a major share of tourist growth. Its working force has to be given regular orientation training and motivated to perform better;**
- **make efforts to increase the occupancy level by improving/upgrading infrastructural facilities and room services of its hotels;**
- **judiciously spend the grants received for the specified purposes to ensure improvement of tourist facilities;**
- **adopt aggressive marketing strategies to attract more tourists. The Company needs to carry the message across boundaries about the process undertaken.**

2.2 Billing and Collection of Revenue by Madhya Pradesh Paschim Kshetra Vidyut Vitaran Company Limited

Highlights

The Company suffered revenue loss of Rs.268.68 crore during July 2005 to August 2006 mainly on account of unrealistic assessment of consumption of agricultural consumers.

(Paragraph 2.2.9 and 2.2.10)

There was short billing of Rs.4.58 crore in Ujjain region as demand raised during July 2005 to March 2006 was less than the subsidised rate and wrong categorisation of a consumer resulted in loss of revenue of Rs.2.34 crore.

(Paragraph 2.2.11 and 2.2.12)

Out of Rs.1253.41 crore pending collection as on 31 March 2007, Rs. 538.17 crore (42.94 *per cent*) was pending for more than two years. Further, the target set for collection was unrealistic.

(Paragraph 2.2.15 and 2.2.16)

Improper accountal of demand of Anti Power Theft Squads resulted in poor follow up and non-realisation of arrears of Rs.33.97 crore in respect of theft cases.

(Paragraph 2.2.20)

Introduction

2.2.1 Madhya Pradesh State Electricity Board (Board) was formed in 1957 under Section 5 of the Electricity (Supply) Act, 1948 mainly to supply electricity within the State of Madhya Pradesh. As a measure to bring reforms in the power sector, the Board was unbundled (September 2003) by forming MP Power Generating Company Ltd, MP Power Transmission Company Ltd, and three[34] distribution companies. Madhya Pradesh Paschim Kshetra Vidyut Vitran Company Limited, Indore (Company) was incorporated (May 2002) as one of the distribution companies. The Company was functioning as an agent of the Board under an Operation and Management agreement (July 2002)

[34] *M.P Paschim Kshetra Vidyut Vitaran Company Ltd;M.P.Poorva Kshetra Vidyut Vitaran Company Ltd;M.P.Madhya Kshetra Vidyut Vitaran Company Ltd.*

entered into with the Board. Based on the orders issued (31 May 2005) by the State Government, the Company started functioning independently from June 2005. The Company is responsible for distribution of electricity in the Western zone covering Indore and Ujjain commissionaries consisting of 13 districts[35].

The management of the Company is vested in a Board of Directors (BOD) consisting of seven Directors including the Chairman and Managing Director (CMD). The CMD, being the Chief Executive, looks after the day to day operations of the Company. The collection of revenue in respect of Low Tension (LT) consumers is done by 367 Distribution Centers (DC) and that of High Tension (HT) consumers through eight[36] Regional Accounts Offices (RAO) under the overall charge of Executive Directors of the Regions (Ujjain Region and Indore Region) and the Chief Engineer (Commercial), who are reporting to the CMD. The Chief Engineers are assisted by the Superintending Engineers, Sr.RAOs/RAOs, Executive Engineers and Assistant Engineers for coordinating the activities of billing and collection of revenue.

The review on "Tariff, Billing and Collection of Revenue" by the Board was included in the Report of the CAG of India (Commercial), Government of Madhya Pradesh, for the year ended 31 March 2000. The review was discussed (January 2005) by the Committee on Public Undertakings (COPU) and their recommendations are awaited (September 2007).

Scope of audit

2.2.2 The present performance review covering billing and collection of revenue by the Company during 2002-03 to 2006-07 was conducted from February to June 2007.

The records relating to billing and collection of revenue were examined at the Corporate office of the Company at Indore, Regional offices (Indore and Ujjain), eight[37] Circle Offices out of 13 circle offices, eight RAOs and 12 Divisions (having 71 DCs) out of 49 Divisions (having 367 DCs), Twenty five *per cent* of HT services in all the RAOs and LT services in all the selected DCs were test checked.

Audit objectives

2.2.3 The performance review was undertaken with a view to ascertain whether:

---

35 *Indore, Khandwa, Khargone, Barvani, Dhar, Jhabua, Burhanpur, Ujjain, Dewas, Shajapur, Ratlam, Mandsaur and Neemuch.*

36 *Indore, Khandwa, Khargone,Dhar, Ujjain, Dewas, , Ratlam, Mandsaur.*

37 *Ujjain, Ratlam, Dewas, Shajapur, Khargone, Khandwa, Indore (City) and Indore (O&M).*

- billing of energy supplied was carried out as per prescribed tariff efficiently, economically and effectively;
- the entire billed amount was collected effectively, efficiently and accounted properly;
- effective efforts were made to realise/reduce the revenue arrears and appropriate action was taken against the defaulting consumers; and
- the internal control system was adequate to ensure correct billing and collection of revenue.

Audit criteria

2.2.4 The audit criteria adopted for assessing the performance of the Company in respect of billing and collection of revenue were:

- tariff orders issued by Madhya Pradesh Electricity Regulatory Commission (MPERC), rules and orders issued by the State Government and the instructions issued by the erstwhile Board and the Company;
- codal provisions and the system of billing / collection and recovery of revenue and its proper accounting;
- guidelines issued for sale of power to subsidised categories of consumers and the system prescribed for claiming the subsidies and its reimbursement from the State Government;
- guidelines/orders issued by the Company for follow up of arrears and its realisation ; and
- procedures prescribed by the Company for ensuring effective internal control.

Audit methodology

2.2.5 The methodology adopted for achieving the audit objectives was a mix of the following:

- study of regulations/orders/codes issued by MPERC, Revenue manual/ orders issued by the erstwhile Board and the Company;
- examination of agenda notes and minutes of BoDs meetings of the erstwhile Board/ Company, MIS reports, etc;
- scrutiny of service connection agreements entered into with the consumers, meter readings, meter sealing certificates, billing files, correspondence files along with ledgers and other reports;

- analysis of targets and achievements of revenue fixed by the erstwhile Board/ Company;

- analysis of effectiveness of recovery of revenue from consumers; and

- issue of audit enquiries and interaction with the Management.

Audit findings

The audit findings were reported (September 2007) to the Management/ Government and discussed (24 September 2007) in the meeting of the Audit Review Committee for Public Sector Enterprises (ARCPSE). The meeting was attended by the Additional Secretary (Energy) and the CMD of the Company. The views expressed by the members were taken into account while finalising the performance review. The audit findings are discussed in the succeeding paragraphs.

Billing

2.2.6 The Company followed the billing and collection mechanism laid down by erstwhile Board in the terms and conditions of supply. In addition, MPERC also issued guidelines for billing and collection of revenue from time to time. Consumers, whose maximum contract demand is upto 100 HP or 75 KW, and are receiving supply from the Company at low or medium voltages are treated as low tension (LT) consumers. Consumers, whose minimum contract demand was 60 KVA, receiving supply from the Company at high voltage are treated as high tension (HT) consumers.

2.2.7 The table given below indicates the position of energy received by the Company, sale of energy and loss of energy during the last two years* upto 31 March 2007:

S.No	Particulars	2005-06	2006-07
1	Number of consumers (in lakh)	24.36	24.90
2	Connected load (MW)	3708	3812
3	Energy input (MU)	11367.95	11664.00
4	Cost of energy purchased per KWh (paise)*	154.75	154.75
5	Energy sold (MU)	7740.58	8079.38
6	Loss of energy (MU) (3-5)	3627.37	3584.62
7	Sale of energy (Rs. in crore)	2401.65	2750.00
8	Cost of sale of energy per KWh (Rupees) (7/5)	3.10	3.40
9	Value of loss of energy (Rs. in crore) (6x8)	1224.48	1218.77
10	Percentage of distribution loss (6/3x100)	31.91	30.73
11	Percentage of distribution loss fixed by MPERC	31.70	30.00
12	Maximum loss of energy allowed by MPERC (MU) (3x11)	3603.64	3499.20
13	Loss of energy in excess of norms (MU) (6-12)	23.73	85.42
14	Value of energy lost above the norms (Rs. in crore) (13x8)	7.36	29.04

***** **As per bulk supply agreement entered into by the Company and MPSEB.**
Source: Data provided by the Management.

Due to excess distribution losses, the Company could not sell 109.15 MU of energy valued at Rs.36.40 crore.

It will be seen from the above table that the Company sold 7,740.58 MUs (68.09 *per cent*) and 8,079.38 MUs (69.27 *per cent)* only as against 11,367.95 MUs and 11,664 MUs of power drawn, thereby suffering loss of energy of 3,627.37 MUs and 3,584.62 MUs and potential revenue of Rs. 2,443.25 crore during the years 2005-06 and 2006-07 respectively. The MPERC had fixed target of distribution losses at 31.70 and 30 *per cent* in the tariff orders for these years. These targets were fixed by MPERC in consultation with the Company and were based on the past performance. As against these targets, the Company suffered distribution losses of 31.91 and 30.73 *per cent* during the above period. The Company, thus, suffered distribution losses in excess of the target fixed by MPERC. As a result, the Company could not sell 109.15 MU of energy valued at Rs.36.40 crore during the two years upto 31 March 2007.

Billing procedure

2.2.8 As per procedure prescribed in the M.P. Electricity Supply Code, 2004 (Code), the Company is required to take reading of energy consumption at the end of the notified billing cycle. On the basis of the meter readings, bills are issued to the consumers. In respect of unmetered and meter disconnected consumers, billing is done on the basis of assessed consumption.

In order to reduce the billing cycles, the following steps were also prescribed in the Code:

The Company has not taken action to reduce billing cycle.

- to make arrangements to display the meter readings and payment status of high value consumers on the internet.
- to make arrangements for hand held instruments for generation of bills on the spot.
- to introduce a scheme for pre-payment of energy charges for such consumers, who are getting unmetered supply, after ensuring adequate publicity.
- to provide a choice of maximum alternative modes of payment like payments through credit cards, drop boxes etc., in order to reduce the cost of collection payable to private agencies.

The Company, however, had not implemented any of these methods so far (September 2007).

Deficiencies noticed in billing are discussed in the succeeding paragraphs:

Deficiencies in billing

Short billing of energy charges in respect of unmetered irrigation pump connections

2.2.9 The Company had been billing the unmetered consumers at a flat rate per horse power (HP) per month upto July 2005. Thereafter, based on the tariff order (June 2005), the Company started (July 2005) billing the permanent unmetered irrigation pump consumers for assumed consumption of 100 units per HP per month at permanent metered rates. The temporary unmetered irrigation pump consumers are billed for assumed consumption of 130 units per HP per month at temporary metered rates. These rates were applicable to the consumers who were provided with six hours of supply. The Company was allowed to provide electricity for more than six hours, if the consumers were willing to pay the additional amount for extra hours. In order to assess the actual consumption by these unmetered consumers, the Company has installed meters at selected locations.

Estimation of agricultural consumption is inappropriate compared to the actual hours of supply of power.

Test check of the records for the period from August 2005 to July 2006 (the Company had not worked out the actual consumption thereafter) revealed that the Company had assessed consumption of 48,864.43 lakh units during this period. It was noticed that against the assessed consumption of 48,864.43 lakh units, the Company had billed the unmetered consumers for 36,014.30 lakh units. The Company did not take any action to restrict the supply or to bill the excess consumption as per tariff order (June 2005) of MPERC. It was observed that the agricultural consumers were being billed uniformly as per tariff, without considering the duration of supply. Some consumers were getting continuous supply from other than agricultural feeders. Thus, the non-billing of 12,850.13 lakh units, consumed in excess of billed consumption, resulted in loss of revenue Rs. 151.63 crore (worked out on the basis of average selling price of Rs.1.18 per unit) to the Company

The Management stated (September 2007) that it followed up the case with MPERC after conducting study in this regard and got its approval (March 2007) to bill the consumers in urban areas @ 130 units per HP per month and in rural areas @ 100 units per HP per month from March 2007. The reply is not acceptable as the MPERC, approved the increase for consumption in urban areas only without allowing any increase to the consumers in the rural areas. The fact is that the agricultural consumers are mainly located in rural areas and such excess consumption may occur in the rural areas, causing revenue loss to the Company. The Company has, however, not taken any action to bill the excess consumption of 12,850.13 lakh units so far (September 2007).

Allowing two different tariffs to agricultural consumers

2.2.10 MPERC fixed (June 2005) two different rates for irrigation pump consumers. The metered consumers were billed on the basis of consumption recorded on consumers' meters and for the unmetered and faulty metered irrigation pump consumers billing was done at a flat rate of 100 units per HP per month. The Company, on realising that the metered agricultural consumers were resorting to theft of energy either by bypassing the meter or by suppressing the consumption, conducted (January 2006 to March 2006) intensive checks at their premises and issued (December 2006) instructions to remove the meters of those consumers who were found to be resorting to theft of energy and to bill them at the rate of 100 units per HP per month. However, these instructions have not been implemented so far (September 2007). Audit scrutiny revealed that at the rate of 100 units per HP per month, the total consumption by the metered agricultural consumers of the Company (July 2005 to July 2006) worked out to 18,439.68 lakh units as against 8,520.05 lakh units recorded in the meters. Had the metered consumers been billed at 100 units per HP per month, at par with unmetered consumers, the Company would have earned revenue of Rs.117.05 crore for an additional 9,919.63 lakh units during July 2005 to July 2006.

The Company suffered loss of revenue of Rs.117.05 crore due to uncontrolled theft of energy by metered agricultural consumers.

The Management stated (September 2007) that in spite of resistance from the consumers, steps for removal of meters were taken to improve billing. Further, maintenance of meters at remote places was difficult and theft of power could not be fully controlled. The reply is not acceptable since the Company issued directions to remove the meters and to bill the consumers on assumed consumption basis, after theft of power was noticed. The Company has however, not taken any action to bill the excess consumption of 9,919.63 lakh units so far (September 2007).

Thus, the delayed decision for billing at a flat rate resulted in loss of revenue of Rs.117.05 crore to the Company

Short billing of revenue due to non accountal of demand as per tariff

2.2.11 As per Tariff orders, all consumers of different categories have to be billed at the specified tariff rate. As the State Government was allowing subsidy to agricultural consumers, the difference between the tariff rate and the subsidised rate was to be claimed from the State Government. As per billing procedure, the Company should raise demand at tariff rate but collection should be done at subsidised rate from the consumers and the difference should be claimed from the State Government. Audit scrutiny revealed that during July 2005 to March 2006, two circles of Ujjain region (Ujjain, and Shajhapur) raised the demand even less than the demand at subsidised rate. The reasons for the same were not available on record. This resulted in loss of revenue of Rs.4.58 crore to the Company as given below.

Raising of demand at lesser rate than the subsidised rate in Ujjain and Shajapur circles resulted in revenue loss of Rs.4.58 crore.

(Rupees in crore)

Name of the circle	Demand to be raised	Demand raised	Demand to be raised at subsidised rate	Difference between demand at subsidised rates and actual demand raised
Ujjain	44.60	30.54	32.20	1.66
Shajapur	28.33	18.30	21.22	2.92
Total	**72.93**	**48.84**	**53.42**	**4.58**

Source: Data collected from field offices of the Company.

The Management accepted (September 2007) that there was no uniform procedure for accounting the demand of subsidised tariff and a uniform procedure will be implemented in future.

Thus, due to raising of demand lower than the tariff at subsidised rate, the Company suffered loss of revenue of Rs.4.58 crore.

Wrong application of tariff for defence installation

Wrong categorisation of HT consumer resulted in revenue loss of Rs.2.34 crore.

2.2.12 Garrison Engineers (Project) MES, Mhow had a total contracted mixed load of 3200 KVA in bulk for its power house, water works, Military Hospital, workshop, Wallesely Barracks, Denis Road and Golf View. According to the revised tariff (June 2005) the non-industrial consumers having mixed load were to be billed under category HV 3. It was observed that the consumer was, however, being billed under category HV 6, which was applicable to industry or any other township for domestic purpose such as lighting, fans, heating, etc.

Thus, due to wrong classification of tariff, there was a short billing of Rs.2.34 crore for the supplies made during July 2005 to March 2007. After being pointed out by the Audit, the Company raised (May 2007) a supplementary bill for this short-billed amount. Payment of the same has not been received, so far (September 2007).

Security Deposit from Consumers

2.2.13 As per the Conditions for Supply of Electricity Energy, the consumers were required to deposit security in cash or otherwise for the amount equivalent to the value of estimated consumption of 45 to 90 days, depending upon the nature of supply. The consumers were also required to replenish the security deposit when it was found insufficient to meet the value of estimated consumption of 45 or 90 days. As per MPERC (Security Deposit) Regulations (September 2004), all licensees were required to collect security deposit / additional security deposit from all the consumers. Audit scrutiny revealed the following deficiencies:

Security deposit of Rs.23.67 crore was not collected from Railways and RE Societies due to lack of pursuance

- The Company has not collected security deposit amounting to Rs.23.67 crore from Railways (Rs.17.01 crore) and Rural Electrical Co-operative Societies (RE Societies) (Rs.6.66 crore) as per the MPERC (Security Deposit) Regulations.

The Management stated (September 2007) that security deposit would be claimed from Railways in future and in respect of RE Societies attempts would be made for recovery after finalisation of their legal standing.

Non-levy of surcharge as per MPERC regulations resulted in loss of revenue of Rs.0.80 crore.

- Khargone circle of the Company raised (September 2005) demand for obtaining additional cash security deposits of Rs.4.46 crore from four HT connections of Municipal Corporation (MC) for its water works. As per the MPERC Regulations, the consumer was liable to pay surcharge in case the payment of security deposit was delayed for more than one month. The MC had not deposited the additional security deposit, so far (September 2007). It was noticed that the arrears of security deposit were not being shown as arrears of energy charges and the surcharge on delay in payment was also not levied. This resulted in loss of revenue of Rs.80.27 lakh upto March 2007 (surcharge at the rate of one *per cent* per month for 18 months) towards surcharge.

  The Management stated (September 2007) that action for billing surcharge on additional security deposit was being taken. Further, no action has been taken to recover the additional security deposit of Rs.4.46 crore.

Collection of revenue

Procedure for collection of revenue

2.2.14 The Company is responsible to ensure that no default in payment is continued beyond a reasonable period, subject to a maximum of three months, without action for temporary disconnection. The authorised official will ensure that all the cases pertaining to default in payment are monitored regularly and timely action is initiated for temporary or permanent disconnection. In case, connection is temporarily disconnected, supply shall be restored only after the outstanding charges/amount of instalment along with disconnection/ reconnection charges are paid by the concerned consumer. If power supply remains disconnected for a period of sixty days due to non payment of charges or due to non compliance of any direction issued in this regard, the Company shall issue a show cause notice (to be replied within seven days), to the consumer for termination of the power supply agreement. In case the consumer did not take any effective steps for restoration of power supply the agreement for power supply shall be terminated on expiry of the notice period of seven days, provided the initial period of the agreement is completed. During the period of temporary disconnection, the consumer shall be liable to pay the minimum charges. After permanent disconnection, if the consumer wishes to restore the service connection, it would be treated as an application for new connection, but would be entertained only after all outstanding dues are cleared.

The collection mechanism followed by the Company was as follows:

- revenue billed in respect of HT services was collected at Regional Accounts Offices;
- in respect of LT services, electricity bills were collected by collection centers located at distribution centers except in some areas where collection work was entrusted to certain collection agencies viz., Rural Cooperative Banks and Post offices; and
- the HT and LT consumers were required to pay current charges within 15 days from the date of the bill, failing which the consumers were liable to pay surcharge at the prescribed rates.

Collection efficiency

2.2.15 The demand raised, revenue collected, amount outstanding, distribution losses, collection efficiency and arrears in terms of months' assessment for five years ended 31 March 2007 are indicated below:

(***Rupees in crore***)

Sl. No.	Particulars	2002-03	2003-04	2004-05	2005-06	2006-07
1.	Balance outstanding at the Beginning of the year	832.21	894.66	1200.84	1490.05	1016.15
2.	Revenue assessed during the year	1,766.89	2,103.15	2,180.20	2,401.65	2,750.00
3.	Total amount due for realisation	2,599.10	2,997.81	3,381.04	3,891.70	3,766.15
4.	Amount realised during the year	1,536.95	1,731.18	1,947.83	2,225.51	2,521.37
5.	Other Adjustments*	167.49	65.79	(-)56.84	650.04	(-)8.63
6.	Balance outstanding at the end of the year	894.66	1,200.84	1,490.05	1,016.15	1,253.41
7.	Percentage of amount realised to total dues (4/3) x 100 (Collection efficiency)	59.13	57.75	57.61	57.19	66.95
8.	Balance in terms of months assessment (month)	6.08	6.85	8.20	5.08	5.47
9.	Realisation target	NA	1,921.25	2,136.31	2,358.80	NA
10.	Percentage of realisation target with reference to revenue assessed during the year	NA	91.35	97.99	98.22	NA
11.	Realisation target as percentage of arrears (9/3) x 100	NA	64.09	63.18	60.61	NA

Note: * Balancing figure (3-4-6), since details not available. NA (Not available).
Source: Data collected from field offices of the Company.

Amount outstanding increased by 40.10 *per cent* from Rs.894.66 crore in 2002-03 to Rs.1253.41 crore in 2006-07.

It was observed that:

- collection efficiency which stood at 59.13 *per cent* in 2002-03 decreased to 57.19 *per cent* in 2005-06 and subsequently increased to 66.95 *per cent* during 2006-07;

- even though the realisation increased by 64.05 *per cent* over the five years from Rs.1536.95 crore in 2002-03 to Rs.2521.37 crore in 2006-07, but the balance outstanding increased by 40.10 *per cent* from Rs.894.66 crore to Rs.1253.41 crore during the same period; and

- the target set for collection was not realistic as it did not include the amount of arrears. Further, the targets set were also less than the current year's demand and the Company failed to achieve the targets in all the years, as a result, the arrears kept on accumulating. Realisation target, as percentage of arrears came down from 64.09 *per cent* in 2003-04 to 60.61 *per cent* in 2005-06.

The category wise arrears of LT consumers / HT consumers for the period ending March 2007 is given in ***Annexure-13.***

It will be observed from Annexure 13 that:

- Outstanding dues of LT categories viz., domestic, non-domestic, water works, street lights increased by more than 50 *per cent* during the last five years; and

Outstanding dues in LT category are mainly from domestic and agricultural consumers.

- Outstanding dues were mainly from domestic and agricultural consumers. The outstanding dues against these consumers ranged between 86.11 to 93.17 *per cent* of total outstanding dues of LT consumers. The outstanding dues from these consumers increased by 67.04 *per cent* during the last five years.

Further analysis of group-wise debts outstanding as on 31 March 2007 revealed that an amount of Rs.470.49 crore and Rs.282.55 crore were due from temporarily disconnected and permanently disconnected services respectively.

2.2.16 The age-wise analysis of outstanding dues as on 31 March 2007 is given below:

(Rupees in crore)

Age	**Outstandings as on 31 March 2007**		
	HT Services	**LT Services**	**Total**
Below one month	24.07	20.44	44.51
One to six months	95.21	109.88	205.09
Six months to one year	87.11	130.41	217.52
More than one year – below two years	119.15	128.97	248.12
More than two years – below three years	89.22	130.46	219.68
Three years and above	236.97	81.52	318.49
Total	**651.73**	**601.68**	**1253.41**

Source: MIS of the Company.

It will be seen that the dues outstanding for more than two years amounting to Rs.538.17 crore were 42.94 *per cent* of Rs.1253.41 crore pending collection as on 31 March 2007.

The main reasons, as analysed by audit, for increase in outstanding dues were as follows:

- sickness of industries and disputes relating to captive generation / tariff in courts of law;
- poor financial status of RE Societies;
- continuing supply to emergency services like street light, waterworks, despite heavy arrears;
- allowing special packages like waiver of arrears/surcharge from time to time especially to agricultural and domestic (BPL) consumers;
- delay in disconnection of services of defaulted agricultural and domestic consumers; and
- allowing payment in instalments without securing the arrears.

Thus, because of lack of serious concerted effort, the outstandings increased and if concerted efforts to reduce the outstandings is not taken, with the passage of time, the chances of realisation of arrears would become remote.

Arrears of revenue from temporary services

2.2.17 As per the terms of supply, the Company should assess the consumption of new temporary service connection based on the load applied for and the assessed charges should be collected in advance. Further, the readings of the meter should be taken during the period of temporary connection to ensure that the charges for actual consumption do not exceed advance payment received. Under the circumstances, there cannot be arrears from temporary connections. However, an amount of Rs.2.35 crore was outstanding from temporary services as on 31 December 2006, after netting off of advances received from the temporary consumers. Further, it was observed that the Company is not maintaining consumer wise details, in the absence of which audit could not assess the actual arrears pending against the temporary connections. Non-collection of advance amount as per codal provisions resulted in accumulation of arrears and in the absence of security deposit, the realisation is doubtful. The Company did not fix any responsibility for non collection of sufficient advance as electricity charges from temporary service connections.

Non-collection of sufficient advance resulted in accumulation of arrears from temporary services.

The Management stated (September 2007) that the arrears at the end of March 2007 was negligible after adjustment of security deposit. The reply is not acceptable since the details of outstanding from temporary services as on March 2007 were not furnished to audit.

Card billing

Non-issuing of bills resulted in accumulation of arrears of Rs.2.14 crore.

2.2.18 The Board was following a card billing system[38] in respect of domestic, commercial, and agricultural categories of consumers since January 1987. At regular intervals of six months, meter reading was taken and actual consumption was billed. After introduction of computer billing (June 2002) the card billing was converted into regular billing. A test check of records of Ujjain O&M Division revealed that there were 3403 consumers whose billing was being done under card billing system. It was noticed that while the division was accounting for monthly charges excluding surcharge in the accounts, no monthly bills were raised to the consumers. Thus, the failure of the Company to issue the bills to such consumers resulted in accumulation of arrears of Rs. 2.14 crore.

The Management accepted (September 2007) the lapse and stated that extensive survey was carried out in May 2007 and the bills for arrear were being issued with facility to pay the dues in instalments.

Arrears against Government Departments

2.2.19 The arrears against the Government Departments and institutions upto 31 March 2007 were as follows:

Out of Rs.1253.41 crore pending realisation as on 31 March 2007, Rs.476.06 crore were due from Government Departments/ Organisations.

(Rupees in crore)

Particulars	**Arrears to the end of March 2007**		
	LT	**HT**	**TOTAL**
Nagar Nigams	8.12	162.03	170.15
Nagar palikas	6.44	2.82	9.26
Panchyats	13.95	0.00	13.95
Public Health and Engineering Department	0.01	1.32	1.33
Irrigation Department	0.26	3.20	3.46
R.E Societies	--	147.78	147.78
State / Central Government Textile companies	--	57.28	57.28
Other State Government Departments	1.65	0.05	1.70
Central Government offices	0.03	71.12	71.15
Total	**30.46**	**445.60**	**476.06**

Source: Data provided by the Management.

As these huge outstandings affected the cash flow, the MPERC suggested (December 2004) the State Government to evolve a mechanism for liquidating such past liabilities and for timely payment of bills by its departments and other Government Institutions.

It was noticed that the State Government, however, ordered (May 2005) the Company to reconnect the supply of all the disconnected water schemes of Nagar Nigams / Nagars Palikas, without clearance of the outstanding arrears. MPERC directed (September 2005) both the parties (the Company and the State Government) to discuss the issue of settlement of arrears, which were

38 *The consumer was provided with a printed card, fixing the amounts to be paid by them based on an average consumption.*

outstanding. The Management stated (September 2007) that necessary action would be taken with the intervention of the State Government.

It was also noticed that the supply to textile mills was continued up to July 2001 without collection of arrears (Rs.57.28 crore) on the plea that disconnection may lead to law and order problem due to labour unrest. Thus, delay in resolving the matter regarding recovery of dues from the Government departments resulted in accumulation of arrears to Rs. 476.06 crore.

Recovery of dues in respect of cases detected under anti theft drive

2.2.20 In order to detect theft of electricity, the Company formed an Anti-Power Theft Squad to inspect the service connections. The table below indicates the number of connections checked, number of theft cases detected, amount involved in the theft, amount realised and the balance pending collection, for the five years period ended 31 March 2007.

(Rupees in crore)

Sl. No.	Year	Number of connections checked	Number of cases detected	Percentage	Amount billed	Amount realised	Balance amount
1	2002-03	992564	285612	28.78	39.50	32.19	7.31
2	2003-04	870735	197893	22.73	39.33	32.75	6.58
3	2004-05	762224	177185	23.25	48.26	40.66	7.60
4	2005-06	935201	172484	18.44	61.65	51.80	9.85
5	2006-07	1089883	189482	17.39	77.37	74.74	2.63
		Total			266.11	237.14	**33.97**

Source: MIS of the Company.

Lack of internal control in pursuance of recovery of revenue pointed out during anti-power theft drive, resulted in non-recovery of Rs.33.97 crore.

Of the connections checked during 2002-07 the percentage of theft ranged between 28.78 to 17.39. It was noticed that as against the billed amount of Rs. 266.11 crore, the Company realised Rs. 237.14 crore.

The reasons for non-recovery of balance amount of Rs.33.97 crore was not available on record. The Management stated (September 2007) that as the number of cases were too large and the assessments generally went into argument or litigation. Based on the judgment or compromise, downward revision of bills was inevitable. The reply is not tenable as the assessment made during anti power theft drive was not adequately documented which necessitated the downward revision. Further, the internal control mechanism was also ineffective in watching the recovery.

Arrears from the Employees

2.2.21 The outstanding dues on account of sale of power against the employees of the Company / Board up to December 2006 are detailed below:

(Rupees in lakh)

	Ujjain region	Indore region	Total
MPSE Board employees	16.70	19.86	36.56
Retired Board employees	2.00	2.48	4.48
Total	**18.70**	**22.34**	**41.04**

Source: MIS of the Company.

It was noticed that the Company did not take effective steps to recover the dues from their salaries. The Management stated (September 2007) that regional heads were looking into the matter and recovery would soon be made. The reply however, does not indicate as to how the recovery would be made particularly from retired employees.

Improper accountal of dishonoured cheques

2.2.22 As per system followed by the Company, cheques received against energy dues from consumers were credited/adjusted before realisation. In case the cheques were returned by bank, they are returned to the consumers requesting for fresh payment duly raising demand in this regard. Further, as per instructions issued (January 2005) by the CE (Commercial) of the Company, the RAOs should return the dishonoured cheques to the concerned DCs within 2 days of return of the cheques by the banks and watch whether proper demand was raised for the value of dishonoured cheques including penal charges and surcharge. In addition, a monthly return indicating the position of dishonoured cheques and realisation thereof is to be sent to circle offices for necessary pursuance. The status of dishonoured cheques in respect of HT/LT consumers as on 31 March 2007 was as under:

(Rupees in lakh)

Name of region	Cheques dishonoured pending adjustment as on 1 April 2006		Cheques dishonored during the year 2006-07		Demand raised during the year 2006-07		Balance dishonoured cheques as on 31 March 2007	
	No	Amount	No	Amount	No	Amount	No	Amount
Indore								
LT	7176	604.30	5127	454.72	6766	575.19	5537	483.83
HT	13	32.95	99	309.18	98	295.01	14	47.12
Ujjain								
LT	955	107.25	790	67.59	1240	119.87	505	54.97
HT	8	4.91	18	137.64	8	81.81	18	60.74
Total	**8152**	**749.41**	**6034**	**969.13**	**8112**	**1071.88**	**6074**	**646.66**

Source: Data provided by the Management.

Rs.6.47 crore remained uncollected due to non-raising of demand against dishonoured cheques.

It was observed that 6074 cheques (May 2000 to March 2007) worth Rs.6.47 crore, dishonoured by banks, were not accounted for properly by raising fresh demand on the defaulting consumers, instead the same were shown as collected in the records. This resulted in non-collection of revenue to that extent from the consumers. It was further observed that:

- dishonoured cheques were pending since May 2000 for proper accountal;
- the Company accepted post dated cheques, unsigned cheques, and cheques not drawn in favour of the Company leading to dishonour of the same by the banks; and
- the Company accepted cheques of certain consumers whose cheques were dishonoured more than once on earlier occasions. A test check of

records of two circles (Dewas and Ujjain) revealed that 21 cheques worth Rs.1.68 crore were dishonoured more than once in respect of seven consumers.

As per the provisions of the Negotiable Instruments Act, 1881, whenever a cheque is dishonoured, a notice allowing 15 days time for payment of the defaulted amount is to be issued. Action under criminal procedure is also to be initiated after expiry of 15 days notice in case of non-payment of dues. It was observed that no such action was taken by the Company for realisation of the amount of the dishonoured cheques. Thus, improper follow-up of cases of dishonoured cheques resulted in extension of undue benefit to the consumers and loss of revenue to the Company.

The Management stated (September 2007) that large number of cheques pertained to old period and the Company was finding it difficult to check these cheques because of lack of information. The reply is not acceptable since the Company could not realise even 71 cheques worth Rs.9.82 lakh dishonoured during 2006-07 in Dewas circle alone due to improper pursuance.

Short Accountal of Revenue of Agricultural and Single Light Point (SLP) consumers

Rs.190.20 crore was claimed and received as reimbursement of subsidy from the State Government, in excess of the demand exhibited in accounts.

2.2.23 The State Government decided (October 2003) to restore supply of SLP connections and agricultural pump up to 5 HP, disconnected due to non payment of dues. As per the decision, non payment of energy bills of the irrigation pumps up to 5 HP and SLP connections of BPL consumers for the period from January 2001 to December 2003 was to be waived off and the same would be paid to the Board by the State Government. As per the order, the consumer would be issued a bill showing the amount due, amount adjusted (State Government) with "nil" due and consolidated bill to be sent to the State Government for reimbursement. The Company submitted (April 2004) claim for waiver of dues of SLP and agricultural pump consumers and realised (March 2004 to January 2006) from the State Government Rs.254.89 crore and Rs.767.37 crore respectively including surcharge. While adjusting (during 2005-06) the amount realised, it was noticed that the demand shown/raised in the books of accounts was less than the amount realised from the State Government. As such, the Company issued instructions (July 2005) to DCs to raise supplementary demand of Rs.190.20 crore to book the revenue in the books of accounts. The Management did not analyse the reasons for non-accountal of entire demand in the books, when such bills were issued to the consumers. Further, the above concession was to be given only to those agricultural and SLP consumers who got meters installed or gave a written understanding for the same. It was noticed that the State Government orders regarding installation of meters by the consumers were not followed and that adjustment of differences was yet to be done by raising proper demand. Thus, the Company claimed and received an amount of Rs.190.20 crore from the State Government, as reimbursement of subsidy, in excess of the demand exhibited in their books of accounts. Further, reasons for failure of internal audit was not analysed by the Company before issuing instructions for raising supplementary demand and for safeguarding against such repeated lapse.

The Management stated (September 2007) that there were some errors in raising the demand during 2003-04, which has been rectified. The reply is not tenable as the Company failed to follow the instructions of the State Government for raising the demand before submission of claim and accountal of demand is still pending.

Status of RE Societies

2.2.24 A reference is made to the billing activities of RE Societies in the Report of the Comptroller and Auditor General of India, Government of Madhya Pradesh, (Commercial) for the year ended March 2000 (Para 3A.5.1.1). The erstwhile Board entered (October 1976 to March 1989) into agreement with 17 Gramin Vidyut Sahkhari Samities (Rural Electrical Cooperative Societies) in the State for supply of power to rural areas under the MP Samiti Adhiniyam, 1968. These Societies were billed at the concessional rate fixed in tariff order under category HV.7 "bulk supplies". The rationale for concessional supply of power to RE Societies was to accelerate the pace of electrification, supplement the efforts of the Board and to provide better consumer services in the rural areas. Out of the 17 societies in the State, Societies at Manasa, Pandhana and Manawar were formed in the geographical area of the Company.

Delay in settling the status of RE Societies resulted in non-realisation of arrears of Rs.147.78 crore.

The State Government took a policy decision (26 June 1996) that all the RE Societies should be merged with the Board. Since the financial position of the RE Societies was very poor, the State Government filed (June 2001) a case before MPERC for revocation of licence of all the RE Societies. The MPERC on observing (July 2004) that none of the RE Societies followed the provisions of conditions of distribution licence, registered (September 2004) a suo-moto petition and directed (December 2004) that all the RE Societies, who were willing to be liquidated may approach the Registrar of Co-operative Societies and the Board in this regard. The MPERC further ordered that the State Government and the Board had to sort out the issues of status of all the Societies. Out of the three societies, RE Society, Manawar was taken over (March 2002) by the Board and is working as a division of the Company. The State Government and the Company is yet to settle the status of remaining two societies (September 2007).

The Management stated (September 2007) that it was taking all legal recourse for revocation of licence of societies and for taking over the activities of the societies.

Thus, delay on the part of the State Government and the Company in settling the issues of the remaining two societies resulted in delay in realisation of arrears amounting to Rs.147.78 crore (October 2007).

Instalment facility to HT Consumers

2.2.25 In order to collect the arrears of revenue and to grant relief to consumers in making the payment, the Company extended the facility for payment of arrears / current energy bills in instalments. The procedure laid down for granting the facility was also issued from time to time upto May 2004, indicating the criteria and parameters for assessing the genuineness and capability of the consumers to pay the bills in instalments. The policy *inter alia* prescribed that while sanctioning instalments, the Company should:

- examine the financial strength of the consumer;
- consider security mechanism by taking postdated cheques for each instalment, an agreement/undertaking executed by consumer, and additional security in the form of personal guarantee /third party/bank guarantee; and
- ensure that the facility of making payment in instalments shall be extended to a consumer only once in two consecutive financial years.

Similarly, with a view to revive the closed sick industries, the Board introduced (December 2000) a Special Package Scheme (SPS) for disconnected HT consumers. The scheme was reintroduced in July 2004 and April 2006. The salient features of the scheme were:

- the facility of the scheme was permissible only once to a consumer;
- the scheme was valid for one year;
- the Security deposit of the consumer would be adjusted against surcharge and the remaining surcharge amount shall be waived after receipt of the entire arrears. The monthly minimum charges billed during the disconnected period would also be waived;
- after receipt of ten *per cent* of arrears of energy bills as down payment, the consumer would be allowed to pay the balance in 18 monthly instalments, without surcharge; and
- the scheme was extended to disconnected/unconnected consumers, whose services remained disconnected for more than six months and whose period of agreement stood expired.

Some of the irregularities noticed in implementation of the instalment facilities/ SPS are discussed below:

Extension of undue benefit to Gajra Bevel Gears in sanctioning industrial package

2.2.26 Gajra Bevel Gears Limited, an HT consumer defaulted (since July 2004) in payment of electricity dues. The consumer was allowed (July 2004) to pay the dues in instalments but on his failure to do so, the supply was disconnected (October 2004). He was again sanctioned (December 2004 and February 2005) instalment facility for payment of dues. Meanwhile, the consumer requested (May 2005) the Company to extend the facility under SPS. Consequently, the supply was restored and the consumer was allowed (June 2005) to pay the arrears of Rs.58.66 lakh in instalments, withdrawing demand of Rs.77.02 lakh for the disconnected period (November 2004 to May 2005). However, the service was again disconnected (October 2006) for non-payment of arrears. The amount payable by the consumer as on 31 March 2007 stood at Rs.1.16 crore. It was observed that the Company extended the instalment facility four times (July 2004, December 2004, February 2005 and June 2005) as against facility to be provided once in two consecutive financial years. Further, while allowing to pay in instalments, the Company failed to insist on security as prescribed in the scheme. The Company also extended SPS to the consumer (a working unit), meant for reviving closed and sick industries only. Despite waiver of Rs.77.02 lakh and reconnecting the service four times, the Company could not collect arrears from the consumer, which increased from Rs.58.66 lakh (June 2005) to Rs.1.16 crore (March 2007).

Payment of arrears in instalments was extended to ineligible consumer and demand of Rs.77.02 lakh waived off earlier not reinstated.

The Management stated (September 2007) that instalment facility was extended to the consumer so that the arrears could be recovered by keeping the industry working. The reply is not acceptable because sanction of SPS to a working unit is contrary to the policy of the scheme. Further the demand for Rs.77.02 lakh which was withdrawn earlier was not reinstated on the failure of the consumer to make the payment in instalments.

Extension of undue benefit to Pratap Steel Rolling Mills

2.2.27 As per the provisions of Supply Code, a new service connection shall be released to a consumer only after clearance of all outstanding dues against the existing connection. Pratap Steel Rolling Mills Limited, Indore was availing of power supply from the Board with a contract demand of 1200 KVA since July 2001. As per terms of the agreement, the consumer was to avail the supply for a minimum period of two years (i.e. up to July 2003) and to pay energy charges or monthly minimum charges, whichever was higher. The service was disconnected (April 2002) due to non payment of energy bills and the arrears accumulated to Rs.1.08 crore up to July 2003. The consumer applied (May 2006) for reduction of contract demand to 700 KVA under SPS. The Company reconnected (August 2006) the service after executing (June 2006) a new supply agreement, which included the following conditions

- to withdraw the demand of Rs.90.35 lakh raised during May 2002 to July 2003 (the agreement period);
- down payment of Rs.3 lakh at the time of executing agreement;
- payment of dues of Rs.14.42 lakh in 18 monthly instalments; and

- to clear the dues of Rs.6.01 crore pertaining to another connection for mini steel plant owned by the consumer (instalment starting after clearance of dues of Rs.14.42 lakh).

SPS was extended to the consumer which was ordered for closure by the BIFR/AAIFR.

It was noticed that Board for Industrial and Financial Reconstruction (BIFR) ordered (January 2002) the consumer to wind up the unit. On an appeal filed (April 2002) against the orders of BIFR, the Appellate Authority for Industrial and Financial Reconstruction (AAIFR) also confirmed (May 2002) the orders of BIFR, against which the consumer filed (May 2002) a writ petition in the High Court. The Court did not stay the orders of AAIFR and the case is still pending (September 2007). Further, the legal adviser of the Company opined (August 2005) that all the agreements/assurances and undertakings were only a matter of paper work and would never translate into any positive action without any specified terms and advised to release supply only on specified terms like imposition of penal clause to avoid recurrence and frequency of defaults. Despite the above, the consumer was sanctioned (May 2006) reconnection under SPS. Thus, the consumer managed to get the service reconnected (August 2006) but failed to pay the arrears and finally the service was disconnected in February 2007.

The Management stated (September 2007) that the consumer failed to pay the dues in instalments as such the demand for Rs.90.35 lakh was not withdrawn. The dues from the consumer accumulated to Rs.1.39 crore (August 2007). The reply is not tenable, as BIFR and AAIFR had ordered for closure of the unit. Further, the court had not stayed their orders and its decision is still pending. Thus the Company should not have extended SPS (August 2006) for revival of the unit.

Accumulation of arrears in respect of Shree Synthetics Limited

2.2.28 Shree Synthetics Limited Ujjain an HT consumer had a contract demand of 10 MVA. The consumer defaulted (October 1996) in the payment of electricity dues and was declared (September 1997) sick by BIFR. The Board permitted (April 1999) the consumer to pay the dues of Rs.14.35 crore in instalments as it was registered (August 1997) with BIFR, subject to the condition that it should provide proper security/LC for payment of instalments. The consumer neither provided proper security nor paid the instalments promptly. It was, however, observed that the consumer was allowed to utilise power which was an undue favour extended to him.

Delayed disconnection resulted in accumulation of arrears.

The BIFR issued (July 2004) orders for closure of the unit and when the consumer appealed to AAIFR, it passed (October 2005) an interim order to pay the current dues regularly. The unit, however, paid (between October to December 2005) the dues in part and when the dues accumulated to Rs.74.56 crore (energy charges: Rs.64.87 crore and surcharge Rs.9.69 crore), the Company disconnected the service (April 2006) and terminated (July 2006) the HT agreement. After adjustment of security deposit, the dues outstanding against the consumer amounted to Rs.72.27 crore (energy charges Rs.64.87 crore and surcharge Rs.7.40 crore). It was observed that the unit was a habitual defaulter and despite knowing this fact, the Company extended power supply without obtaining bank guarantee/ LC in order to safeguard its interest.

The Management stated (September 2007) that the consumer was paying current energy charges upto April 2005 and the supply was disconnected in April 2006. The reply is not tenable as the consumer was making only part payment and not even the current months energy charges in full which resulted in accumulation of arrears.

Arrears of Maikal Fibres Limited

Extension of SPS to ineligible consumer.

2.2.29 The service connection of Maikal Fibres Limited, Bheelgaon, Khargone - an HT consumer with contract demand of 1500 KVA was permanently disconnected (October 2003) due to non payment of Energy Development (ED) cess amounting to Rs.1.13 crore on captive generation. The consumer was granted (October 2004) permission to clear the dues in instalments under SPS, but he did not pay the dues. In the meantime, the factory was running by diesel generator set. The consumer applied (August 2006) for reconnection under SPS and for additional load of 800 KVA, which was approved by the Company and a new supply agreement was entered into (September 2006). It was observed that the consumer was neither a sick industry nor a closed unit and was, therefore, not eligible for the facilities under SPS. Further the arrears were pertaining to ED cess for which SPS was not applicable. Sanctioning of SPS to the consumer for more than once having a running unit tantamount to undue benefit. The consumer thereafter again defaulted in making the payments and the arrears increased to Rs.1.62 crore (December 2006).

The Management stated (September 2007) that there was no question of giving undue benefit to the consumer as the Company considered the request of the consumer in the interest of revenue realisation. The reply is not acceptable since the consumer was not eligible for facility under SPS and even after availing facilities under SPS, it failed to make payments of dues.

Internal Control and Internal Audit System

Internal Control

2.2.30 Internal control is a process designed for providing reasonable assurance for efficiency of operation, reliability of financial reporting and compliance with applicable laws and statutes. A built in internal control system and strict adherence to the statutes, codes and manuals minimises the risk of errors and irregularities in an organisation. An evaluation of the internal control system of the Company revealed the following deficiencies:

- the Company failed to arrest distribution losses and theft of power due to lack of internal control system and periodical checking of meters;

- the Company could not evolve system to ensure timely collection of revenue;

- no internal check was exercised while raising the demand for tariff subsidy and making adjustments in DCBs; and

- the amount of security deposit collected from consumers amounting to Rs.293.02 crore was shown in the books of accounts as Rs.475 crore due to failure of proper internal checks.

Internal Audit

2.2.31 The internal audit is a system designed to ensure proper functioning as well as effectiveness of the internal control system and detection of errors and frauds in a business entity. It is an independent mechanism to examine and evaluate the level of compliance of financial rules and procedure. The Internal Audit Wing of the Board headed by the Joint Director (Audit) was disbanded (May 2006) and the audit parties (eight) along with officers under the administrative control of Pashchim Kshetra were posted in the Company. The position of outstanding paras of the internal audit reports of the Company was as follows:-

(*Rupees in lakh*)

Year/Region	Number of Paras raised	Amount involved	Number of Paras settled	Amount realised	Balance	
					Number of paras	Amount
Upto March 2006						
Indore	4299	2030.07	1184	191.33	3115	1838.75
Ujjain	4572	951.36	949	230.64	3623	720.71
Total	**8871**	**2981.43**	**2133**	**421.97**	**6738**	**2559.46**
2006-07 (Upto January 2007)						
Indore	413	172.42	N A	76.03	NA	96.39
Ujjain	427	260.17	N A	42.32	NA	217.35
Total	**840**	**432.59**		**118.35**		**313.74**

Source: Data provided by the Management.

The Statutory auditors of the Company in their report on the accounts for the year ended 31 March 2006 pointed out that the internal audit in the Company was inadequate. Outsourcing of internal Audit of DCs was under consideration of the Company, which has not yet been finalised (May 2007). It was observed that:

- As against the Internal audit observations valued at Rs.29.81 crore (up to 2006) and Rs.4.32 crore (2006-07), the Company could realise only Rs.4.22 crore and Rs.1.18 crore during 2005-06 and 2006-07 respectively.

- Internal audit of 283 DCs was pending since 2002. As no dues from a consumer, as per terms of Supply Code, shall be recoverable after a period of two years from the date when the amount became first due, unless the sum was shown as arrears in bills continuously, it would be difficult to realise any short collection, which may be reported by internal audit after lapse of two years.

- The objections raised in internal audit were not effectively pursued by the Divisions and DCs.

Implementation of Management Information System

2.2.32 Management Information System (MIS) is a tool of communication in which the information in the form of reports, statements, and notes flow from middle/bottom level management to top level management, and it is vital in taking the right and timely decision by the functional heads. Thus, the correctness of the decision of the management depends on the accuracy of information furnished to the management. In MIS, the status of its various functions could be reported in periodical intervals to the BoDs so as to enable it to review the position and to revise the policies and procedures as may be necessary for streamlining or increasing efficiency.

The Company was not having adequate information system.

In the Business Plan, it was felt (August 2005) that the Company was not having adequate information system and information technology media to store, protect, share and manage the data. The management was not able to retrieve the data due to deficiencies in computerisation and inadequate financial management system. The position of MIS was worse in the field offices. Further due to duplication, lack of automation and standardisation of reports, the accounts' generated information was found inconsistent.

Conclusion

The billing and collection procedures were deficient as the Company did not apply the tariff rate correctly resulting in incorrect billing, accounting and resultant loss of revenue. The system followed for computation of agricultural consumption was unrealistic. The Company allowed the facility of payment under installment and special package scheme to ineligible consumers. The Company did not have sound and effective Management Information System and internal audit system. There was improper accounting of sundry debtors.

Recommendations

The Company should :

- **ensure correct application of tariff and systematic billing.**
- **strengthen and streamline its collection mechanism by increasing the collection centers and by resorting to alternative modes of payment.**
- **evolve a scientific approach for accurate estimation of agricultural consumption switching over to IT methods.**

- **strictly adhere to the laid down criteria and parameters of the policy while sanctioning instalment facility.**

- **strengthen the system of maintenance of data and records to ensure accuracy/correctness of the information available with it.**

2.3 Operational Performance of Amarkantak Thermal Power Station, Chachai of Madhya Pradesh Power Generating Company Limited

Highlights

There was shortfall in generation of 3801.16 MUs valued at Rs.1140.35 crore mainly due to planning deficiency in maintenance activities and delay in taking up R&M works.

(Paragraph 2.3.7)

The auxiliary consumption in power station was in excess of norms prescribed by CEA which resulted in excess consumption of 150.34 MUs valued at Rs. 45.10 crore

(Paragraph 2.3.9)

Low thermal efficiency resulted in excess consumption of 18.27 lakh MT of coal valuing Rs.196.92 crore. Excess station heat over designed parameters resulted in excess consumption of 5.54 lakh MT of coal valuing Rs.59.74 crore.

(Paragraphs 2.3.10 & 2.3.11)

Faulty procedure of physical verification of coal stock resulted in non-accountal of coal valuing Rs. 15.52 crore

(Paragraph 2.3.13)

The ATPS consumed oil in excess of prescribed norm resulting in extra expenditure of Rs.44.55 crore. Cost of treatment of demineralised water consumed in excess of the target fixed was Rs.2.23 crore.

(Paragraphs 2.3.15 & 2.3.16)

The hours lost due to planned and forced outages in excess of norm prescribed by CEA led to loss of generation of 1305.08 MUs valued at Rs.391.52 crore.

(Paragraph 2.3.17)

Excess time taken in overhauling/capital overhauling over and above the norms prescribed by Kukde committee appointed by Government of India resulted in loss of generation of 160.56 MUs valued at Rs.48.17 crore.

(Paragraph 2.3.18)

Delay in the Renovation and Modernisation work of PH-II due to frequent changes in the scope of work deprived the Company of anticipated generation of 350 MUs annually.

(Paragraphs 2.3.25)

Introduction

2.3.1 The Amarkantak Thermal Power Station, Chachai (Power Station) of Madhya Pradesh Power Generating Company Limited (Company) {erstwhile Madhya Pradesh State Electricity Board- (Board)} has installed generation capacity of 290 MegaWatt (MW) as detailed below:

Particulars	Capacity (MW)	Date of commencement of commercial operation
Power House I -(PH– I)		
Unit 1	30	1 February 1965
Unit 2	30 (de-rated to 20 in 1991)	8 February 1965
Power House II -(PH – II)		
Unit 3	120	11 September 1977
Unit 4	120	31 March 1978

The construction of one additional unit of 210 MW is under progress (September 2007).

The Chief Engineer (Generation) (CE, Gen.) is the chief executive and overall incharge of the Power Station, who is accountable to the Chairman and Managing Director (CMD) of the Company. In discharging his functions, the CE (Gen.) is assisted by Additional Chief Engineers, Superintending Engineers, Executive Engineers and other supporting technical/ non-technical staff.

A review on working of the Power Station was included in the Report of the Comptroller and Auditor General of India (Commercial), Government of

Madhya Pradesh for the year ended March 1988. The Report was discussed (April 1999) by the Committee on Public Undertakings (COPU) and its recommendations were included in its third report of July 1999. Action Taken Report on the recommendations of COPU is still awaited (September 2007). In spite of COPU's recommendations for taking effective steps on the following important points, the Company did not take any corrective measures/action and the inconsistencies still persisted:

- Efforts should be made to bring down the auxiliary consumption within the standard norms (Para No.171 of COPU's Report-July 1999).
- Action plan in compliance to the recommendations (April 1975) of Kulkarni committee and committee of State Heads in carrying out the Annual Overhaul/Capital Overhaul should be prepared and implemented and the responsibility for loss, if any, should be fixed (Para No.171of COPU's Report-July 1999).
- Effective measures should be taken to reduce the consumption of fuel (Para No.183 of COPU's Report-July 1999).

Scope of audit

2.3.2 The present performance review conducted between January and May 2007 covers the operational performance of the Power Station during 2002-2007. The records of the Power Station and of the Head office of the Company for the above period were examined.

Audit objectives

2.3.3 The performance review was conducted with a view to ascertain whether:

- the operation of the Power Station was carried out economically, efficiently and effectively;
- the consumption of fuel (coal, oil etc.) and utilities like steam and water was within the norms fixed by the Central Electricity Authority (CEA), the State Government, Madhya Pradesh Electricity Regulatory Commission (MPERC) and the Board/Company;
- the renovation and modernization of Power Station was taken up with clearly defined pre-determined plans and was completed within the approved cost and time;
- the Power Station is operating within the prescribed norms of Central/ State Pollution Control Boards;

- the manpower was deployed as per the norms and whether adequate training was given to the concerned employees for the operation and maintenance of the plant; and

- the internal control, internal audit was commensurate with the size and activities of the Power Station.

Audit criteria

2.3.4 The audit criteria adopted for assessing the audit objectives were:

- National Electricity Policy;

- design capacity of the units and operational guidelines and norms prescribed by CEA, National Tariff Commission, MPERC, the State Government, the Board/Company and other comparable plants in the State;

- norms prescribed by Central/State Pollution Control Board;

- detailed project reports/feasibility studies and contracts relating to carrying out renovation and modernization and maintenance of plants;

- guidelines and norms prescribed for the deployment of manpower and their training; and

- prescribed procedure for internal control/internal audit.

Audit methodology

2.3.5 The audit methodology adopted for achieving the audit objectives with reference to audit criteria was as follows:

- examination of guidelines issued by CEA, National Tariff Commission, MPERC, the Board/Company, Central/State Governments, National Electricity Policy, agenda and minutes of the Board/ Company;

- review of the system in place for planning, operating, checking and monitoring the activity of Power Station;

- examination of purchase orders, MIS-reports, contract agreements;

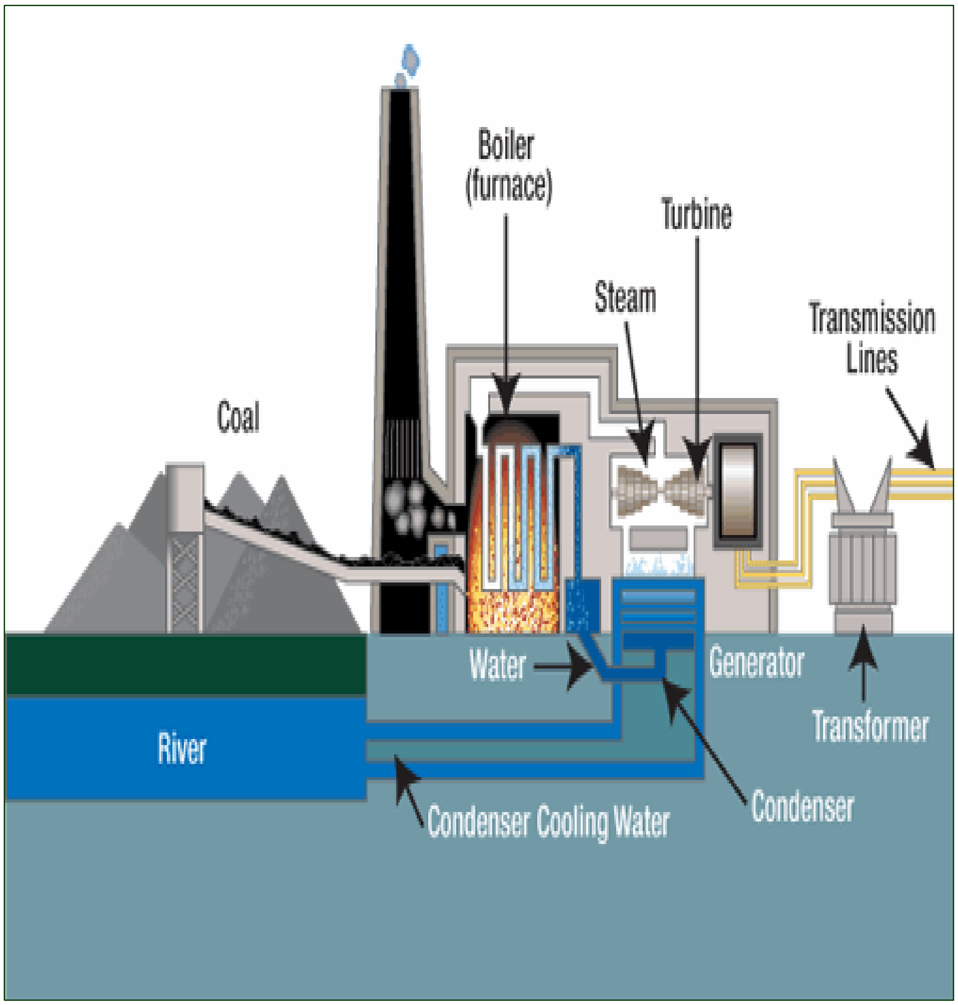
- examination of system of deployment of manpower and their training; and

- issue of audit enquiries and interaction with the Management.

Audit findings

2.3.6 The audit findings were reported (August 2007) to the Management/ State Government and discussed (24 September 2007) in the meeting of the Audit Review Committee for Public Sector Enterprises (ARCPSE). The Additional Secretary (Energy) and CMD of the company attended the meeting. The views expressed by the members in the meeting have been taken into consideration while finalizing the performace review. The audit findings are discussed in the succeeding paragraphs.

A symmetrical diagram and the process of generation in a thermal power plant is given below:



Coal-fired units produce electricity by burning coal in a boiler to heat water to produce steam. The steam, at tremendous pressure, flows into a turbine, which spins a generator to produce electricity. The steam is cooled, condensed back into water and returned to the boiler to continue the process.

Generation

2.3.7 The performance of the Power Station (PH-I and II) for five years ended 2006–07 is tabulated below :-

Sl. No	*Particulars*	Units	2002-03		2003-04		2004-05		2005-06		2006-07	
			PH-I	PH-II	PH-I	PH-II	PH-I	PH-II	PH-I	PH-II	PH-I	PH-II
1.	Installed Capacity	MW	1x30+ 1x20	2x120	1x30+ 1x20	2x120	1x30+ 1x20	2x120	1x30+ 1x20	2x120	1x30+ 1x20	2x120
2.	Total hours available in a year		17,520	17,520	17,568	17,568	17,520	17,520	17,520	17,520	17,520	17,520
3.	Generating Capacity at 100 *percent*	MUs	438	2,102.40	439.20	2,108.16	438	2,102.40	438	2,102.40	438	2,102.40
4.	Actual running hours		13,537	14,392	12,384	13,521	11,921	14,095	11,207	13,796	9,207	14,977
5.	Possible generation w.r.t. hours actually run	MUs	342.03	1,727.04	315.67	1,622.52	308.47	1,691.40	280.67	1,655.52	228.04	1,797.19
6.	Actual Generation	MUs	227.11	1,215.90	184.14	986.14	173.62	1,025.49	150.24	952.57	143.35	1,108.83
7.	Short fall in Generation	MUs	114.92	511.14	131.53	636.38	134.85	665.91	130.43	702.95	84.69	688.36
8.	Shortfall in generation to generating capacity (7/3 x 100)	%	26.24	24.31	29.95	30.19	30.79	31.67	29.78	33.44	19.34	32.74
9.	Percentage of actual generation to possible generation. (6/5x 100)	%	66.40	70.40	58.33	60.78	56.28	60.63	53.53	57.54	62.86	61.70
10.	Possible PLF w.r.t. hours actually run (5/3 x 100)	%	78.09	82.15	71.87	76.96	70.43	80.45	64.08	78.74	52.06	85.48
11.	Actual Plant Load Factor(PLF) (6/3 x 100)	%	51.85	57.83	41.93	46.78	39.64	48.78	34.30	45.31	32.73	52.74
12.	Overall PLF at National Level	%	72.34	72.34	72.96	72.96	74.82	74.82	73.71	73.71	77.03	77.03
13.	Overall PLF of State Sector Generating Station.	%	68.93	68.93	68.80	68.80	69.77	69.77	67.30	67.30	NA	NA

Source: Data provided by the Management.

There was shortfall in generation of 3801.16 MUs valued at Rs.1140.35 crore mainly due to planning deficiency in maintenance activities and delay in taking up R&M works

It will be seen from the above that as against 1474.88 MUs of possible generation in PH-I during 2002-07, only 878.46 MUs (59.56 *per cent*) were generated, recording a short fall of 596.42 MUs (40.44 *per cent*). In respect of PH-II, the power generated during the above period was 5288.93 MUs (62.27 *per cent*) as against possible generation of 8493.67 MUs, recording a short fall of 3204.74 MUs (37.73 *per cent*). Thus, the total shortfall in generation in the power station during the period 2002-03 to 2006-07 was 3801.16 MUs (38.13 *per cent*) valued at Rs.1140.35 crore. (calculated with reference to average revenue realization during the period) Further, the plant load factor (PLF) in both the Power Houses showed declining trend during the period of review. While in respect of PH-I, it decreased from 51.85 *per cent* in 2002-03 to 32.73 *per cent* in 2006-07, in respect of PH-II it decreased from 57.83 *per cent* in 2002-03 to 52.74 *per cent* in 2006-07.

One of the reasons for shortfall in generation, as noticed in audit, was that the load of PH-II (unit 3 and 4) was maintained between 75-85 MW due to drum pressure restrictions[39] on boilers to 105-120 kg/cm^2 as against prescribed pressure of 133.6 kg/cm^2 during 2004-07. This contributed to loss of generation of 909.24 MUs valued at Rs.272.77crore during that period. The

[39] *Steam from boilers at restricted pressure (less than 133.60 kg/cm^2), spin turbines at reduced rate (design rate 3000 rpm), leading to reduction in current load.*

shortfall in generation in PH-I (unit 1 and 2) was also due to forced outages due to poor milling system, low vacuum problem and non planned capital overhaul of unit 1 in 2005. The other factors that contributed to shortfall in generation in both the power houses were planning deficiency in maintenance activities, imprudence in operation of renovation and modernisation (R & M) work/activity, etc. as discussed in the succeeding paragraphs.

The Management stated (September 2007) that the reason for shortfall in generation in PH-II was decrease in efficiency of plant due to ageing and hence required major renovation. The reply is not acceptable as the Management has not completed the renovation of PH-II so far (September 2007) despite the fact that it was initiated in 1994. In respect of PH-I, the Management is considering phasing out of the units, since the plants were 42 years old. The reply is not acceptable as by not carrying out refurbishments within the prescribed time schedule resulted in shortfall in generation of power valuing Rs. 1,140.35 crore.

Generation cost per unit

2.3.8 The table below indicates unit cost of generation for the five years upto 2006-07:

Year	Cost of Generation (*paise per unit)*	
	PH-I	PH-II
2002-03	192.05	132.87
2003-04	286.14	161.98
2004-05	326.08	195.79
2005-06 *	NA	NA
2006-07 *	NA	NA

Source: Data provided by Management.

**** Note: unit cost of generation could not be worked out in the absence of finalisation of accounts by the Company/Board for these years.***

It could be seen from the above that during 2002-05, the cost of generation per unit was showing an increasing trend. The reasons for the increase in generation cost were low generation, low thermal efficiency, consumption of excess fuel, forced outages, etc., which are discussed in the succeeding paragraphs.

Auxiliary consumption

2.3.9 Auxiliary consumption is the energy used by the Power Station for running its equipment/common services and is not available for sale. As per norms fixed by CEA for coal based generation stations, the auxiliary energy consumption is to be 9.5 *per cent* of the energy generated.

Energy generated, energy sent out and percentage of auxiliary consumption in excess of norms for PH-I and PH-II is tabulated below :-

Sl. No.	Particulars	2002-03		2003-04		2004-05		2005-06		2006-07	
		PH-I	PH-II	PH-I	PH-II	PH-I	PH-II	PH-I	PH-II	PH-I	PH-II
1.	Energy generated (MU)	227.11	1215.90	184.14	986.14	173.62	1025.49	150.24	952.57	143.35	1108.83
2.	Energy sent out (MU)	198.99	1091.34	158.44	872.44	147.60	903.16	125.86	832.83	121.49	978.94
3.	Auxiliary consumption of the plant (MU)	28.12	124.56	25.70	113.70	26.02	122.33	24.38	119.74	21.86	129.89
4.	Percentage of auxiliary consumption w.r.t the energy generated	12.38	10.24	13.96	11.53	14.99	11.93	16.22	12.57	15.24	11.71
5.	Auxiliary consumption in excess of norms in MUs *(per cent)*	6.54 (2.88)	8.99 (0.74)	8.21 (4.46)	20.02 (2.03)	9.53 (5.49)	24.92 (2.43)	10.10 (6.72)	29.24 (3.07)	8.24 (5.75)	24.55 (2.21)
6.	Average Aux. Cons. (per cent) at national level	9.55		9.91		8.57		8.44		N.A.	

Source: Data provided by Management.

The auxiliary consumption in power station was in excess of norms prescribed by CEA which resulted in excess consumption of 150.34 MUs of energy valued at Rs. 45.10 crore

It will be seen from the above that the percentage of auxiliary consumption increased from 12.38 in 2002-03 to 15.24 in 2006-07 for PH-I and from 10.24 to 11.71 for PH-II in the respective years. Thus, the auxiliary consumption in excess of the prescribed norms was 150.34 MUs valued at Rs.45.10 crore during 2002-2007. It was noticed that auxiliary consumption of Power Station always remained above the national average. It was observed that extra cooling water pump, ash pump and condensated extraction pump in PH-II, besides, additional water treatment plant in both the power houses contributed to excess auxiliary consumption. This shows that maintenance was not upto required standards.

The Management stated (September 2007) that the units were running at partial load, whereas, all the auxiliaries were required to run on rated loading. The reply is not acceptable as the units could have run on full load if renovation and modernization and refurbishment of plants were carried out in time.

Low thermal efficiency

Low thermal efficiency resulted in excess consumption of 18.27 lakh MT of coal valuing Rs.196.92 crore.

2.3.10 The thermal efficiency of a power house is an index of the efficiency of conversion of thermal energy into electrical energy. ***Annexure-14*** shows that against the projected thermal efficiency of 29.95 *per cent* (as per design parameters), the thermal efficiency of PH-I during the period 2002-07 ranged between 16.21 *per cent* (2005-06) and 22.15 *per cent* (2002-03). In respect of PH-II, the actual thermal efficiency ranged between 21.71 *per cent* (2004-05) and 24.30 *per cent* (2002-03) against the projected efficiency of 34.83 *percent*. Due to low thermal efficiency, the units consumed heat ranging between 3881.85 Kcal/Kwh (2002-03) and 5305.59 (2005-06) Kcal/kwh for PH-I and 3538.56 Kcal/Kwh (2002-03) and 3961.76 Kcal/kwh (2004-05) for PH-II as against 2871 Kcal/ kwh and 2469 Kcal/kwh, designed for PH-I and PH-II respectively. This resulted in excess consumption of 18.27 lakh MT of coal valuing Rs.196.92 crore with consequent increase in cost of generation during 2002-07.

MPERC had directed (November 2002) the erstwhile Board to take up the Energy Audit of Power station to assess the performance level of plant so that measures could be taken to reduce the consumption of various inputs per unit of generation by increasing the thermal efficiency. The Company entrusted (February 2005) the work of energy audit to Electrical Research and Development Association, after a delay of more than two years. It was observed that the energy audit report suggested (August 2006) various measures for optimizing the excess air level of the boiler; improvement in performance of condenser and replacement of electrical equipments; by which the Company could achieve potential energy saving worth Rs.15.02 crore per year with the total investment of Rs.3.23 crore. These suggestions are yet (September 2007) to be implemented by the Company.

The Management stated (September 2007) that the main reason for low thermal efficiency was more number of startups and shutdown due to ageing of plants. It was further stated that inferior quality of coal was also a factor for low thermal efficiency. The reply is not acceptable as timely Annual overhauling (AOH) and Capital overhauling (COH) of the plants was not carried out which contributed to more outages and resultant increase in startups and shutdowns. Further, the Company did not ensure supply of standard quality of coal by the coal companies.

Excess operating Station Heat Rate

2.3.11 Station Heat Rate (SHR) is an index for assessing the efficiency of a thermal power station. It is the heat energy input in Kilo Calorie required to generate one kilo watt hour (kwh) of electrical energy. The designed SHR of PH-I and PH-II was 2871 kcal/kwh and 2469 kcal/kwh respectively.

Excess station heat rate over the designed parameters, resulted in excess consumption of 5.54 lakh MT of coal valued at Rs.59.74 crore.

During 2002-07 the Power Station could not operate at its designed SHR level and the excess operating heat rate varied from 35.25 *per cent* in 2002-03 to 85.55 *per cent* in 2005-06 for PH-I and from 44.35 *per cent* in 2002-03 to 60.75 *per cent* in 2004-05 for PH-II. The year wise details indicating various parameters, deviation, increased heat rate and excess coal consumed in respect of PH-II (similar details in respect of PH-I not worked out by the Management) are shown in ***Annexure-15.*** It will be seen from the annexure that station heat rate has increased and varied between 21 Kcal/ kwh and 251.6 Kcal/kwh over the designed parameters during 2002-2007 which resulted in excess consumption of coal of 5.54 lakh MT valuing Rs.59.74 crore with consequential increase in cost of generation.

The Management stated (September 2007) that excess operating heat rate was mainly due to reduction of boiler efficiency, partial loading, weak thermal insulation, increased clearance in gland water sealing system, broken LP turbine blades, low vacuum, etc. The reply is not acceptable as the Company did not take remedial action to rectify these deficiencies.

Coal consumption

Consumption of 23.17 lakh MT of coal in excess of the norms resulted in extra expenditure of Rs. 249.61 crore.

2.3.12 As per the designed parameters, the specific coal required to generate one kwh of energy was 0.568 kg for PH-I with calorific value (CV) of 5058 kcal / kg of coal and 0.449 kg for PH-II with CV of 5500 kcal/kg. Coal was being supplied to the power station by Western Coal Limited (WCL), a subsidiary company of Coal India Limited (CIL), till 1986, under the Fuel Supply Agreement (FSA) entered (1985) between the Board and WCL. SECL another subsidiary company of CIL, after its formation in 1986 started supplying coal to the power station. In the year 1992, in a meeting between the Board and SECL, it was decided that the terms of supplies of coal would be as per the prevailing agreement (1985) with the Board. Since then no fresh FSA has been entered into. Thus, the Board/Company could not ensure the CV of coal supplied by SECL, which varied from 4491 to 4637 during 2002-07. The actual consumption of coal vis-à-vis the standards and excess consumptions during 2002-07 is given in the ***Annexure-16.*** It will be seen therein that, during the above period, there was excess consumption of 23.17 lakh MT of coal valued at Rs 249.61 crore with consequential increase in cost of generation.

Thus, the failure on the part of the Board/Company to insist on the supply of standard quality of coal from SECL by executing FSA led to receipt of coal with low CV resulting in excess consumption of coal with consequential increase in cost of generation.

Under quantification of coal stock

2.3.13 MPERC appointed (July 2005) an investigator to ascertain the actual quantity of coal available at the site of the plant at the end of financial year 2002-03 and 2003-04. The investigator observed (September 2006) that coal stock lying at bunkers, hoppers and carpet coal in stockyard which were included in the book stock, had not been considered during the physical verification (PV) conducted by the Company. Further, the volume of coal was being determined after deduction of 16 *per cent* for voids. The volume so arrived was multiplied by the density, which was also arrived at after taking into account the expected voids. PV procedure prescribed by the Company, however, did not require any reduction for void. Thus, 69,082 MT of coal valuing Rs.6.77 crore was left unaccounted during the physical verification conducted in 2002-03 and 2003-04.

Faulty procedure of physical verification of coal stock resulted in non-accountal of coal valuing Rs. 15.52 crore.

The practice of reducing coal by 16 *per cent* for void was continued till March 2006. This resulted in further under quantification of coal stock by 76,124.545 MT valuing Rs.8.75 crore during 2004-06. Thus, the total quantity of 1,45,206 MT of coal valuing Rs.15.52 crore was not accounted for during the physical verification conducted during 2002-03 to 2005-06. It was observed that the Company wrote off 21,317.861 MT of coal valuing Rs.2.20 crore on account of shortages in its accounts during 2002-03 to 2006-07, without carrying out any investigation. Thus, the action of the Management to write off the shortages without any investigation and policy of non-accountal of stock lying at bunkers, hoppers and carpets and reducing stock by 16 *per cent* for voids was fraught with a risk of misappropriation of stock.

Loss due to rejection of claims for stones and shales

Failure to insist on agreed sampling methods resulted in rejection of claims for Rs.4.71 crore on account of stones and shales in the coal supplied by SECL.

2.3.14 During the five years ending March 2007, the Power Station received a total quantity of 52,87,403.53 MT of coal which contained 44,781.458 MT (0.85 *per cent*) of stones and shales. At the average rate of coal, the value of stones and shales worked out to Rs.4.71 crore for which the Company lodged claims on monthly basis with SECL for refund of the same. However, the claims were rejected on the ground that billing of coal was subject to the result of joint sampling, which was carried out at the unloading end. It was noticed that as per the sampling protocol agreed with SECL, the sampling of 25 *per cent* rail wagons was to be undertaken at unloading end after crusher. However, sampling of 25 *per cent* of rail wagons was carried out at unloading end before crusher. Due to the failure of the Management to insist on the agreed sampling methods, the supplier rejected the claims for refund of Rs.4.71 crore.

The Management stated (September 2007) that sampling was being done from wagons so as to avoid any delay in sampling of coal supplied. In case sampling was done after crusher, it might lead to delay due to any outage of the plant/ equipment being single steam. It was also stated that the matter relating to claim for refund was being taken up at the higher level. The fact remains that failure of the Management to conduct joint sampling as per the agreed procedure, resulted in rejection of claims of Rs.4.71 crore by the coal company.

Fuel oil consumption

2.3.15 The fuel oil is required for ignition and to give support to furnace stability. As per norms prescribed by the Union Ministry of Power (MoP), the consumption of fuel oil per Kwh of electricity generated was 3.5 ml. The table below indicates oil consumption at PH-I and II, compared with the norms during 2002-07.

S. No	Particulars	2002-03		2003-04		2004-05		2005-06		2006-07	
		PH-I	PH-II	PH-I	PH-II	PH-I	PH-II	PH-I	PH-II	PH-I	PH-II
1	Gross Generation (MU)	227.107	1215.901	184.140	986.135	173.619	1,025.486	150.239	952.565	143.345	1,108.831
2	Consumption of oil as per norms (3.5 ml/Kwh) (KL)	794.874	4,255.653	644.490	3,451.472	607.667	3,589.200	525.837	3,333.978	501.708	3,880.909
3	Actual consumption (KL)	2,748.00	6,816.00	5,100.00	7,603.00	2,515.500	6,742.00	2,291.250	6,600.27	1,256.50	3,191.5
4	Excess consumption (KL)	1,953.126	2,560.347	4,455.510	4,151.528	1,907.833	3,152.799	1,765.413	3,206.292	754.792	NIL

S. No	Particulars	2002-03		2003-04		2004-05		2005-06		2006-07	
		PH-I	PH-II	PH-I	PH-II	PH-I	PH-II	PH-I	PH-II	PH-I	PH-II
5	Value of Excess consumption (Rs. in crore) @ Rs 18592 per KL.	3.63	4.76	8.28	7.72	3.55	5.86	3.28	6.07	1.40	NIL
6	Specific oil Consumption (ml/Kwh)	12.10	5.61	27.70	7.71	14.49	6.57	15.25	6.93	8.77	2.88
7	All India Average Specific oil consumption (ml/Kwh)	0.68	0.68	2.30	2.30	1.37	1.37	1.77	1.77	N.A.	N.A.

Source: Data provided by the Management.

Consumption of 23967.64 KL of fuel oil in excess of the norms resulted in extra expenditure of Rs.44.55 crore.

It will be seen that the actual consumption of oil was higher than the norms in all the five years and the excess consumption of oil worked out to 23,967.640 KL valuing Rs.44.55 crore. This also resulted in increase in cost of generation during the above period. Further, the specific oil consumption increased from 12.10 ml/Kwh in 2002-03 to 27.70 ml/Kwh in 2003-04 for PH-I, but decreased to 8.77 ml/ Kwh in 2006-07 and for PH-II, the consumption was reduced to 2.88 ml/Kwh in 2006-07 from 7.71 ml/Kwh in 2003-04. The All India average for specific oil consumption was 0.68 ml/Kwh in 2002-03 and 1.77 ml/Kwh in 2005-06. Though, there was a decreasing trend, but it was considered high as compared with the national average of specific oil consumption of all the years.

The Management stated (September 2007) that poor milling was one of the reasons for more consumption of fuel oil. Further, during partial loading, secondary oil was required to support startup and shutdown for safe operation of units. The reply is not tenable as timely AOH and R & M of mills could have avoided frequent outage of mills. The partial loading could have been avoided with improved boiler efficiency.

Consumption of demineralised water

Consumption of demineralised water in excess of norms resulted in treatment of excess water at an extra expenditure of Rs.2.23 crore.

2.3.16 Demineralised water (DM) is the chemically treated water. As per the target fixed by the Company, the DM water consumption for the plant should be three *per cent* of the quantity of steam required for one MW generation. The consumption of DM water in PH-I and PH-II during 2002-07 is detailed in ***Annexure-17.*** It will be seen from the Annexure 17 that the percentage of DM water consumption varied from 12.67 to 22.31 for PH-I and 8.75 to 14.58 for PH-II against the target of three *percent*. The cost of treatment of this excess DM water worked out to Rs.2.23 crore.

The Management stated (September 2007) that in PH-I, each and every valve of steam side, water side and condensate handling system developed leakages from seats and glands. The re-visioning limit was exhausted and system was obsolete. In PH-II, the reasons for excess water consumption was non-attainment of the designed capability of the boiler to generate 393 MT steam per hour at 133.6 Kg/cm^2 pressure and 540.6^0 C temperature. Further, frequent tube leakages and blow down operations also caused increased water consumption. The reply is not acceptable since the power station could not attain the designed capability of the boiler due to the absence of timely repair/ replacement of boiler auxiliaries.

Plant outages

There was excess outages for 28740 hours resulting in loss of generation of 1305.08 MUs valued at Rs.391.52 crore.

2.3.17 Thermal stations have outages which may be planned and forced. While planned outages are necessitated for maintenance work of boilers, turbine, etc, forced ones are unscheduled outages caused by unforeseen factors involving lack of adequate and timely preventive maintenance work. The Company has to ensure that stoppage of units for planned maintenance does not exceed prescribed time and the forced outages are minimized to the extent possible. The details indicating hours available, hours operated and outages during the last five years upto 2006-07 are given in ***Annexure-18***. It will be seen from the Annexure 18 that the Power Station was closed for 5,819 hours for planned shutdown, and 40,427 hours on account of forced shutdown during 2002-2007 indicating poor maintenance planning. CEA had prescribed (March 1992) availability of plant as 90 *per cent* of total hours i.e. 10 *per cent* of total hours were allowed as outages, planned as well as forced. However, Annexure 18 shows that plants' outages ranged between 9.75 to 49.07 *per cent*. Excess outages of 28,740 hours resulted in loss of generation of 1305.08 MUs valuing Rs.391.52 crore.

Audit scrutiny revealed the following:

Planned outages

2.3.18 Kukde Committee set up (February 2000) by the MoP to review the norms for planned maintenance period for boilers and turbo generator sets recommended (September 2000) five years rolling plan for maintenance stipulating 30 days for annual overhaul (AOH) for four years and 45 days for capital overhaul (COH) in the fifth year. Scrutiny of records revealed that AOH for boiler 1 and boiler 2 of unit 1 (PH-I) was not carried out in 2004 and 2003 respectively. Similarly, the AOH was not carried out for unit 3 and unit 4 (PH-II) in 2002 and 2006 respectively. No COH was carried out for units 2,3 and 4 during the last five years ended on 31 March 2007. The unit wise details of time taken for planned AOH and COH carried out during the last five years ended March 2007 on the basis of the recommendations of Kukde committee are given in ***Annexure-19***. It will be seen from Annexure 19 that the Company could not adhere to the prescribed time schedule and extended the maintenance period from four days (2003) to 20 days (2003) for AOH of PH-II units during 2002-07. This resulted in loss of generation of 141.12 MUs with consequent revenue loss[40] of Rs.42.34 crore.

Excess time taken in overhauling/capital overhauling over and above the norms prescribed by Kukde committee appointed by the GoI resulted in loss of generation of 160.56 MUs valued at Rs. 48.17 crore.

In respect of unit 1 of PH-I, the total time taken for COH during 2005 was 72 days.The excess time of 27 days taken for the COH resulted in loss of generation of 19.44 MUs worth Rs.5.83 crore.

[40] *The revenue loss has been worked out with reference to average realization per unit during the period of review.*

The Management stated (September 2007) that the extended period for AOH of PH-II units was due to the R & M activities taken along with the AOH. The reply is not acceptable as the R & M activities such as replacement of tubes was a part of normal AOH work and was included in the work order awarded.

2.3.19 The Kukde Committee in its report also suggested (September 2000) that final report of overhaul with recommendations for next overhaul must be prepared within two months of completion of overhauling. It was however, observed that the reports were prepared without recommendations for next overhaul and in the absence of recommendations the Power Station could not identify major deficient areas for improvement which resulted in frequent forced outages.

Non-recovery of fixed charges

2.3.20 The MPERC determines the station-wise tariff of electricity generated by the Company for sale to Madhya Pradesh Power Trading Company Limited (TRADECO). The tariff so fixed comprises of annual fixed charges and variable charges. The fixed charges consists of operation and maintenance expenses, cess on auxiliary consumption, rents and rates, depreciation, interest and finance, interest on working capital and return on equity. The variable charges cover only the fuel cost. MPERC while fixing (March 2006) the tariff allowed fixed charges at Rs. 47.38 crore and variable charges @ 117 *paise* per unit of power generated for the year 2006-07 in respect of this power station. These were allowed by fixing a norm of 51.36 *per cent* PLF and 11.85 *per cent* auxiliary consumption.

Low PLF of 49.29 *per cent* as against 51.36 *per cent* resulted in under recovery of fixed charges valued at Rs. 2.04 crore.

Based on the PLF norm of 51.36 *per cent,* the gross generation for the year 2006-07 should have been 1,305 MUs and after allowing 11.85 *per cent* auxiliary consumption, the Power Station should have sent out 1150 MUs, whereas, the Power Station could generate 1,252.176 MUs (49.29 *per cent* PLF) and could release only 1,100.435 MUs (43.32 *per cent* of capacity available). Thus, the Power Station could not recover the full fixed charges, which resulted in under recovery of Rs.2.04 crore for the year 2006-07.

Maintenance

For economic and efficient operations of the plant, regular maintenance of equipments is necessary. The Kukde Committee recommended (September 2000) that every plant shall have a written maintenance policy, defining responsibilities of various functions e.g. operations, maintenance, stores etc. Audit scrutiny revealed that no such policy has been framed for the Power Station so far (September 2007).

Audit scrutiny of records relating to maintenance revealed the following:

Delay in execution of the replacement work

Delay in commissioning of Digital Automatic Voltage Regulator even after four years of its procurement resulted in blocking of funds amounting to Rs. 43.02 lakh

2.3.21 The Company placed (September 2002) orders on Siemens Limited, Gurgaon (contractor) for purchase of two Digital Automatic Voltage Regulator (AVR) with spares (Rs.43.36 lakh) for installation of these AVRs by replacing the existing old AVR system (Rs.1.70 lakh) of 2 x 30 MW Turbine Generating Sets of PH-I at a total cost of Rs.45.06 lakh. The Company released (November 2003) full payment of Rs. 43.02 lakh for the material supplied (September 2003) by the contractor without obtaining performance bond (10 *per cent* of the order value) as stipulated in the contract. It was observed that the contractor installed (January 2005) the Digital AVRs but failed to commission the same (September 2007) as some components of new AVRs were found (January 2005) defective. The Company did not take any action to get these AVR replaced. Thus, the delay in commissioning of Digital AVRs has led to idling of equipment worth Rs.43.02 lakh for the last four years. The Company also lost the benefit of guarantee (18 month) for satisfactory performance of the equipment as the machines are lying idle till date (September 2007).

Higher maintenance expenditure on old reconditioned engines/locos

The Company incurred an expenditure of Rs.2.57 crore on maintenance and reconditioning of two old locos instead of procuring a new one.

2.3.22 The Power Station has two. 700 HP diesel locomotives for transportation of coal, which were procured (1992 and 1996) at a cost of Rs.1.13 crore and Rs.1.41 crore. The engines of both the locos were exchanged/ replaced (December 2002 and May 2003) at a cost of Rs.16 lakh. The Company also incurred an expenditure of Rs.2.41 crore on maintenance of locos between 2002- 2007 (works and purchases). It was noticed that service wing of the Power Station was neither aware of the life span of locos nor did they initiate action for procurement of a new loco in view of the increasing maintenance cost. The Company failed to analyse the cost benefit of procurement of new engine but continued with the replacement of reconditioned engines. It was also noticed that the Board procured (January 2002) a locomotive of 700 HP at a cost of Rs.1.90 crore, which was commissioned at Sanjay Gandhi Thermal Power Station, Birsinghpur. Thus, it would have been better if the Company had utilized Rs.2.57 crore (Rs.2.41 crore-maintenance and Rs.16 lakh-replacement of engines) on purchase of new loco, instead of incurring piecemeal expenditure on its maintenance.

The Management stated (September 2007) that expenditure was incurred on periodic overhaul and maintenance of locos which were essential. The reply is not acceptable as considering the age of locos and maintenance expenditure, it would have been prudent to procure a new loco instead of repairing the old loco.

Renovation and Modernisation (R & M) of units

Power House (PH-I)

2.3.23 The erstwhile Board prepared (March 2002) a scheme for undertaking R & M work of two units of PH-I (commissioned in 1965) which completed operation of three lakh hours during the life span of 37 years since their commissioning. The scheme envisaged additional generation of 139 MUs per annum at an estimated cost of Rs.81 crore. The scheme was approved (June 2002) by the State Government. The Power Finance Corporation Limited (PFC) was approached (June 2002) for funding the R & M Scheme. PFC felt (November 2002) that the cost worked out was on the higher side and suggested (November 2002) to limit the scope to the critical works essential for sustaining the performance of the units. The Board decided (December 2002) to run the above units with limited R & M works so that their operation was within economical limits with a view to scrap the units in due course of time.

Non installation of isolators and SF-6 circuit breakers

38 isolators valued at Rs.1.04 crore meant for the critical works of PH1 were not installed even after a lapse of more than two years, since procurement.

2.3.24 In terms of Board's decision (December 2002) to limit the R&M activities to the critical works, the Company placed (May 2003) two purchase orders, one for supply of three SF-6 circuit breakers and another for 38 Nos. of isolators (August 2004) at a total cost of Rs.24 lakh and Rs.1.04 crore respectively. The material was received during February/March and November/ December 2004 respectively. While the circuit breakers were installed (November 2006) the isolators had not been installed so far (September 2007) even after a lapse of more than two years. Further, it was reported (April 2007) that some of the components of the isolators valuing Rs.24 lakh were missing.

As a result, the objective of sustaining the performance of PH-I could not be achieved. Besides, it also resulted in blocking of funds amounting to Rs. 1.04 crore.

Renovation and Modernisation of Power House-II (PH-II)

2.3.25 Units 3 and 4 of PH-II were commissioned in 1977 and 1978 respectively. Comprehensive refurbishment of the PH-II was initiated in 1996. The contract was awarded (August 1999) to Ansaldo Energia, Italy, which was terminated (January 2002) on account of non performance. Fresh tenders were invited (March 2002) for major R & M works. Due to high cost of main package (TG and boiler), the total project cost exceeded Rs.350 crore rendering the project techno-economically unviable and was, thus, dropped. Subsequently, the scope was reframed and it was decided (November 2003) to split the work into smaller packages. The Board accorded (January 2004) administrative approval to undertake the work at a total estimated project cost of Rs.140 crore. The PFC further reduced (January 2004) the scope of the project to make it economically viable with estimated cost of Rs. 124.30 crore. Accordingly, PFC sanctioned (January 2004) a loan of Rs.99 crore. As per the guidelines issued (January 2004) by GoI, for R & M of thermal power stations, plants where Bharat Heavy Electrical limited (BHEL) were original supplier of the turbine generators and boilers, the R & M of these turbines and ancillaries could be awarded to BHEL through negotiations. The Company invited tenders (April 2004) from BHEL on single tender basis, against which BHEL offered (6 June 2005) to do the work at Rs.105.96 crore. The Company reduced (between February 2005 and November 2005) the scope of work, in view of fund constraint. The negotiations were held (November/ December 2005) and BHEL agreed to do the work at Rs.69 crore.

Delay in Renovation and Modernisation work of PH-II due to frequent changes in the scope of work deprived the Company of anticipated generation of 350 MUs annually.

In the meantime, another firm NTPC Alstom Limited (NASL) on their own expressed (November 2005) their interest to participate in the R & M of TG sets through the Principal Secretary (Energy). NASL quoted (26 November 2005) Rs.89.50 crore after discussions (November 2005) with the CMD of the Company. The Company, however, decided (January 2006) to invite fresh tenders. The Company invited (March 2006) fresh tenders, against which BHEL did not participate and the only tender received was from NASL. Letter of intent was issued (May 2007) to NASL at a total cost of Rs.59.80 crore. Thus, the repeated revision of scope of work coupled with several negotiations resulted in delayed award of R & M work of TG sets, which was initiated in April 2004 but was finalized in May 2007, only after a period of more than three years.

The Company attributed (September 2007) the delay to the reluctant and monopolistic approach of BHEL and stated that the pace of finalizing the contracts depended on the promptitude of the bidders in tender related activities. The reply is not acceptable as the delay was mainly due to frequent changes in the scope of the work by the Company. Further, the delayed R&M work deprived the Company of additional generation of 350 MUs of energy as discussed in para 2.3.26.

Delayed R&M work deprived benefit of power

2.3.26 It may be mentioned that two units of similar capacity (2x120) were commissioned by erstwhile Board at Korba during the same period (1977 and 1979) as that of PH-II units of Power station. After bifurcation (November 2000) of the State the Korba Plant was transferred to Chattisgarh State Electricity Board (CSEB). The CSEB carried out the R & M work of one unit of Korba plant during December 2002 to October 2003 and that of other unit from April 2004 to March 2005. Performance level of Korba plant before and after R & M and ATPS is given as under:

Sl. No	Particulars	Korba		ATPS PH-II	
		Before R&M	After R&M		
		2002-03	2006-07	2002-03	2006-07
1.	Generation (MUs)	1158.40	1659.80	1215.90	1108.83
2.	PLF (per cent)	55.10	78.95	57.83	52.74
3.	Aux. Consumption (per cent)	9.96	8.48	10.24	11.71
4.	Specific coal consumption (kg/Kwh)	0.867	0.778	0.76	0.82
5.	Make up water (per cent)	3.3	1.31	8.75	10.51
6.	Heat Rate (kcal/Kwh)	2899	2639	3564	3722

Source: Data provided by Managements.

Delay in finalisation of contract for R&M works of PH-II deprived the Company of anticipated annual generation of 350 MUs of energy.

It will be seen from the above that the performance of the Korba plant improved after R&M. Thus, by prolonging the R&M work of PH-II of the Power Station for some or the other reasons, the Company failed to improve the efficiency of power house. The delay in finalisation of contract for R & M work of turbines deprived the State of generation of anticipated 350 MUs annually which resulted in purchase of power to that extent, (based on the anticipated generation, once R & M works were complete) valuing Rs.66.15 crore at an average purchase price of 189 *paise* per unit.

Some of the shortcomings noticed in carrying out R & M works are discussed below:

Unwarranted procurement of economizer coils

2.3.27 The Company placed (August 2005) order for procurement of 114 Nos. (2x57) economizer coils for replacement in both the units of PH-II at a total cost of Rs.2.59 crore. These economizer coils were received (September 2006) and installed (August/September 2007) at a cost of Rs.8.55 lakh. It was observed that the replacement of these economizer coils was unwarranted for the reasons detailed below:-

- These coils replaced in 1996 (unit 4)/1997 (unit 3) had an expected life span of 20 years.
- The Residual Life Assessment study conducted (April 2000) by Ansaldo Energia, Italy to identify the scope of R&M work recommended only for refurbishing the misaligned sidewalls of economizer coils of unit 3.
- The team of engineers who prioritised the R&M activities also did not recommend (January 2002) replacement of economizer coils.
- Further, Energy Audit conducted between February 2005 and August 2006, on the directions of MPERC also reported about the satisfactory performance of economizer coils.

Unwarranted replacement of economizer coils resulted in avoidable expenditure of Rs. 2.68 crore.

Thus, the replacement of economizer coils resulted in avoidable expenditure of Rs.2.68 crore.

The Management stated (September 2007) that RLA study was done in 2000, while the site engineers' recommended (2 August 2003) for replacement of coils and the same was planned for replacement in 2006. The reply is not acceptable as the Company had not reviewed its decision before placing replacement order (2005), as the previous two studies on R&M only recommended for realigning of the economizer coil, which was further substantiated by the Energy audit report.

Idling of coal mill spares due to lack of prompt installation action

Improper planning of work resulted in non-installation of coal mill spares valued at Rs. 4.11 crore and loss of interest of Rs. 41.10 lakh.

2.3.28 The Company placed three purchase orders (August 2005, October 2005 and November 2005) under R & M scheme for procurement of spares for upgrading/refurbishing of all the eight mills of PH-II at a total cost of Rs.8.22 crore. All the spares were received (July to September 2006) at site. The Company placed (26 February 2007) order on Shukla Associates, Chachai for complete overhauling work (which included installation of spare parts procured) of four out of eight coal mills. Spares purchased for other four mills could not be installed as the orders placed (December 2006 and February 2007) for annual overhaul did not include the installation of these spares. Thus, due to improper planning, spares valuing Rs.4.11 crore procured through PFC loan remained unused with consequential loss of interest of Rs.41.10 lakh (September 2007).

Idle inventory

2.3.29 As on 31 March 2007, inventory items valuing Rs.56.24 crore were lying in the store. Out of which 1372 items valuing Rs.3.61 crore had not moved for more than three years. The non moving inventory holdings at store I and II was increasing. No action was taken for disposal of obsolete items so as to effect reduction in the inventory.

The table below indicates the cables and tubes purchased, consumed and still lying at ATPS store, Chachai:-

Name of item	Qty. (Mtrs.)	Value (Rs.in lakh)	Date of Receipt in Store	Consumption QTY. and period	Balance in March 2007 (Mtrs)	Value (Rs. in lakh)
Power cable XLPE 3 core 400 Sq.mm 3.3 KV Arnoured Al.	1003	10.91	May 1992	NIL	1003	10.91
Air heaters Tubes (Two Sizes)	7466 Nos. 3777 Nos.	29.32 38.10	April 2004 September 2002	NIL	7466 3777	29.32 38.10
Total						**78.33**

Source: Data provided by Management.

It will be seen from the above details that 1003 meters of power cable valuing Rs.10.91 lakh received in the store in May 1992 remained unutilized till date (September 2007). The cables were lying in open yard, therefore, with passage of time, possibility of deterioration in their quality cannot be ruled out. Further, the Company was aware (August 2003) that the air heater tubes in both the units of PH-II were badly damaged and tube plate holes had become oblong. The Company, therefore, planned (January 2004) to replace the air heater tubes and tube plate during AOH in September 2006 and use the old tubes also. But the Company failed to procure balance tubes and tube plates before AOH, as such these tubes could not be used. Thus, failure of the Company to procure tubes and plates in time resulted in idling of air heater tubes worth Rs.67.42 lakh for last five years.

Imprudent fixation of size of new unit as 210 MW

The decision to go in for 210MW new unit instead of 250MW unit was imprudent as the water savings from scraping of PH-I would have met the additional requirement for 250 MW unit.

2.3.30 The Company planned to expand the existing plant capacity of 290 MW by adding one unit of 200 MW in the free space available within the premises of the Power Station. The State Government accorded (April 2001) administrative approval for the project. The consultant engaged (January 2002) for conducting the feasibility study to decide the size of the unit recommended installation of 250 MW unit, but for water constraints. Considering the water constraints, the Company decided (June 2002) to go in for 210 MW unit instead of 250 MW. Based on the above, the work was awarded (September 2004) to BHEL for 210 MW at a total cost of Rs.625 crore. The work scheduled for completion by March 2007 is yet to be completed (September 2007). It was observed that the decision of the Company to go in for 210 MW plant was not prudent as the requirement of additional water of 6.57 lakh cubic meter (additional requirement for 250 MW plant) could be met after phasing out of PH-I of 50 MW which required 44.1 lakh cubic meter of water, as the Company was planning to scrap PH-I and had also stopped all the major R&M work of its units.

Non availing of interest subsidy from Government of India

The Company failed to complete the R&M works of PH-II and the new 210 MW unit within Tenth plan and thereby lost 3 per cent interest subsidy from GOI on the loan taken from PFC.

2.3.31 In order to achieve the targeted capacity addition in the 10th Five Year Plan (2002-2007), the Union Cabinet Committee on Economic Affairs (CCEA) approved (December 2002) extension of Accelerated Generation and Supply Programme (AG&SP) by giving an interest subsidy of three *per cent* for R & M scheme and new extension projects financed by PFC on the condition that it should be completed/commissioned within the plan period ending March, 2007.

The Company availed (2004-07) loan of Rs.99 crore for R & M of PH-II units and Rs.742 crore for the new 210 MW project from PFC. The Company, however, did not complete both the projects within the plan period and thereby lost the benefit of three *per cent* interest subsidy.

Internal control

2.3.32 Internal control is a management tool used to provide reasonable assurance that the objectives of the organization are being achieved in an efficient, effective and orderly manner. A good system of internal control comprise of proper allocation of functional responsibilities within the organization, proper procedures for operating and accounting activities. This helps to ensure accuracy and reliability of data, efficiency in operation, safeguarding of assets, performance of duties and responsibilities of personnel and review of the work of one individual by another, whereby the possibilities of fraud and error could be avoided. Review of internal control system followed by the Power Station revealed the following:

- ATPS is exercising internal control through the revised delegation of power (DOP) on financial and administrative matters issued (August 2003) by the Company which became effective from June 2005. There was however, no system in ATPS to ensure adherence to the provisions of DOP.

- The CMD of the Company inspected (October 2004) the function of the performance of the ATPS and expressed his concern on the poor performance of the power station and the management of stores and suggested to make efforts for improvement. It was, however, observed that there was no system in ATPS to ensure follow-up on the observations made by the CMD.

- Further, there was lack of co-ordination among different functionaries, instances of which are :-

  - ➢ accumulation of non moving spares and
  - ➢ non-installation of spares procured for coal mills, during the AOH.

- Internal audit of ATPS was not conducted for all the years covered under review.

Conclusion

The performance of Power Station was far from satisfactory. The balance between the possible generation and actual generation was not maintained due to partial loading. The Power Station had not developed maintenance policy and due to improper operation and maintenance planning, there were frequent forced outages and excess time was taken for planned outages. Inspite of COPU's recommendations, effective/ corrective measures were not taken to bring down the auxiliary consumption, consumption of coal, oil and DM water within the prescribed standards/parameters as prescribed by the CEA/ Company. Due to delay in taking up R&M work, the Company failed to improve the efficiency of the plant.

Recommendations

The Company should take effective and immediate steps to:

- ➢ **take up R&M works at the earliest,**
- ➢ **develop a maintenance policy explaining the responsibility of various functionaries in the operations,**
- ➢ **adopt a five years rolling plan for Annual overhauling and Capital overhauling of the plants as recommended by the Kukde Committee,**
- ➢ **implement the suggestions of Energy Audit; and**
- ➢ **utilise coal, oil and water efficiently.**

2.4 Information technology audit of Revenue Billing Software for low tension consumers in respect of Power Distribution Companies

Highlights

Due to inadequate input controls and lack of proper validation checks resulted in non-detection of certain concessions like employee rebate, zero security deposit and non-enhancement of security deposit made available to ineligible consumers.

(Paragraphs 2.4.11 and 2.4.13)

There were no validation checks in software detecting cases of non-billing or short/excess billing of meter rent.

(Paragraph 2.4.14)

Deficiencies in design of the system led to business rules getting by-passed.

(Paragraphs 2.4.16 and 2.4.17)

Inadequate password controls rendered the data vulnerable to unauthorized access/ modifications.

(Paragraph 2.4.20)

Unfruitful expenditure of Rs. 4.25 crore on purchase of hardware and software by MPSEB.

(Paragraph 2.4.22)

Introduction

2.4.1 The distribution of electrical power in the State is being managed by three Distribution Companies (DISCOMS) namely, 'Madhya Pradesh Madhya Kshetra Vidyut Vitaran Company Limited, Bhopal', 'Madhya Pradesh Poorva Kshetra Vidyut Vitaran Company Limited, Jabalpur' and 'Madhya Pradesh Pashchim Kshetra Vidyut Vitaran Company Limited, Indore', which were created with effect from June 2005. The State is divided into seven regions, 40 circles and 143 divisions to manage a Low Tension (Supply Voltage of 230V or 400V) Consumer Base of nearly 65 lakh consumers.

2.4.2 The information technology (IT) needs of DISCOMS are overseen by the 'Computer System & Automation (CSA)' Department of the Madhya Pradesh State Electricity Board (MPSEB), which is headed by Chief (CSA) who reports to the Secretary, MPSEB who in turn reports to the Chairman, MPSEB. Chief (CSA) is assisted by System Managers, System Analysts, Programmers etc. Prior to the year 2000, LT billing was being done under the overall control of Chief (CSA) with the help of stand-alone, COBOL or SYBASE based systems installed in divisions.

2.4.3 In October 2000, the MPSEB formed a separate group of 19 engineers called Capacity Building Group (CBG) under the administrative control of Executive Director, Corporate Planning Group (who reports to the Secretary, MPSEB) for in-house development of a new ORACLE based software for LT Billing called Revenue Management System (RMS).

Revenue Management System (RMS)

2.4.4 The RMS was to be implemented by the end of year 2003 at an estimated cost of Rs.55.88 crore in all divisions, circle & regional headquarters and at the corporate office. The main components of RMS were:

- Development of Application Software
- Networking solution for all divisions and headquarters
- Acquisition and Installation of Hardware for the above

2.4.5 The main objectives of the project were as follows:

- Computerisation of all functions of revenue management leading to timely generation of Management Information System (MIS) for decision support
- Provision for Energy Accounting and Auditing to reduce commercial losses
- Better Revenue Monitoring and Management in an Online environment
- Proper implementation/adherence to business rules
- Online maintenance of three year history of consumers to improve consumer complaint redressal mechanism.

2.4.6 As on July 2007, RMS could be implemented in only 64 divisions with a consumer base of around 30 lakh consumers

Audit objectives

2.4.7 The audit objectives were to assess whether

- IT controls in place were adequate and effective thereby ensuring data completeness, accuracy and reliability;
- Business rules, as stipulated by the Tariff Orders and Supply Code of Madhya Pradesh Electricity Regulatory Commission (MPERC) and other relevant rules and orders, have been correctly mapped on to the computerized system;

- Objectives of computerization were achieved and
- The prescribed purchase procedures were complied with and the IT infrastructure created was reasonably utilised.

Audit scope and methodology

2.4.8 Data generated by the RMS package was analysed (March 2007 to July 2007) in 13[41] divisions using various 'Computer Assisted Audit Techniques' like IDEA and SQL Queries. The IT Controls were evaluated to ascertain compliance to the provisions of Tariff Orders and Supply Code issued by the Madhya Pradesh Electricity Regulatory Commission (MPERC) and concerned provisions of the Electricity (Supply) Act, 2003.

2.4.9 Methodologies and Procedures followed by the MPSEB and the three DISCOMS during implementation of the RMS Project were evaluated (March 2007 to July 2007) against best practices of 'IT Governance' and various rules framed by the MPSEB in this regard. The evaluation was carried out by scrutiny of records maintained at headquarters of the three DISCOMS at Bhopal, Indore and Jabalpur and MPSEB headquarter at Jabalpur.

Audit findings

The significant audit findings are detailed in the succeeding paragraphs. Replies to the findings have been received from MPSEB and DISCOM, Jabalpur and duly incorporated. Replies from DISCOMs, Indore and Bhopal had not been received (October 2007).

Inadequacy of Input Controls and Validation Checks

Input Controls ensure that the data received for processing is genuine, complete, valid, accurate and properly authorised and the data entry is done accurately and without duplication. Analysis of data of RMS package revealed various instances of failure of Input Controls and absence of validation checks.

2.4.10 Missing Dummy Consumer and Meter information in the database.

Para 9.28 of M.P. Electricity Supply Code, 2004 provides that in the bills of metered consumers, contracted/connected/demand load, identification details of meter/consumer name etc are to be mentioned compulsorily. However during data analyses, following deficiencies were noticed:

- The RMS user manual states that the meter serial number, phase, make and rating is unique in itself. No other meter entry with the same parameters shall be accepted by the system. However, in 23,217 cases,

---

41 *Jabalpur – South, West, East and O&M; Bhopal – North, South, East and West; Indore – North, South and West; Gwalior – North and South*

one meter with unique number was found installed in the name of more than one consumer.

- In 23,588 cases, meter number was not recorded in the system.
- In 3,826 cases, connected load of the consumers was not recorded.
- In 1,009 cases, the name of the consumers was meaningless such as 'AA, 'XYZ', '-', '+' etc.

DISCOM, Jabalpur stated (September 2007) that due to acute shortage of man power at field level it was decided to start with dummy numbers for meter and due to punching errors consumer name and load was not entered in data base. The matter was being investigated and corrective action was being taken and compliance would be reported shortly.

However, compliance report had not been received (October 2007).

2.4.11 Zero' Security Deposit appearing in the bills of ineligible consumers

M.P. Government Notification No. 2560/MPERC/2004 dated 01 October 2004 provides that the initial energy security deposit (SD) from every LT consumer (other than certain exempted categories) was to be collected on the basis of 45/ 90 days estimated consumption. Data of the month January 2007 was analysed with due consideration of the exempted categories and it was observed that in 17,170 bills, the security deposit was not found recorded in database which indicated lack of validation control that allowed 'null entry' even in cases of ineligible consumers.

Thus, the software failed to validate the input entries in the SD field with reference to the various categories of consumers. This led to the software allowing 'zero' SD in the bills generated for general consumers and other such consumers who were not eligible for such exemption.

DISCOM, Jabalpur stated (September 2007) that the list of such consumers where SD was missing has been investigated and it has been observed that a number of these belong to either of the following categories:

- Link consumers where security and billing is available with main meter.
- Board employee.
- Temporary Disconnected Consumers where SD has been adjusted on account of outstanding arrears.
- Cases of 'Single Light Point' customers where no SD was earlier charged.

The reply was not tenable as these cases were pointed out by audit after excluding and giving due consideration to exempted categories.

The Executive Engineer, City Division, North, Madhya Pradesh Madhya Kshetra Vidyut Vitran Company Limited, Gwalior replied (September 2007) that fresh bills have been raised at the instance of audit in respect of consumers from whom no SD was charged previously.

2.4.12 Non-enhancement of Security Deposit of ineligible consumers by the software

Para 1.16 of MPERC (Security Deposit) Regulations, 2004 dated 22 September 2004 provides that Security Deposit of LT consumers (other than Board employees/ retired Board employees and Government offices) should be reviewed annually on the basis of previous 12 months' consumption in the month of April every year. Data analysis of divisions revealed that the 'Security Deposit Enhance Flag' in the master table for 1,360 such consumers contained 'No' value instead of 'Yes' due to which their Security Deposit was either not reviewed or enhanced.

It was further observed that data regarding consumer category and security enhancement was fed in the same input form and the former was fed first. However, the software accepted 'No' i.e. invalid values in the 'SD Enhance Flag' even for consumers who were not exempted from yearly SD enhancement. Thus, the software allowed invalid entries in the 'SD Enhance Flag'.

2.4.13 'Employee Rebate' allowed to ineligible consumers by the software

MPSEB order no 01-07/WAC/1381 dated 04 March 2005 stipulates that working Board employees and retired Board employees will be allowed rebate of 50 *per cent* and 25 *per cent* respectively on energy charges and fixed charges. The 'Revenue Category Code' for such consumers in the RMS package is 101-02 and 101-55 respectively and the 'Employees Rebate Flag' for such consumers in the master table is 'Y'. Analysis of data of the month January 2007 revealed that 'Employees Rebate Flag' was 'Y' for 412 general consumers (Revenue Category Code – 101-01).

It was further observed that data regarding consumer revenue category and employees rebate flag was fed in the same input form and the former was fed first. However, the software accepted 'Yes' values in "Employees Rebate Flag' even in case of general consumers.

DISCOM, Jabalpur accepted (September 2007) the audit observation and stated that all the cases pointed by the audit pertained to Board employees and that there was no loss of revenue. The consumers were now being transferred to the specified category in RMS. This further showed that the consumer master data was inaccurate as wrong revenue category code was fed into the database. This also rendered the reliability of various MIS reports generated by the RMS package doubtful.

2.4.14 Non validation/detecting cases of non-billing or short/excess billing of meter rent.

As per Para 5.4 of the Order on Miscellaneous and General Charges issued by the MPERC on 9 December 2004, 'Meter Rent' was to be recovered from each metered consumer at the rate of Rupees five per month for single-phase connection and Rs.12 per month for poly-phase connection with effect from 1 January 2005. Analysis of data pertaining to the period January 2005 to March 2007 (27 months) after due consideration of the cases where meter rent was not applicable revealed that meter rent in 35,30,784 bills was 'Zero' and in 61,293 bills of poly-phase consumers, meter rent was billed at the rate of Rupees five instead of Rs.12 per month. Likewise there were 645 cases where meter rent was charged at the rate of Rs. 12 per month whereas Rupees five should have been charged as per analysis of the data for the month of January 2007. This indicated that the billing software did not validate the entries regarding 'zero rent' or 'short/excess levy of rent' with reference to the meter information of the consumers.

DISCOM, Jabalpur accepted (September 2007) the audit observation and agreed to make necessary corrective measures in this regard.

2.4.15 Non detection and validation of cases where single-phase connections were provided to consumers instead of three-phase connections

As per Para 3.2 and 3.4 of the M.P. Electricity Supply Code 2004, maximum contract demand for single phase consumers is 3 kilowatt/4hp/3000 watt. However, data analysis revealed that in case of 4,859 consumers, the connected load was more than 3 kilowatt/4hp/3000 watt but the connection was single phase. It indicated the lack of validation check in the RMS package as the software allowed load greater than the stipulated maximum load for single phase connections to be fed into the system.

DISCOM, Jabalpur stated (September 2007) that in the present billing system all consumers over three KW of load are served three phase connection only and correction has now been made in the software. The cases pointed out by the audit are primarily the old consumers where wrong punching of data was done or consumers had enhanced their load after connection. Notices had also been served to the consumers to convert to three phase connection.

System design deficiencies

One of the objectives of computerization was to properly implement the business rules. However data analysis revealed instances of non-adherence to business rules by the RMS package as brought out in the succeeding paragraphs

2.4.16 Non-entry of data related to 'Continuous Supply' allowed by the system

As per MPERC tariff order for the financial year 2006-07, if average monthly supply is less than 23.50 hours per day (non-continuous supply), concessional fixed charges should be billed in case of 'Domestic Light and Fan (DLF)' consumers. Data analysis revealed that the provision for entering the monthly average supply was available in RMS software although the same was not a mandatory entry before generating the bills. As a result, in case of no data entry, the system evoked a default entry (24 hours) of continuous supply which may or may not represent the true and fair assessment. By not making entering information regarding continuous supply mandatory, the business rules were bypassed. Thus, the possibility of excess recovery of fixed charges from the consumers could not be ruled out.

No reply in this regard was received from the DISCOMs (October 2007).

2.4.17 Billing based on 'Assessed Consumption' allowed by software although the meters were not declared 'Stop' or 'Defective'

As per the orders issued by MPERC, consumers may not be billed on the basis of 'Assessed Consumption' until and unless the meter installed at consumers' premises was declared 'Stop' or 'Defective'. During the data analysis it was observed that there was inadequate system level check in the software, due to which assessed consumption was accepted by the system whereas meters of the consumers were not declared 'Stop' or 'Defective'. Further it was also observed that a separate code for assessed consumption had been introduced and as per this code it was not mandatory that the meter should be declared 'Stop' or 'Defective' for billing of assessed consumption. This indicated bypassing of the business rule by the billing software.

Further, the program also did not have any provision for automatically calculating the assessed consumption. As per the supply code, assessed consumption is to be calculated as an average on the basis of previous three months' meter reading. Due to this deficiency in the software, manual intervention was resorted to in order to calculate assessed consumption.

As per data in the computerised software, an assessed consumption of 1,03,63,126 units during the month of January 2007 appearing in 71,422 bills where the meter was not shown as 'Stop' or 'Defective' was noticed by audit. Thus, the consumers were billed 'assessed consumption' without declaring their meters 'Stop' or 'Defective' in contravention to the business rules.

DISCOM, Jabalpur stated (September 2007) that the primary causes of assessed consumption were:

- Replacement of meter during the billing month and the new meter does not cover the consumption in respect of the whole month.

- Abnormal dips in consumption are observed and remarks of doubtful consumption are recorded by Meter Readers/Junior Engineers in the Meter Reading Books (MRB).

The reply was not tenable as MPERC orders categorically state that consumers may not be billed on the basis of 'Assessed Consumption' until and unless the meter installed at consumers' premises was declared 'Stop' or 'Defective'. Business rules did not provide for assessed consumption in cases pointed out by the DISCOM.

Thus, the system allowed bypassing of business rules and did not have the feature of calculation of assessed consumption which was therefore, being done manually.

Inadequacy of General Controls

General Controls create the environment in which IT applications and related controls operate. Scrutiny of records of the Capacity Building Group, DISCOMs, Circles, Regions and Divisions revealed instances of inadequacy of General Controls as detailed in succeeding paragraphs.

2.4.18 Organizational and Management Controls

IT operations in MPSEB are being carried out parallely by Executive Director (CPG) through CBG and by Chief (CSA). Lack of co-ordination between these two has led to various problems like delays in implementation of latest tariff orders, submission of MIS in different versions and diffused monitoring which has ultimately resulted in delay in implementation of RMS project. As on July 2007, RMS could be implemented in only 64 divisions out of a total of 143 divisions. Of these 64, only five divisions are online and the remaining 59 divisions are still working in stand-alone offline environment. Further, of the14 modules that were to be developed in the RMS package only eight could be developed (July 2007). Thus, the intended benefits of the project are yet to be realized.

The MPSEB stated (November 2007) in reply that the RMS has been rolled out in 64 divisions as planned. At present there is no further roll out plan for RMS in remaining divisions. In case of any decision at DISCOM level for rollout in remaining divisions, plans shall be prepared accordingly.

The reply of the Board was not tenable because as per the original project report the RMS was to be rolled out in 143 divisions on online basis and even after lapse of more than five years, out of the 143 division only five divisions could be started on the online basis.

2.4.19 Lack of IT policy and documentation

The MPSEB and DISCOMS failed to formulate and document an IT security policy regarding the security of IT assets, software and data security. In absence of security policy, possibility of security breaches, data loss, fraud and errors cannot be ruled out. A written IT policy covering the organizational objectives, the technological direction and management of human resources etc. has also not been developed. A Disaster Recovery and Business Continuity Plan outlining the action to be taken immediately after a disaster and to effectively ensure that information processing capacity can be resumed at the earliest has also not been developed. Even day-to-day maintenance problems related to IT assets are being dealt on need basis, as annual maintenance contracts are not being entered into in most divisions.

2.4.20 Physical and Logical Access Controls

The objective of physical and environmental controls is to prevent unauthorized access and interference to IT services. IT assets should be protected from environmental damage, caused by fire, water (either actual water or excess humidity), earthquakes, electrical power surges or power shortage. No separate cell is available for IT operations in divisional offices and physical access to non-IT staff was not found restricted. Proper arrangement for fire fighting was also not found in any division.

Although the password policy was formulated, normal password control procedures like restriction on unsuccessful login attempts by the users or automatic lapse of password after a predefined period and system enforced periodical change of passwords after certain period were not in existence. Further, it was noticed that there was no restriction on the number of unsuccessful login attempts. It was also noticed that divisional implementers, since the start of the system, did not change password of the Oracle User Schema and almost all divisions had identical method of passwords which were known to the entire staff.

DISCOM, Jabalpur stated (September 2007) in reply that access control document, containing physical and logical access was already in vogue. It might be possible at some places due to shortage of desired skilled operational manpower/administrators it was not properly implemented. Instructions had been issued to institutionalize the access control policy at all level. Maintaining the infrastructure/ real estate /logistics and safeguarding against natural hazards was being planned as it requires huge efforts in estimation and shall also be requiring the handsome amount of funds as well. In view of financial constraints, a total integrated IT solution was being planned for the DISCOM.

2.4.21 Program Change Controls

Changes to software required due to change in tariff orders, court judgments, rule amendments etc are implemented through release of patches from time to time. However, no records which document these changes were found maintained at divisions to ensure that the amendments to the software were authorized, tested and accepted.

Other points of interest

2.4.22 Unfruitful expenditure of Rs.4.25 crore on purchase of hardware and software by MPSEB

MPSEB identified (2002) two divisions as 'pilot' sites and 21 divisions as 'priority' divisions situated at seven[42] regional headquarter cities for immediate implementation of RMS on online basis. Orders for procurement of hardware and software to be installed at these pilot and priority divisions were placed (August 2002 to February 2003) by MPSEB and the delivery was to be made at regional level.

Scrutiny (July 2007) of records of MPSEB revealed that RMS could be implemented in these divisions after an average delay of two years from the date of procurement of hardware and software. It was further noticed that only in five divisions out of these 23 divisions, RMS could be implemented on online basis. In the remaining 18 divisions, RMS continued to run on offline basis. However, the procurement of hardware and software was done as per requirement of an online system which was much greater than that of an offline system. Thus, hardware and software purchased in excess of offline requirement remained unutilized for more than four years in these 18 divisions rendering Rs.4.25 crore (as per details in ***Annexure 20***) spent on purchase of these items unfruitful.

The MPSEB stated (November 2007) that the RMS implementation was planned with online access providing the terminals to concerned and functional users to access the software. The computer hardware was made available to the field officers through regions and is being utilised for RMS including servers, printers, software etc. There may be few cases of diverting the hardware for important works by the DISCOMS depending upon the requirement which can not be considered as unfruitful expenditure and PCs if utilised for other works played a vital role in efficiency improvement.

The reply was not tenable in view of the fact that hardware and software was procured for implementing RMS on online basis and could not be utilised for the purpose for which it was procured.

2.4.23 Non procurement of networking equipment despite sanction and availability of funds

In August 2003, MPSEB approved the procurement of hardware/ software including networking components for implementation of RMS in 21 divisions at seven regional headquarters. The tentative cost for setting up the networking infrastructure at 21 priority divisions and their sub-ordinate offices was worked out as Rs.4.10 crore and the same was approved by the Chairman on 5

[42] *Bhopal, Indore, Jabalpur, Gwalior, Ujjain, Sagar and Rewa*

August 2003 and sent to the Chief Engineer (Stores & Purchase), MPSEB in August 2003 for procurement.

However, neither the CE (S&P) and subsequently nor the Chairmen cum Managing Directors (CMDs) of three DISCOMs could procure the networking equipment (July'2007). As a result only five divisions are online.

The Board stated (November 2007) that after the formation of DISCOMS the procurement was undertaken by the individual DISCOMS.

The reply was not tenable as procurement of networking equipments was neither done by MPSEB despite the sanction of the Board nor was subsequently done by the DISCOMS.

Conclusion

More than five years have elapsed since inception of the RMS project. However, out of 143 divisions, only five divisions have RMS running on online basis. The RMS in its present form has only eight modules as against 14 that were to be developed. Networking between divisions, circles, regional headquarters and corporate office has not been done. Thus, none of the objectives of the project has been achieved. Data generated by the RMS software in its present form is neither accurate nor complete and is therefore not reliable. The general environment in which IT operations are being carried out are poor. IT Security Policy has not been formulated. There is no Disaster Recovery & Business Continuity Plan.

Recommendations

- **MPSEB should consider disbanding the Capacity Building Group and hiring the services of IT professionals in order to develop an integrated solution which should be implemented uniformly in the State. IT needs of MPSEB should be managed by only one department as was being done by the Computer Systems and Automation Department prior to the year 2000.**
- **Immediate steps like data input validation, correct mapping of business rules as laid out in various statutes etc. should be initiated so that instances of possibility of loss of revenue and excess recovery from consumers can be addressed.**
- **Immediate formulation, documentation and implementation of a comprehensive IT Policy enumerating Security Controls, Physical & Logical Access Controls, Program Change Controls and Disaster Recovery & Business Continuity Plans etc is urgently required.**