

CHAPTER III

PERFORMANCE REVIEWS RELATING TO STATUTORY CORPORATIONS

HIMACHAL PRADESH STATE ELECTRICITY BOARD

3.1 Tariff, Billing and Collection of revenue

Highlights

Failure of the Board to file tariff petitions annually in time with complete details and justifiable data resulted in loss of Rs.154.86 crore and delay in recovery of Rs.533.72 crore.

(Paragraphs 3.1.7, 3.1.10 to 3.1.13)

The Board failed to restructure its high cost debts resulting in loss of Rs.48.21 crore due to non-adjustment of interest through tariff.

(Paragraph 3.1.8)

Failure of the Board to reduce transmission and distribution losses as per the targets fixed by HPERC resulted in loss of potential revenue of Rs.79.75 crore.

(Paragraph 3.1.14)

Failure of the Board to recover from the consumers share of cost of providing connections resulted in undue favour of Rs.10.48 crore to them.

(Paragraph 3.1.18)

The Board failed to bill the consumers in accordance with the laid down procedure/directions of HPERC resulting in non-recovery of revenue of Rs.70.40 crore.

(Paragraphs 3.1.19 to 3.1.28)

The amount of permanent default from the consumers increased from Rs.5.70 crore in 2002-03 to Rs.7.02 crore in 2006-07 due to failure of the Board to take effective steps to recover the default amount.

(Paragraph 3.1.32)

Internal control mechanism and internal audit system were deficient resulting in increase in number of units remaining un-audited by Internal Audit and non-settlement of large number of outstanding observations of Internal Audit.

(Paragraphs 3.1.37 and 3.1.38)

Introduction

3.1.1 The Himachal Pradesh State Electricity Board (Board) was incorporated (September 1971) for generation, transmission and distribution of electricity in an efficient and economical manner in the State. Sale of power is regulated with reference to the tariff fixed by the Himachal Pradesh Electricity Regulatory Commission (HPERC) from time to time. Prior to the establishment (December 2000) of the HPERC, the Board was exercising the powers conferred on it by the Electricity (Supply) Act, 1948 with regard to fixation of tariff.

The Member (Operation) is the overall in-charge of the activity of sale of power to all categories of consumers. He is assisted by Chief Engineer (Commercial), Chief Engineer (Operation) North, Chief Engineer (Operation) South and Chief Engineer (Operation) Central Zone. The Chief Engineers (Operation) are further assisted by 12 Superintending Engineers (Operation), 49 Executive Engineers and 226 Assistant Engineers in the operation and maintenance of the entire power distribution network of the Board. The organisational chart is annexed as **Annexure-XVI**.

A review on Billing and Collection of Revenue in the Board was included in the Report of the Comptroller and Auditor General of India for the year 1996-97 (Commercial) - Government of Himachal Pradesh. The report was discussed by the Committee on Public Sector Undertakings (COPU) in February 2002. Action Taken Notes on its recommendations finalised/placed in the State Legislature in March 2003 were received in August 2007.

Scope of audit

3.1.2 The present performance review conducted from November 2006 to April 2007 covers examination of overall efficiency of the Board in fixation/revision of tariff, billing and collection/accountal of revenue from all the categories of consumers for energy sold during 2002-03 to 2006-07. Four* out of 12 circles having 75 sub-divisions were selected for detailed examination on simple random sampling method without replacement, which contribute about 64 per cent of the revenue of the Board.

* Solan, Nahan, Una and Dalhousie

The table below indicates category-wise number of consumers, connected load and revenue assessed. The sample selected is also based on connected load and selected consumers and assessment of revenue thereagainst under various categories as on 31 March 2007, which represented more than 60 per cent of total revenue assessed:

| Sr. No. | Category of consumers | No. of consumers | Connected load (In MW) | Assessment of revenue during 2006-07 | Connected load of the selected consumers (In MW) | Assessment of revenue of the selected consumers | Percentage of revenue assessed of the selected consumers to total revenue |
|---------|--|------------------|------------------------|--------------------------------------|--|---|---|
| | | | | (Rs. in crore) | | (Rs. in crore) | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 1 | Domestic | 15,31,613 | 1,997.164 | 216.48 | 637.675 | 79.14 | 36.56 |
| 2 | N.D.N.C.‡ | 14,209 | 76.644 | 33.83 | 14.692 | 9.28 | 27.43 |
| 3 | Commercial | 2,03,135 | 416.375 | 112.20 | 126.291 | 37.03 | 33.00 |
| 4 | Industrial (SMS, LS) | 33,198 | 1,010.626 | 761.58 | 795.043 | 642.51 | 84.36 |
| 5 | Govt. irrigation and water supply scheme | 3176 | 165.963 | 129.67 | 75.341 | 53.73 | 41.43 |
| 6 | Public lighting | 551 | 3.138 | 4.84 | 1.253 | 1.56 | 32.23 |
| 7 | Agriculture/ Irrigation | 11,487 | 64.483 | 16.72 | 45.758 | 7.65 | 45.75 |
| 8 | Bulk supply | 151 | 83.430 | 41.04 | 20.694 | 12.94 | 31.53 |
| 9 | Temporary | 1,743 | 15.072 | 8.50 | 10.666 | 8.11 | 95.41 |
| | Total | | | 1,324.86 | 1,727.413 | 851.95 | 64.32 |

Source: Compiled from the relevant records of the Board.

Apart from the above, the overall performance of all the categories of consumers with reference to outstanding arrears, non-overhauling of consumers accounts, delay in billing, non-downloading of data and non-observance of codal procedures was also examined.

‡ NDNC: Non-domestic Non-commercial. This category includes Government/semi government offices, educational institutions, religious places, sanik rest houses, working women hostels and hospitals.

Audit objectives

3.1.3 The audit objectives of the Performance review were to ascertain whether:

- aggregate revenue requirement (ARR) projected in the tariff petitions to HPERC for determination of tariff were realistic and filed annually in time;
- energy was sold to consumers with reference to HPERC guidelines and tariff rates;
- billing process was carried out effectively, energy charges were billed correctly and revenue realised efficiently and accounted for correctly;
- effective efforts were made to realise /reduce the revenue arrears; and
- internal control mechanism was efficient and effective.

Audit criteria

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

- billing schedule, tariff distribution code and commercial/revenue manuals issued by HPERC and Board;
- procedures, guidelines and rules and regulations laid down by the State Government, HPERC/and the Board;
- directives issued by the HPERC and Board for reduction of losses, employees cost, debt re-structuring, metering, billing and collection; and
- directives of the State Government/HPERC/Board, rules/regulations for taking action against the defaulting consumers.

Audit methodology

3.1.5 The following mix of audit methodologies was adopted for achieving the audit objectives of the performance review:

- study of Regulations/Orders/Distribution Codes issued by HPERC and Commercial and Revenue Manual/Orders of HPSEB;
- examination of annual reports and performance reports of the Board, agenda and minutes of the meetings of the members of the Board;
- scrutiny of agreements executed with consumers, meter reading, sealing certificates, billing files, revenue collection system and other reports;
- analysis of targets and achievements of the revenue and effectiveness in realisation of revenue;
- issue of audit enquiries and interaction with the Management.

Audit findings

3.1.6 Audit findings, arising from the performance audit of Tariff, Billing and Collection of Revenue in the Board were issued (June 2007) to the Government/Board and were discussed (16 August 2007) in the meeting of the Audit Review Committee for State Public Sector Enterprises (ARCPSE). The Secretary, Multi-purpose Project and Power, Government of Himachal Pradesh and Member (Finance), Member (Technical) and Member (Operation) along with other officers of the Board attended the meeting. The views expressed by the members have been taken into consideration while finalising the review.

Tariff

Non-filing/delay in filing of Aggregate Revenue Requirement (ARR)

Due to delay in filing of tariff petitions/submission of incorrect data, the Board could not realise potential revenue of Rs.24.14 crore.

3.1.7 The Electricity Regulatory Commission Act, 1998 lays down the methodology and procedure to be adopted by the utility for filing ARR with HPERC. As per laid down procedure, the utility has to submit full details of its expected aggregate revenue from the charges for the financial year to the HPERC at least three months before the ensuing financial year or part thereof. The Indian Electricity Act, 2003 (IE Act, 2003) provides that the tariff determined by the HPERC should safeguard the interest of the consumers, ensure recovery of cost of electricity in a reasonable manner and reduce/eliminate cross subsidy within the period to be specified by the HPERC. The HPERC approved first cost based tariff in November 2001. Revised tariffs were approved by the HPERC in July 2004^s, July 2005 and July 2006.

It was noticed that due to non-filing of tariff petitions for 2002-03 and 2003-04 and delay in filing of tariff petition/submission of incorrect data, the Board/Government could not realise potential revenue of Rs.24.14 crore as discussed below:

- The Board failed to submit ARR/tariff petition for the year 2002-03 and 2003-04 which resulted in increase in revenue gap. To bridge the revenue gap, the Board raised short term loans of Rs.185 crore from REC (Rs.65 crore), PFC (Rs. 30 crore) and United Commercial Bank (Rs.90 crore) and paid interest of Rs.8.67 crore on these loans. It also deprived the State Government of the revenue receipt of Rs.70.01 lakh on account of tariff petition fee payable at the rate of 2 *paise* for every 20 Kwh (units) as provided under the Conduct of Business Regulation 2001, which was ultimately recoverable from the consumers through tariff.

^s *Loss of Rs.48.83 crore for the delay in filing tariff petition for the year 2004-05 has already been commented upon in para 6.5 of the Report of the C&AG of India for the year 2004-05*

- In terms of the above procedure, the Board filed (November 2005) its application for ARR for 2006-07 with the HPERC. As the application was incomplete, the HPERC did not admit the same. The required additional information was finally submitted by the Board on 16 June 2006 and the tariff order issued by the HPERC on 3 July 2006 was made effective by the Board from 8 July 2006.

Failure of the Board to file complete details in time resulted in non-realisation of potential revenue of Rs.24.14 crore from April to June 2006.

The Government stated (August 2007) that the tariff petition for 2002-04 could not be submitted due to introduction of major changes in tariff structure by the HPERC. Since the tariff petition was neither filed nor processed, the question of loss of revenue to the Government did not arise. The HPERC had compensated the Board to recover the increased cost through stabilisation charges of Rs.23 crore. It was also admitted by the Government that the HPERC did not provide for the increased tariff during April 2006 to June 2006 as there was delay on the part of the Board in forwarding the requisite details.

The reply of the Government establishes the fact that the Board failed to comply with the directives of the HPERC resulting in loss of revenue. Further, the Board was allowed to recover only Rs.23 crore out of total revenue gap of Rs.185 crore. The Board also failed to file the true up petition for the recovery of this amount though there was provision for the same in the tariff order for the year 2005-06 and admitted that the delay was on its own part.

Non-restructuring of high cost debt

Failure of the Board to restructure high cost debts resulted in non-adjustment of interest of Rs.18.21 crore through tariff.

3.1.8 On the direction (June 2004) of the HPERC, the Board assured (June 2004) to re-structure the high cost debt with low rate of interest by the end of October 2004. Accordingly, the HPERC deducted (July 2004) anticipated interest saving of Rs.10.03 crore on loans and bonds from the ARR for 2004-05. The Board, however, failed to re-structure the high cost debt of Rs.692.98 crore (bonds: Rs. 500.98 crore and bank loans: Rs.192 crore) in the prescribed time schedule. So far as bonds are concerned, redemption of bonds (except for SLR bonds) could not be done as there was no provision for early redemption of the bonds in the terms and conditions of various bonds. In case of SLR bonds amounting to Rs.58.44 crore raised (January to March 1999) from Kangra Central Co-operative Bank and H.P. State Co-operative Bank for seven years, the Board did not exercise the option for redemption after five years (March 2004). This has been commented in paragraph 4.8 *infra* of the Report. The bank loans were restructured in January 2005 after a delay of two months from the prescribed time schedule assured to HPERC. This resulted in non-adjustment of interest of Rs.4.96 crore from the consumers through tariff.

Similarly, while finalising the tariff order for the year 2006-07, the HPERC disallowed interest charges of Rs.43.25 crore on high cost debt on the same analogy which also could not be adjusted in the tariff.

The Government stated (August 2007) that the Board had gone in appeal against the order of the HPERC and the Appellate Tribunal had set aside the disallowance of interest by the HPERC. Accordingly, the HPERC had also dropped the direction in tariff order for 2007-08 and the Board would file true up petition on account of the above judgement. It was also stated that by restructuring the old high cost debts with cheaper rate of interest, the Board had saved interest of Rs.59.36 crore over the remaining period of these loans.

The reply is not tenable as the Tribunal had set aside (July 2006) disallowance of portion of interest with the directive that the Board would take effective steps to reduce the rate of interest within one year. It also stated that failure to do this would lead to the same eventuality during the next tariff period. The Board has, however, not been able to restructure the high cost debts of Rs.363.60 crore (non SLR bonds: Rs.333.61 crore and SLR bonds: Rs.29.99 crore) so far (August 2007).

Payment of excess fee for tariff determination

3.1.9 The HPERC is empowered[&] to determine the tariff within the State. The Board, while filing ARR for the financial years 2004-05, 2005-06 and 2006-07 paid tariff determination fee of Rs.52.56 lakh, Rs.50.52 lakh and Rs 54.73 lakh respectively at the rate of two paise per 20 Kwh on total energy available for sale including inter-state sale. Since the inter-state sale is regulated by the Central Electricity Regulatory Commission (CERC), inclusion of inter-state sale while calculating the fee payable resulted in excess payment of tariff determination fee of Rs.31.65 lakh and consequent excess recovery to that extent from the consumers.

The Government stated (August 2007) that the fee was paid in accordance with the conduct of business regulations for total power available for sale within and out side the State. The reply is not tenable as the tariff relating to interstate sale of power is determined by the CERC. Thus, the payment of petition fee to the HPERC in respect of interstate sale was not in order.

Expenses disallowed by the HPERC

3.1.10 As per the CERC guidelines, the Board was required to file petition for determination of project-wise generation tariff. The HPERC had also issued direction^{*} in the tariff order for 2004-05 whereby the Board was required to file applications for fixing the cost of generation in respect of Board's own

[&] As per Section 86 (a) read with Section 79 of the Indian Electricity Act, 2003
^{*} No. 9.4.24 dated 2 July 2004

projects to the HPERC for the year 2005-06 by the end of October 2004. The Board in its tariff petition for 2005-06 filed during December 2004 did not submit petition for generation tariff as required above and submitted generation petition only during January 2005 based on allocation of expenditure and not on actual basis. During the hearing (June 2005) by the commission, the Board submitted that it was not in a position to submit separate petitions for each of its Power Houses due to non-maintenance of data. Consequently, the HPERC in its interim order directed (June 2005) the Board to submit additional information on generation tariff by 13 June 2005 but the Board failed to submit the same (August 2007).

Failure to furnish the requisite information in respect of generation cost of four projects to the HPERC, resulted in non-recovery of Rs.6.02 crore through tariff.

From the available data, the HPERC observed (March 2007) that generation cost of some of the Power Houses was on higher side and restricted the generation cost of these projects to the level fixed by it for private sector projects. Due to Board's failure to submit the applications as per the CERC/HPERC's guidelines and also the information sought by the HPERC, the generation cost of Board's four projects (Binwa, Thiroth, Gumma and Nogli) was slashed by the HPERC by Rs.6.02 crore and could not be recovered from the consumer through tariff resulting in loss to the Board to that extent.

The Government stated (August 2007) that the Board would file true up petition on the basis of the judgment (July 2006) given by the Appellate Tribunal. The fact remains that the cost of generation disallowed by the HPERC would remain un-recovered up to March 2008 as the Board failed to include the above amount in the tariff petition for the year 2007-08 filed on 30 November 2006.

3.1.11 During the financial year 2004-05, the Board purchased 4,763.531 million units (MUs) of energy from other agencies such as Punjab State Electricity Board, (PSEB), NTPC, NHPC, etc. While filing ARR for 2005-06, it, however, envisaged power purchase of 3,452 MUs (excluding Government's share) valued at Rs.704.21 crore which was 72.47 per cent of the power purchased during 2004-05. The HPERC approved purchase of 3,624 MUs valued at Rs.692.18 crore. It was observed that during 2005-06, the Board actually purchased 4,918.951 MUs of power that is 42.50 per cent more than what was envisaged, valued at Rs.1082.30 crore.

The Government stated (August 2007) that the HPERC in its tariff order for 2007-08 had approved (April 2007) the power purchase on actual basis in the true up petition. The reply is not tenable as the HPERC has allowed only Rs.1,057.74 crore against the actual expenditure of Rs.1,082.30 crore. Due to incorrect estimation, recovery of Rs. 365.56 crore (Rs.1,057.74 crore- Rs. 692.18 crore) was delayed by two years and an amount of Rs. 24.56 crore could not be recovered.

Due to incorrect submission of data to the HPERC, expenditure of Rs.264.78 crore could not be recovered through tariff.

3.1.12 In the tariff orders for the years 2005-06 and 2006-07, the HPERC had disallowed an expenditure of Rs.228.08 crore and an expenditure of Rs.36.70 crore could not be recovered by the Board through tariff from the consumers due to incorrect submission of data (Sr. No. 5 to 7) in tariff petition to HPERC as tabulated below:

| Sr. No. | Year of tariff petition | Actual expenditure | Expenditure allowed | Difference | Reasons |
|--------------|-------------------------|--------------------|---|---------------|--|
| | | (Rs. in crores) | | | |
| 1 | 2005-06 & 2006-07 | 7.50 | -- | 7.50 | Expenditure of Rs. 7.50 crore on account of employee cost was disallowed as the Board had deviated from the adopted pay scale pattern of the Punjab State Electricity Board (PSEB). |
| 2 | 2005-06 & 2006-07 | 176.05 | 94.58 (2005-06 Rs.28.74 crore and 2006-07 Rs.65.84 crore) | 81.47 | Merger of 50 per cent Dearness Allowance (DA) in the Basic pay was allowed by the State Government subject to consideration of resource scenario. Since the Board was running in losses the impact of merger was disallowed by the HPERC with the direction not to allow any future increase in DA till the efficiency is improved by the Board. |
| 3 | 2006-07 | 131.46 | -- | 131.46 | Differential amount of two part* billing for interstate purchase of power as per CERC orders of 2005 for the period 2004-05 (Rs.80.46 crore) and 2005-06 (Rs.51 crore) was not passed on to the consumers. |
| 4 | 2005-06 | 7.65 | -- | 7.65 | Expenditure of Rs.7.65 crore incurred on account of employees cost of Larji and Khauli Hydel projects was not allowed due to time overrun of 16 to 22 months. |
| 5 | 2005-06 | 88.97 | 68.70 | 20.27 | The amount of Rs. 20.27 crore could not be claimed due to the fact that against the actual expenditure of Rs. 88.97 crore on account of terminal benefits to its employees, the Board claimed only Rs. 68.70 crore in its tariff petition. |
| 6 | 2005-06 & 2006-07 | 4.22 | -- | 4.22 | The Board did not include an expenditure of Rs.2.37 crore for 2005-06 and Rs.1.85 crore for 2006-07 on account of Rent, Rates and Taxes and audit fee in its tariff petition. |
| 7 | 2005-06 | 53.89 | 41.68 | 12.21 | The amount of Rs. 12.21 crore could not be claimed due to the fact that against the actual charges of Rs. 53.89 crore on account of depreciation, the Board claimed only Rs. 41.68 crore in its tariff petition. |
| Total | | 469.74 | 204.96 | 264.78 | |

Source: Compiled from the relevant records of the Board and tariff orders passed by the HPERC.

* Two part billing: Billing for capacity charges as well as energy charges

The Government stated (August 2007) that the deviation from the pay scales pattern of PSEB was allowed to employees with the approval of the Whole Time Members (WTMs) of the Board and in view of the decision of Appellate Tribunal, the actual expenditure of Rs.83.55 crore on account of merger of 50 *per cent* DA in basic pay for the year 2005-06 was allowed in true up petition for 2007-08. The balance if any, would also be claimed. The reply is contradictory as the Board had earlier adopted the pay pattern of the PSEB. Moreover, it would recover only Rs.54.81 crore (Rs.83.55 crore - Rs.28.74 crore allowed) incurred during 2005-06 in the year 2007-08 and the excess expenditure of Rs.26.66 crore (Rs.92.50 crore-Rs.65.84 crore allowed) incurred during 2006-07 would be recovered only during 2008-09, if allowed by the HPERC.

In respect of cases mentioned at Sr. No. 3 and 5 to 7, the Government stated (August 2007) that the HPERC had allowed expenditure on account of prior period expenses (Sr. No.3), terminal benefits (Sr. No.5), Audit fee, Rent Rates and Taxes (Sr. No. 6) and Depreciation (Sr. No.7) on actual basic in tariff order for 2007-08. In case of employees cost (Sr. No. 4) of Hydel Projects, it was stated (August 2007) that the Board would file true up petition on the basis of judgement (July 2006) of Appellate Tribunal. The reply is not tenable as the expenditure of Rs.168.16 crore was allowed by the HPERC in tariff order for the year 2007-08. The Board would be able to recover this amount after a delay of one (Rs.52.85 crore) to two (Rs.115.31 crore) years. As regards employees cost of Hydel Projects, the true up petition was yet to be filed. Thus, out of disallowed expenditure of Rs.264.78 crore, an amount of Rs.96.62 crore would remain un-recovered and the amount of Rs.168.16 crore would be received with a delay of one to two years.

Non-recovery of surcharge on delayed payment of subsidy

3.1.13 Surcharge of Rs.3.52 crore on delayed payment of subsidy recoverable from the State Government was not recovered by the Board though the above amount was deducted from the ARR by the HPERC at the time of finalising tariff for 2004-05.

The Government stated (August 2007) that surcharge on subsidy was not acceptable as the Board also delayed payment of free power, electricity duty and repayment of loans to the Government.

Excess transmission and distribution losses

3.1.14 In the process of transmission and distribution, considerable energy is lost. Transmission loss is the technical loss due to inherent characteristics of transformers, cables and conductors, *etc.* Distribution loss occurs due to inherent characteristics of distribution system and a part of it is lost due to leakage of energy on account of theft, defective meters, meter readings not taken, *etc.* (commercial losses). Large part of energy is also dissipated in the system due to inadequate provision of system compensation through installation of capacitor banks at load end and in the premises of the consumers.

The details of energy received; sold to consumers, targets of T&D losses fixed by HPERC and excess losses as worked out by Audit are given below:

(In MUs)

| Sr. No. | Particulars | 2002-03 | 2003-04 | 2004-05 | 2005-06 | 2006-07 |
|---------|---|-----------|-----------|-----------|-----------|------------|
| 1 | Total power available for sale | 4,079.576 | 5,302.527 | 5,605.123 | 6,246.306 | 6,442.779 |
| 2 | Inter state sale | 688.026 | 1692.889 | 1658.999 | 1722.531 | 1255.270 |
| 3 | Sale within the state | 2,519.002 | 2,726.324 | 2,954.155 | 3,568.689 | 4,351.303 |
| 4 | T & D losses | 872.548 | 883.314 | 991.969 | 955.086 | 836.206 |
| 5 | Percentage of T & D losses | 21.39 | 16.66 | 17.70 | 15.29 | 12.98 |
| 6 | Target of T & D loss as fixed by HPERC (per cent) : | | | | | |
| | (i) Inter state | 3 | 3 | 3 | 3.45 | 3 |
| | (ii) Within the state | 22.5 | 21.5 | 20.5 | 19.5 | 18.5 |
| 7. | Losses as per target fixed by HPERC | 779.590* | 817.172 | 849.746 | 931.685 | 991.330 |
| 8 | Excess T & D losses | 92.958 | 66.142 | 142.223 | 23.401 | (-)155.124 |
| 9. | Average sale rate | 2.20 | 2.21 | 2.59 | 3.35 | |
| 10 | Value of excess T & D losses (in crore) | 20.45 | 14.62 | 36.84 | 7.84 | |

Source: Compiled from the relevant records of the Board and HPERC.

A scrutiny of records revealed that while approving tariff for 2001-02 (29 October 2001), the HPERC fixed T&D losses of 23.5 per cent (within State) and accepted the benchmark of one per cent reduction in losses every year as set out in the Memorandum of Understanding (MOU) signed (March 2001) by the State Government with the Government of India. The target was based on the expectation of HPERC that the Board would bring efficiency in its working gradually and reduce the losses in the system. It would be seen from the above table that instead of improving the efficiency, the losses in each year were more than the target fixed by the HPERC (except during the year 2006-07).

The value of excess T&D losses over the targets fixed worked out to Rs. 79.75 crore during these years. During 2006-07, the Board was able to bring down the losses below the target to the extent of 155.124 MUs.

The value of excess T & D losses over the target fixed by HPERC worked out to Rs.79.75 crore.

* Inter state sale of 688.026 MUs being equivalent to 97 per cent. Inter state sale inclusive of loss is thus = 709.31 MUs. Inter state loss being = 21.28 MUs. Sale within the State = 3,370.266 MUs (4,079.576- 709.310 MUs). Loss allowed by HPERC for sale within the State = 758.31 MUs (22.5 per cent). Total loss allowed by HPERC = 779.590 MUs (758.310 MUs+21.280 MUs). Figures for the remaining years have been worked out accordingly

The Government stated (August 2007) that the Appellate Tribunal had directed the HPERC to allow 22 per cent loss as an *ad hoc* one time measure. It was further stated that the losses for the year 2004-05 and 2005-06 had been allowed in the tariff order for the year 2007-08. The reply is not acceptable as the Board failed to recover the losses for the year 2002-03 and 2003-04 amounting to Rs. 35.07 crore. Moreover, the losses for the year 2004-05 and 2005-06 would be recovered after a period of two to three years.

Cross subsidisation

3.1.15 The Electricity Act, 2003 provides that the tariff mechanism should reduce and eliminate cross subsidies within the prescribed period as specified by the Board. The details of cross subsidisation *i.e.* positive (+) or negative (-) contribution in the share of assessment as compared to the share in energy consumption by various categories of consumers for a period of five years up to 2006-07 are given in **Annexure-XVII**. As can be seen from the Annexure, the domestic consumers are largely benefited from the cross subsidisation at the cost of other categories of consumers. The agriculture consumers are being billed at the rate of 50 *paise* per unit as against the cost of Rs.4.57 per unit. The subsidy on this account could not be worked out as the necessary data in respect of agriculture consumers was not made available to Audit.

Billing operations

3.1.16 Billing and collection of revenue mechanism of the Board has been laid down in their Sales Manual Part-I. Guidelines/instructions for billing and collection are also issued by the HPERC and the Chief Engineer (Commercial) from time to time. The source of revenue of the Board is sale of power to its consumers. Electricity is one industry where sale is invariably on credit and receipt of revenue takes place after a certain period. Therefore, prompt and accurate billing is necessary for improving the financial position of the Board and any laxity may entail huge losses of revenue. In order to ensure prompt and accurate billing, the following are the basic requirements:

- Installation of meters of required capacity capable of recording different parameters as per the tariff provisions.
- Recording of meter readings on due dates.
- Prompt and accurate billing in accordance with the tariff provisions.
- Levy of penalty for violation of terms and conditions of supply and immediate disconnection in case of non-payment of dues.
- Compliance of provisions of Indian Electricity Act, 2003, Sales Manual Part-I and directives issued by the HPERC and the Board.

As on 31 March 2007, the billing of all categories of consumers, except large supply consumers, was being done through 226 sub-divisions. The billing of large supply consumers was done through Central Billing Cells at circle level. It was observed that non-billing of consumers in accordance with the laid down procedure and applicable tariff resulted in non-recovery of cost share[#] from consumers, peak load violations, non-billing of consumers for energy recorded at the sub-stations, wrong verification of load, un-authorised use of power, contract demand violation, wrong application of tariff, *etc.* as discussed in the subsequent paragraphs.

Failure to bill the consumers as per the billing cycle

3.1.17 The Board adopted (March 2001) monthly and bi-monthly billing cycle for urban and rural areas respectively. The Board has, however, not maintained data to show the number of consumers in the urban and rural areas separately. It does not know as to whether the adopted billing cycle is being followed or not. Scrutiny of records revealed (March 2007) that the prescribed billing cycle was not being followed in 22 sub-divisions[£] test checked in audit. In these sub-divisions billing was being done after three, four and five months resulting in delay in collection of revenue. Further, scrutiny of records revealed that per year unbilled revenue increased from Rs.29.13 crore as on 31 March 2003 to Rs.81.86 crore as on 31 March 2007.

The Government while accepting the audit observation stated (August 2007) that the billing cycle could not be adhered to as the sub-divisions did not have adequate skilled manpower. Efforts were underway to outsource the billing to ensure regular billing.

3.1.18 *Non-recovery of cost share*

In pursuance of regulations framed by the HPERC under Section 46 of the Electricity Act, 2003, the Board is empowered to recover the cost share for providing connections to the industrial consumers from the sub-stations/capacity being augmented/added under the short term plan scheme. In the following cases, the Board could not recover the cost share of Rs. 10.13 crore from the concerned consumers:

| Sr. No. | Name of the Circle/Division/Sub-division | No. of consumers | Amount of cost share not recovered | Annual interest liability | Remarks |
|---------|---|------------------|------------------------------------|---------------------------|--|
| | | | (Rs. in crore) | | |
| 1 | Nahan circle | 64 | 9.49 | 1.14 | Cost share on account of capacity addition of Kala Amb, Paonta, Sataun and Dhaula Kuan sub-stations. |
| 2 | Kala Amb, Dhaula Kuan and Paonta Sub-division | 4 | 0.64 | 0.08 | Cost share not recovered in terms of the sanction orders. |

Source: Compiled from the relevant records of concerned circle/sub-divisions.

[#] Cost share: Share of cost incurred by the Board for making power available to the consumers
[£] These sub- divisions were under Una, Kangra and Hamirpur circles of the Board

Un-billed revenue increased from Rs.29.13 crore as on 31 March 2003 to Rs.81.86 crore as on 31 March 2007.

The Board failed to recover cost share of Rs.10.13 crore from the consumers for providing connections though it could have been recovered as per regulations framed by the HPERC.

In respect of above cases, the Government stated (August 2007) that the recovery has been held up in view of stay on recovery by the HPERC. The reply is not tenable as the Board did not furnish (August 2007) the requisite details to the HPERC for calculation of realistic per KVA cost data resulting in stay by HPERC.

- In case of two industrial consumers (Tannu Alloys and Ferro Chem.) under Una circle, the power loads were sanctioned (June 2005 and July 2006) subject to the condition that the proportionate cost of 33 KV dedicated/joint feeder or augmentation of existing feeder along with bay and associated equipment at both ends would be borne by them. Though the connections were released (December 2005 and January 2007) in both the cases by tapping the existing 33 KV feeders but the proportionate cost of Rs.35.22 lakh of the bay and terminal equipment at the sending end and also the interest liability of Rs.4.22 lakh thereon was not recovered. It was noticed (March 2007) that in case of Tannu Alloys (now Balaji) to whom connection was released by tapping the existing 33 KV Amb-Gagret feeder, the losses on the system increased to 9.93 *per cent* (at 33 KV) against the earlier average losses of 1.27 *per cent*. The Board neither investigated the reasons for this abnormal increase in losses nor charged the same (10.16 lakh unit valued at Rs.21.33 lakh) from the consumer so far (August 2007).

The Government stated (August 2007) that the connections to both the consumers were released by tapping 33 KV line emanating from 132 KV sub-station at Amb due to non-availability of bay and space at Amb sub-station. Further, Vacuum Circuit Breaker was being provided on the tapping points for the consumer (Tannu Alloys) and it was proposed to provide a meter also to monitor the losses.

The reply is not tenable as the Board had the right to recover the proportionate cost as per HPERC regulations which was not done and action taken by the Board is for improving the system in future and not specific to the audit observation.

Non-levy of peak load violation charges

3.1.19 Schedule of tariff applicable from time to time envisages the levy of peak load violation and energy charges for drawl of power over and above the load exempted for peak load hours. Schedule of tariff further provides that if an industrial consumer wants to run his unit during peak load hours, prior sanction of the competent authority was required failing which the consumer was liable to pay violation charges. The HPERC also clarified (August 2002) that exemption allowed for drawal of power during peak hours would be the contract demand and consumer exceeding that limit would have to pay the penalty for the over drawal. In this regard, Audit observed as under:

- In case of five* consumers under Nahan and Solan circles, the bills for penalty for drawal of power over and above the sanctioned load for peak

Failure to levy peak load violation charges on the consumers resulted in non-recovery of revenue of Rs.27.51 crore.

* Malwa Cotton, Lime Chemical, Pragati Paper Mill, Kamla Dial and Pronto Stearing

hours were not raised in accordance with the guidelines issued by the HPERC for over drawal of power. This resulted in non-levy of peak hour violation charges of Rs.2.61 crore during January 2002 to May 2005.

The Government stated (August 2007) that no mention of light load in the sanction was made which was otherwise deemed to be exempted. The reply is not relevant as according to the award pronounced (August 2002) by the HPERC, the load sanctioned for the peak hours was to be considered as contract demand (which was inclusive of light load) for peak hours.

- The Board allowed peak load exemption from April to October during the year to three industrial consumers {ACC Barmana (August 1995), GACL Darlaghat (August 2001) and Gonnterman Nalagarh (March 1998)}. For November to March, the consumers were required to obtain separate exemption sanction. Though these consumers drew power during peak load hours in November to March without sanction, the Board did not take any action to recover the peak load violation charges for the period from November 2001 to March 2005 resulting in revenue loss of Rs.16.99^s crore.

The Government stated (August 2007) that there was no need to take sanction every year for running of industry during peak hours in winter months. The reply is not tenable as the consumers were allowed peak load exemptions for summer months only. The Board had itself clarified (May 2006) that the consumers with such type of sanction would have to seek exemption for the period from November to March every year.

- A consumer (Sidhartha Super Spinning Mills) under Nalagarh sub-division drew power over and above the sanctioned (May 1984) contract demand (CD) of 1400 KVA and 494 KVA for peak hours during summer and winter months respectively against sanctioned load of 1847.2 KW with effect from May 2002 to May 2005 in violation of peak hour's restrictions. The Board, however, did not levy penalty for violation resulting in short recovery of Rs.1.67 crore from the consumer (June 2007).

The Government stated (August 2007) that the sanction for peak load was for 1847.2 KW (2052.44 KVA). The reply is not tenable as the consumer should have been allowed to draw power up to 1400 KVA and 494 KVA during summer and winter months respectively in view of peak load sanction accorded during May 1984 instead of 1847.2 KW which was his connected load. Further, the consumer had neither applied for fresh peak load exemption nor the restriction imposed (May 1984) for winter months was lifted by the Board.

- The Chief Engineer (Commercial) Shimla imposed (December 2006) power restriction of 70 *per cent* of the load exempted for peak hours on the consumers who were allowed evening peak load exemption due to restricted

^s ACC: Rs. 9.34 crore, GACL: Rs. 6.23 crore and Gounterman: Rs.1.42 crore

availability of power. In six[▲] cases, the violation charges of Rs.1.01 crore for December 2006 were levied (January 2007) by the central billing cell at Solan for violation of peak load restrictions. The Board on the basis of representations received (January 2007) from the concerned consumers withheld (March 2007) the recovery of violation charges on the plea that the field units had not conveyed the message for such restrictions to the consumers.

The Government stated (August 2007) that the recovery of violation charges for the month of December 2006 had been waived off. The reply is indicative of the state of affairs in the Board as instead of recovering Rs.1.01 crore, it waived off the recovery from the defaulting consumers.

- In Barotiwala sub-division, an industrial consumer (Deepak Spinners) had sanction to run 533.300 KW load including 115 KW for lighting during peak hours. The consumer was allowed (August 1986) extension of load to 788 KW which was extended up to February 1987 on the request of the consumer. There was, however, nothing on record to show, that, the consumer was granted extension beyond February 1987. The consumer drew power during peak hours over and above the earlier exempted load of 533.300 KW during April 2002 to August 2005 for which penalty of Rs 99.03 lakh was not levied.

The Government stated (August 2007) that the peak load violation charges were recovered from the consumer as per the tariff applicable from time to time. The reply is not tenable as records relating to extension for peak load exemption granted beyond February 1987 were not made available and during the above mentioned period, the consumer had drawn power between 825 and 1535 KVA against the peak load exemption of 559 KVA.

- It was also noticed that, in case of 39 industrial consumers under Solan and Nahan operation circles, peak load exemption/violation charges of Rs.4.24 crore (**Annexure-XVIII**) were not recovered resulting in loss to the Board to that extent.

Delay/non-overhauling of consumer accounts

3.1.20 Schedule of tariff applicable from November 2001 provided for levy of demand charges at the rate of Rs.125 per KVA in respect of industrial consumers on actual recorded demand or 80 *per cent* of the contract demand, whichever was higher. In respect of consumers to whom the connections were released prior to November 2001, the Board offered various opportunities for entering into fresh agreements for contract demand. Opportunities so offered by the Board to enter into fresh agreements for contract demand were set aside (August 2002) by the HPERC. The Board decided (February 2004) to enter into fresh agreements for contract demand and to overhaul the accounts of all

[▲] *Auro Spinning, Mahabir Spinning, Birla Textile, Winsome Textile, Raja forging and N.M.T Spinning Mill*

such consumers by charging the demand charges on the actual recorded demand during November 2001 to February 2004. In this regard, Audit observed as under:

- In 10 cases under three* sub divisions, the accounts of the consumers for the period November 2001 to February 2004 were overhauled after one year and in five@ cases the compliance of the Board's orders was still awaited (August 2007). This resulted in delay/non-receipt of revenue of Rs.1.34 crore (difference of amount to be charged and actually charged) and loss of interest of Rs.46.92 lakh (August 2007) due to delay or non-receipt of revenue.

The Government stated (August 2007) that the accounts of all the consumers had been overhauled. The delay was due to more number of consumers and in certain cases the decision of Court was awaited. The reply is silent as to whether the amount has been recovered from the consumers or not.

- A meter change order was issued (July 2002) to replace the electro mechanical meter installed on the premises of Swastik Food Products, Damtal with electronic meters. The meter was replaced (May 2003) after a delay of ten months. After installation of electronic meter, monthly energy consumption varied (May 2003 to October 2003) between 47,390 and 73,610 units but action to investigate the variation with a view to overhaul the consumer account as per provision of Sales Manual and Abridged Condition of supply (14 e) was not taken.

The Government stated (August 2007) that the previous as well as replaced meter did not show abnormal consumption and slight increase in consumption could not be charged for the previous period. The reply is not tenable as variation in energy consumption on replacement of meter was between 81 to 320 per cent which could not be termed as slight variation.

Non-billing of consumers for consumption recorded at the sub-stations

3.1.21 The monthly energy consumption and contract demand recorded through energy meters installed at the premises of the consumer being fed through an independent feeder should invariably be compared with the reading of that particular feeder recorded at the sub-station. The Chief Engineer (Commercial), issued (November 2003) instructions stating that the metering and billing of consumers provided with connections through dedicated feeders should be done at grid sub-station from where power supply emanates. Audit, however, observed that this requirement was not complied with in respect of six cases (**Annexure-XIX**) resulting in short billing of Rs.2.85 crore.

* Barotiwala, Nalagarh and Parwanoo

@ Winsome Textile, Winsome Spectrum, Winsome Spinner, Delux Enterprises and Deepak Spinner

Wrong verification of light load

3.1.22 The HPERC decided (August 2002), that, in case an industrial consumer having no peak load exemption, draws power over and above the light load during peak hours, the entire drawal of power should be charged at the rate of Rs.300 per KVA. The HPERC in its tariff order (July 2005) further provided that the light load as per test report shall be deemed to have been exempted. As such, no separate peak load exemption is required for light load.

In nine* cases under Solan circle, the Board while releasing the connections (July 1987 to May 2005) included the connected load of industrial power plugs ranging between 144 and 393.78 KVA in the bonafide factory light[§] load instead of taking it under industrial load. This resulted in wrong verification of light load. In one case out of the above nine cases, the load of machinery such as balancing, winding, stacking, lathes, cutting, trickling machines, compressors, etc. was not included in the test reports. Thus, wrong verification of light load resulted in revenue loss of Rs.96.62 lakh on account of non-levy of peak load violation charges by considering the industrial load as the bonafide factory light load during the period February 2002 to October 2006.

The Government stated (August 2007) that demand notices for recovery of Rs.22.38 lakh had been issued (January 2006) to two consumers. In case of third consumer against whom demand notice for recovery of Rs.17.14 lakh was not issued, the power plugs installed in the unit were part and parcel of light load. The reply is not tenable as the notices for recovery were issued in respect of Government connections only. In case of private consumers, the load of similar nature was considered as light load which was indicative of the tendency to favour private consumers.

Delay/non-issuance of bills in respect of temporary connections

3.1.23 Sales Manual Part-I stipulates that in case of temporary connections, meter readings should be taken monthly and energy bills issued to the consumers regularly. Scrutiny of records in this regard revealed non-recovery of revenue of Rs.98.22 lakh (**Annexure-XX**) for the period January 2004 to November 2006 due to late issue of bills (five consumers), bills issued after disconnections (four consumers), accounts of consumers not opened in ledger (15 consumers) and energy consumed by consumers not recorded (13 consumers).

* *Audhnik Packagers, A.B. Tools, Cosmo Ferrites, V.K. Appliances, Shivathene, Henkel Terson, B.C.C. Fuba and C.R.I (2 Nos)*

§ *Energy consumed for light in the factory premises including factory building, offices, store, canteen, library, factory yard lighting, welfare centers, etc.*

The Government stated (August 2007) that an amount of Rs.1.38 crore had already been recovered from 125 consumers. The reply is not acceptable as Rs.1.38 crore is not inclusive of Rs.98.22 lakh pointed out by Audit during test check and the entire matter requires review.

3.1.24 Schedule of tariff applicable from time to time provided for levy of energy charges at different rates for energy consumed during normal, night and peak hours, besides penalty on over drawal of power during peak hours. In order to record all these parameters, time of day/electronic meters compatible for MRI to record half hourly energy consumption from 00 hours to 24.00 hours are being installed on the premises of the consumers. The Board in some cases did not download the data from MRI and in some cases scrutiny of data down loaded from MRI was not done. From the details in **Annexure-XXI** it would be seen that in respect of a case where data was downloaded at the instance of audit and in other cases where analysis of data was done by Audit, short recovery of Rs. 2.26 crore was involved due to drawl of power during peak hours, difference in actual time and time set in meters in three circles and in one case, penalty (amount not ascertained) was not imposed during the period April 2005 to June 2006.

The Government in respect of cases mentioned in the Annexure-XXI stated (August 2007) that some recoveries have been made but no details were furnished to show whether the recoveries included the cases noticed by the Audit and no reply was given for the time difference in the meters installed at the premises of the consumers. The matter requires a detailed review.

Un-authorized use of power

3.1.25 General condition of sanction order provides that in case of infringement of any of the condition of supply, the sanction shall be deemed to be cancelled. Further, Section 126 of Electricity Act, 2003 provides that if on inspection of any premises of a consumer, the inspecting officer comes to a conclusion that such consumer is indulging in unauthorised use of electricity, the assessment in such cases shall be made at a rate equal to one and half time the tariff applicable for the relevant category of service. Scrutiny of records in this regard revealed that in cases detailed in **Annexure-XXII**, though the consumers did not adhere to the conditions of sanction order, the Board failed to charge them for violation resulting in non-recovery of Rs.23.95 crore for the period June 2003 to February 2007.

The Board failed to recover Rs.23.95 crore from the consumers for failure to observe the conditions of sanction of power.

The Government in respect of the cases mentioned in the Annexure-XXII admitted (August 2007) the lapse but gave no reasons and what remedial action would be taken.

3.1.26 The Sales Manual Part-1 envisages that normally a consumer, in accordance with clause 27 of the Abridged Conditions of supply, shall not, without previous consent in writing of the Board, assign, transfer or part with the benefits of his agreement with the Board. In case, a consumer wants to transfer his connection in the name of somebody else, a request on Board's

standard application form by the person in whose name the connection is sought to be transferred, should be made to the local officer of the Board accompanied by the consent of the existing consumer for change of name. It was observed that, a power connection with connected load of 177.82 KW was released (February 2005) in favour of Mars Chemcarb, Dhaulakuan. The load was subsequently (August 2005) increased to 989.904 KW. The above firm changed its name before the issuance (August 2004) of power availability certificate (PAC) to Gulshan Chemcarb Ltd. which further merged (April 2004) with Gulshan Chemfill, a company registered (October 2000) in Uttar Pradesh which shifted (October 2004) its business to Himachal Pradesh. The Board had released the power connection in favour of Mars Chemcarb Ltd. It is pertinent to mention here that the existing consumer Gulshan Chemfill* was paying energy charges through cheques in his name and the Board was issuing receipts in the name of Mars Chemcarb and did not question the consumer or report to vigilance. The new consumer applied (February 2006) for the change of name which was accepted (July 2006) by the Board.

Thus, the consumer unauthorisedly used the sanction issued in favour of Mars Chemcarb Ltd which stood dissolved prior to the issuance of PAC. As such the consumer should have been charged at enhanced rates under Section 126 of the Electricity Act, 2003. Non-levy of enhanced charges resulted in short recovery of Rs.68.13 lakh from March 2005 to August 2006.

The Government stated (August 2007) that the matter would be investigated and outcome intimated in due course of time.

Non/short levy of contract demand/violation charges

3.1.27 Scrutiny of records revealed that the various field offices of the Board failed to comply with the provisions of tariff orders issued by the HPERC from time to time with regard to levy of contract demand/violation charges resulting in revenue loss of Rs.4.72 crores for the period March 2003 to February 2007 (**Annexure-XXIII**).

In respect of first five cases mentioned in the Annexure, the Government stated (August 2007) that:

- power factor of 0.90 was not relevant in the case at Serial number 1. The reply is not tenable as the tariff order stipulated that in cases where the consumer had not entered into contract demand in KVA, the connected load should be computed in KVA assuming 0.90 power factor.
- the demand charges in respect of case at Serial number 2 had been levied during the built up period for the load actually connected. The reply is not tenable as the Sales Manual of the Board provides for charging the maximum demand/connected load calculated on month to month basis during the built up period of the load.

* Account No. 01000065012

- the reduction in contract demand in respect of case at Serial number 3 was allowed by the competent authority. The reply is not tenable as the consumer was not entitled to reduction in contract demand during first year of release of load.
- the field unit had worked out the recovery of Rs.3.53 lakh in respect of case at Serial number 4 which included load retention charges of Rs. 1.13 lakh. The reply is not tenable as according to the Sales Manual, no authority could extend the built up period of load beyond six months from the date of release of connection whereas the Board extended the same to 16 months for calculation of retention charges.
- in respect of case at Serial number 5, the consumer had extended the load/revised the contract demand which was sanctioned by the Board. The reply is not tenable as the contract demand sanctioned by the Board was set aside by the HPERC.
- In respect of case at Serial number 6, the Government did not furnish any reply.

Short billing of energy charges

3.1.28 The Sales Manual Part-I envisages that the supply of power to various categories of consumers is chargeable at the relevant schedule of tariff as determined before the release of connection. The applicability of tariff is, however, subject to revision on the basis of nature and quantum of load. Schedule of tariff for commercial category applicable from time to time envisages that this tariff will also include all other categories, which are not covered by any other tariff schedule.

The Board short billed the consumers for Rs.5.15 crore during November 2001 to March 2007.

In this regard, it was noticed that there was short billing of energy charges of Rs.5.15 crore during the period November 2001 to March 2007 to the consumers (**Annexure-XXIV**) for non-adhering to the requirements as mentioned above.

The Government while admitting (August 2007) the facts, stated that the units are taking action to recover the amount short billed in all the cases (except for two cases, reply to which has not been received).

Non-observance of codal procedure

3.1.29 In order to provide power connection to a consumer, procedure relating to receipt of Application and Agreement form (A & A form), Advance Consumption Deposits (ACD), preparation of financial justification, sanction and verification of test report has been laid down in the Sales Manual Part-I. Para 179 of Sales Manual Part-I read with condition number 24 of Abridged Conditions provides that if a connection is disconnected due to non-payment of dues, the connection in the same premises should not be restored unless the dues of the Board are cleared by the consumer. Audit observed that, in the following cases, officials of the Board did not follow the laid down procedure.

The Board did not take action against the officials concerned for not following the laid down procedure as there is no provision in the Manual for taking action for such faults.

- The connection of Pamwi Tissue./Paper Machine & Wire. in industrial area Barotiwala was permanently disconnected (March 2004) when total outstanding/recoverable dues amounted to Rs.1.35 crore. An amount of Rs.24.03 lakh was adjusted (September 2004) against security deposit and the balance of Rs.1.11 crore remained un-recovered (June 2007). The above amount accumulated due to acceptance of payment of energy bills and arrears of dues in installments. The consumer paid energy bills partly up to November 2003 when the arrear had accumulated to Rs.80.28 lakh. Thereafter, the consumer stopped the payment of energy bills as well as the arrear but the drawal of power continued up to March 2004. Further, though the arrear of Rs.1.11 crore had not been recovered so far (March 2007), the connection in the same premises to another consumer *i.e.* Gopsons Papers. was sanctioned (September 2005) by the SE (Operation), Solan circle in contravention of the above provision. Non-recovery of arrear of Rs.1.11 crore also resulted in interest loss of Rs.35.07 lakh from April 2004 to March 2007 at the rate of 10.5 *per cent* as laid down by the HPERC for recovery.

The Government stated (August 2007) that the recovery suit had already been filed in the court and connection released to another consumer in the same premises had been disconnected. The reply is not tenable as during this period of nine months (July 2003 to March 2004), the consumer deposited only four instalments with the approval of the Board which resulted in increase of outstanding arrears from Rs. 19.29 lakh to Rs.135.39 lakh. The consumer defaulted in payment of instalments after November 2003 when outstanding arrear was Rs.71.71 lakh but the Board failed to initiate action for disconnection of supply.

- The Sales Manual Part-I empowers the SE to sanction load ranging between 101 KW and 500 KW at 11 KV. This instruction further envisages that irrespective of the quantum of load, the power to sanction load containing electric furnace of 100 KW and above and loads containing steel rolling, re-rolling mills is vested in the Board only. Contrary to the above instructions, the SE, Operation circle Nahan, sanctioned/released (December 2001) power load of 400 KW to Jaswal Metal having furnace/rolling mill which was unauthorised. Neither the SE had obtained sanction of the Board so far (March 2007) nor the Board had taken action against the SE for exceeding his powers.

The Government stated (August 2007) that the load was sanctioned directly by SE as it contained only motive load and no furnace, rolling /re-rolling mill load was involved. The reply is not tenable as the additional load of 400 KW

was sanctioned in favour of consumer for the modernisation of existing furnace/rolling mill.

- In Nalagarh sub-division No-1, the category of consumer (Dhariya Labs) was changed (August 2002) from large supply to small and medium supply consumer after verification of the connected load by the Sub-Divisional Officer (SDO) whereas it should have been done by the Executive Engineer. The Board has not taken action against the SDO for exceeding his powers.
- In 14 cases, the reduction/change in contract demand was allowed/accepted (July 2005 to February 2007) by the SDOs without receipt of A & A form, ACD and sanction of the competent authority. The Board did not take action against the SDOs for exceeding his powers.

The Government stated (August 2007) that the Board had noted the point for future compliance and the case for regularisation of reduction of load from the competent authority was being moved separately.

- In 11 cases in two[@] sub-divisions, the field officers had released/granted extension in load (June 2003 to January 2007) without getting the test reports verified from the competent authority. The Board has not taken action against the officials who exceeded their powers.

The Government stated (August 2007) that the test reports could not be countersigned due to over sight and now the test reports had been verified by the concerned EEs.

Checking of connections by the flying squads

3.1.30 As per Sales Manual Part-I, three flying squads under the control of CE (Commercial) have been assigned (2001-2002) the duty of checking at least 3,600 connections in a year of all categories of consumers against the then total number of 15.25 lakh consumers which was 0.23 *per cent* of the total number of consumers. Though the number of consumers had increased to 17.99 lakh in March 2007, the Board did not revise the consumer connections to be checked by the flying squads. The targets fixed for checking by the flying squads and achievement there against during the last five years ended 31 March 2007 is given in **Annexure-XXV**.

It would be seen from Annexure-XXV that:

- the percentage of connections checked to total connections during the last five years ended 31 March 2007 ranged between 0.21 and 0.23 only, yet irregularities amounted to Rs.1.82 crore were detected. An increased percentage of checking would have resulted in better benefits to the Board. While the percentage of checking of domestic and commercial consumers against the total consumers checked (which varied from 3,503 to 3,796

[@] *Nurpur and Damtal*

connections) was 41.95 and 54.55 in 2005-06 and 24.82 and 68.05 in 2006-07 respectively, the percentage of checking of industrial consumers who contribute about 54.79 *per cent* of the revenue was only 3.50 in 2005-06 and 7.14 in 2006-07.

There was no monitoring at Head Office to watch the amount of irregularities pointed out by the flying squads and amount actually recovered. The HPERC in its tariff order for 2006-07 also pointed out an extremely depleted role being played by the flying squads in detecting un-authorized/dishonest use of electricity and directed to strengthen its existing flying squads network so as to play a grater role in the area of surprise inspection of consumers' installations.

Despite good results from checking, the Board, however, did not strengthen the flying squad network so far (August 2007).

The Government stated (August 2007) that the norms for checking of connections were not amended due to introduction of two part tariff and installation of electronic meters. MRI data of all electronic meters was available with the Board and the accounts of consumers could be checked easily in the sub-divisions. The matter for strengthening of the flying squads was under consideration with the Board. The reply is not acceptable as MRI data had not been down loaded by most of the sub-divisions test checked in Audit. Further, the audit also noticed many cases of unauthorised extension of load and peak load violations which were required to be detected by the flying squads as per the provisions of the Sales Manual.

Collection of revenue

3.1.31. Salient features of revenue collection mechanism being followed by the Board are as follows:

- Billed revenue is collected at collection counters located at every sub-division.
- Consumers can pay current energy consumption charges in cash as well as through cheques on the due dates mentioned in the bills for payment, failing which they are liable to pay surcharge.
- Payments through cheques are received in advance by two days from the due date for payment in cash to facilitate timely crediting of the amount in the Board's account.
- The banks in the field are required to transfer the funds deposited by the field units daily to their branches at Shimla.

Inefficiency in collection of revenue

3.1.32 The balance outstanding for recovery at the beginning of the year, revenue assessed during the year, revenue collected, balance outstanding at the end of the year, *etc.* during the last five years ended 31 March 2007 are detailed in **Annexure-XXVI**.

The scrutiny of details in Annexure would reveal the following:

- The dues outstanding at the end of March 2007 were Rs. 107.87 crore which include Rs.39.74 crore recoverable from the Government Departments/Local Bodies. The amount recoverable from Local Bodies increased from Rs.3.74 crore as on 31 March 2003 to Rs.10.92 crore. Besides, Rs.28.82 crore were outstanding against IPHED alone. The Board never resorted to disconnection of supply or pursuing of matter at the Chairman's level for recovery of huge arrears from the Government Departments and Local Bodies.
- The Board during the finalisation of tariff for 2004-05 intimated (June 2004) the collection efficiency at 92 *per cent*. The HPERC directed (June 2004) the Board to improve the collection efficiency to 99 *per cent* as against the actuals of 83.35 *per cent* during 2003-04. The actual collection efficiency of the Board during 2004-05 to 2006-07 was, however, between 86.35 *per cent* to 92.81 *per cent*. The collection efficiency in Kaza and Jubbal divisions during April 2002 to March 2007 ranged between 48.15 and 70.89 *per cent* and 51.48 and 63.16 *per cent* respectively which was very low.
- The amount recoverable from the permanent defaulters after adjustment of security increased from Rs.5.70 crore in 2002-03 to Rs.7.06 crore in 2005-06, though it decreased to Rs.7.02 crore in 2006-07. No concrete action seemed to have been taken by the Board to recover the above amount.
- As on 31 March 2007, 143 cases involving an amount of Rs.18.96 crore were under litigation before the High Court of Himachal Pradesh, Appellate Tribunal for electricity (New Delhi) and Dispute Settlement Committee's of the Board. The cases were filed between April 1999 and March 2007.

The recoverable amount from permanent defaulters increased from Rs.5.70 crore (2002-03) to Rs.7.02 crore (2006-07).

The Government stated (August 2007) that efforts were being made to recover the outstanding balance from the Government Departments and Local Bodies (LBs). It was observed that during 2002-03 to 2006-07, the State Government released grants totaling Rs.74.84 crore to LBs and in the interest of the Board, the State Government could have adjusted its dues while releasing the grants to the LBs.

Non-collection of additional advance consumption deposit (ACD)

3.1.33 Security Regulations 2005 envisage that the consumer shall at all times maintain with the Board an amount equivalent to consumption charges for the billing cycle period as security during the period the agreement for supply of energy to such consumers remains in force. Adequacy of security is to be reviewed every year and the shortfall of existing deposit, if any, is recoverable from the consumers. In this regard, Audit observed as under:

- As on 31 March 2007, recovery of ACD of Rs.2.27 crore from 27 consumers under four* sub-divisions was awaited resulting in interest loss of Rs. 45.57 lakh.

* Kala Amb, Barotiwala, Paonta Sahib and REC Nalagarh

- Security regulations envisage recovery of security from the Government Departments also. It was seen that in 3,046 cases under 16 sub-divisions, recovery of Rs.4.40 crore from the Government Departments was awaited (August 2007) since April 2005 resulting in interest loss of Rs.84.50 lakh.
- In Amb-division, an industrial consumer (Him Alloys) having connected load of 6,000 KW furnished (December 2006) a bank guarantee of Rs.60 lakh in lieu of security deposit deposited in cash earlier. Though the monthly energy charges of the consumers had gone up to Rs.1.64 crore, the Board instead of raising demand for ACD of Rs.1.04 crore, allowed (February 2007) refund of Rs.60 lakh lying with the Board. This resulted in short receipt of ACD of Rs.1.04 crore.

The Government stated (August 2007) that the instructions had been issued to the sub-divisions to give notices to consumers for enhanced ACD and efforts were being made to recover the ACD from the existing consumers. The additional security to secure the running bill would be obtained from the consumers.

Failure to claim delayed payment surcharge

3.1.34. The Board receives payment of energy charges in cash as well as through cheques. The due dates for payment in cash and by cheques are, however, different. In cases where payment is not received on or before the due date, surcharge at the rate of two *per cent* of the bill up to July 2004 and one *per cent* thereafter is levied. To avoid surcharge, cheques should be cleared by the banks by the due date for payment of the bill in cash. Test check of records of Nalagarh sub-division revealed (July 2004 to December 2006) that cheques worth Rs.20.37 crore were cleared after due dates for payment of bills. The Board did not ascertain as to whether the delay was on the part of the consumers or on the part of the banks. Thus, surcharge of Rs.24.48 lakh leviable for late receipt of payments could neither be levied on the consumers nor interest for delay in crediting the amount could be claimed from the banks.

The Government stated (August 2007) that the matter had been taken up with the Banks for clearance of cheques within the stipulated period but did not state why this chronic issue which led to loss of interest was not addressed earlier.

Accountal of revenue

Failure to claim interest from banks for delay in crediting the amount

3.1.35. As per the provision in the Manual for Banking operations, daily balance of collection account at the close of each day after keeping balance of Rs.5,000 is required to be remitted by the authorised branches of the banks in the field to their main branch at Head Office of the Board by telegraphic transfer for credit to the main collection account of the Board.

Scrutiny of records of four sub-divisions revealed that there was delay of 2 to 74 days during April 2004 to January 2007 in crediting the cash (Rs.252.87 crore) transferred from the banks of the field units to the main account maintained at Shimla. The Board did not lodge any claim so far (August 2007) with the banks for interest of Rs.25.73 lakh recoverable for delay in crediting the amounts by the banks.

The Government stated (August 2007) that the necessary instructions had been issued to the field units to get the transfer of daily collection to the main account regularly but did not state why this chronic issue which had led to loss of interest was not addressed earlier.

Internal control and Internal audit system

Internal control

3.1.36 Internal control is a process designed for providing reasonable assurance of accountability and fulfillment of obligations of operations efficiently, safeguarding assets and reliable disclosure of financial data through timely reporting. Internal control includes budgetary control, accounting control, cost control, periodic operating reports, statistical analysis and internal audit. Scrutiny of records in this regard revealed the following deficiencies:

- The Board has not prescribed returns to monitor the implementation of decisions taken by the HPERC and proper implementation of the tariff. Due to this, the decision taken (August 2002) for levy of peak load and contract demand violation charges could be implemented only from September 2004 (paragraph 3.1.19 *supra*), the data relating to compatibility of meters with the meter reading instrument having programme for electronic transfer of data in accordance with the tariff applicable was not available with the Board (paragraph 3.1.24 *supra*).
- In addition to above the field officers had utilised the powers of higher authorities for the sanction of load, verification of test reports, reductions in contract demand and connected load (paragraph 3.1.29 *supra*)

The Government stated (August 2007) that the implementation of tariff was being adhered to and bills were rendered to the consumers as per contract demand. The reply is not based on facts as the Audit has pointed out a number of cases where the provisions of tariff orders were not implemented. These points were indicative of deficient internal control.

Internal audit

3.1.37 The Board is maintaining an Internal Audit Wing for conducting the perpetual audit of revenue being assessed and collected by sub-divisions. The main function of internal audit is to examine the accounts of a month during the following month with a view to immediately rectify the mistakes/irregularities noticed, if any. Contrary to above, the consumers'

accounts were being checked quarterly. The table below indicates the number of audit parties, un-audited accounts months, short assessment detected, pending reports, etc. for the last five year ended March 2007:

| Sr. No. | Particulars | 2002-03 | 2003-04 | 2004-05 | 2005-06 | 2006-07 |
|---------|---|----------|----------|----------|----------|----------|
| 1 | Number of audit parties | 32 | 32 | 32 | 32 | 32 |
| 2 | Un-audited accounts months | 25 | 57 | 399 | 1,531 | 2,679 |
| 3 | Short assessment worked out by internal audit (in lakh) | 1,860.42 | 1,827.16 | 1,075.17 | 1,388.27 | 1,409.87 |
| 4 | Amount not accepted by the units (in lakh) | 495.59 | 100.77 | 39.26 | 71.24 | 50.49 |
| 5 | Pending audit reports | 3,770 | 3,678 | 3,627 | 3,594 | 3,582 |

Source: Compiled from relevant records of the Board

It would be seen from the above that:

- the un-audited account months increased from 25 as on 31 March 2003 to 2,679 as on 31 March 2007 mainly due to non-strengthening of the internal audit wing to cope up with the increase in the number of consumers from 9.59 lakh in March 1991 to 17.99 lakh in March 2007;
- internal audit parties pointed out short revenue receipt of Rs.75.60 crore during April 2002 to March 2007 against which the concerned units did not accept the amount of Rs.7.57 crore due to divergent interpretation of rules and provisions. Final decision of the Corporate Office in this regard was not on record;
- at the end of March 2007, 3,582 audit reports were awaiting compliance. Year-wise break-up of pending reports along with amount involved and action being taken to clear the reports was not available on record at corporate level, which was indicative of inaction at different levels of the management.
- the Board had also not prescribed any return to monitor the recovery of accepted amount by the field units for review at the corporate level. Thus, the recovery of accepted amount could not be vouchsafed in audit.

The Government stated (August 2007) that the action for strengthening of internal audit wing was to be taken at Board level being policy matter. All out efforts were, however, being made to recover the short assessment.

Acknowledgement

3.1.38 Audit acknowledges the co-operation and assistance extended by the Board and officers of the State Government at various stages of conducting the performance audit.

Conclusion

The Board failed to file tariff petitions annually in time and on the basis of justifiable data resulting in disallowing of expenditure by the HPERC and consequential loss to the Board. The Board was unable to bill most of the consumers monthly resulting in delay in collection of revenue. It also did not bill the consumers in accordance with the categorisation, laid down procedure and applicable tariff resulting in non-recovery of legitimate revenue on account of cost share, peak load violations, non-billing of consumers for energy recorded at the sub-stations, wrong verification of load, un-authorized use of power, contract demand violation, wrong application of tariff, *etc.* The system of collection of billed revenue and internal control and audit mechanism was also deficient.

Recommendations

- Board has to show more commitment to ensure efficient and effective revenue collection.
- The Board should redefine its role as a service provider and should not compromise or relax rules in revenue collection.
- Tariff petitions containing accurate and justifiable data need to be filed annually and in time.
- Categorisation of consumers should be done properly so that there is no loss to the Board.
- Provisions of checking of meters of all categories of consumers at regular intervals should be ensured.
- Cash credit through cheques should be improved.
- System of collection of billed revenue and internal control and audit mechanism need to be strengthened.
- Percentage of vigilance/flying squad checks should be improved.
- Discussions should be held with State Government so that Government Department and LB outstandings are paid out of annual grants to them.
- Monitoring should be strengthened.

3.2 Implementation of Accelerated Power Development Reforms Programme

Highlights

The Board did not prepare Detailed Project Reports for various schemes to be implemented under APDRP keeping in view the requirements of the field units. During execution of projects, the cases of deviation/variation in the execution of projects were noticed.

(Paragraph 3.2.9 to 3.2.11)

The State Government delayed the release of APDRP funds aggregating Rs.228.46 crore to the Board by 7 to 637 days thereby making itself liable to pay Rs.9.09 crore as penal interest to the GOI. Besides, the Board had to pay Rs.1.01 crore on account of interest at the rate of 12 per cent on loan component of Rs.16.39 crore for the period of delay in release of funds by the State Government.

(Paragraph 3.2.14)

Delay in completion/non-execution of targeted works resulted in loss of potential revenue of Rs.15.32 crore as envisaged in the APDRP schemes.

(Paragraph 3.2.29)

The Board incurred avoidable extra expenditure of Rs.35.99 crore due to allotment of work at higher rates, failure to purchase the material in bulk, use of conductor of higher size, delay in completion of works, non-receipt of material, etc.

(Paragraph 3.2.30)

The monitoring of works under APDRP was deficient due to weak management information/internal control system and absence of internal audit system.

(Paragraph 3.2.43)

The system of appraisal of performance of works executed was non-existent.

(Paragraph 3.2.44)

Introduction

3.2.1 The Union Ministry of Power (MOP) launched a nationwide programme called Accelerated Power Development Programme (APDP) during 2000-01, which was subsequently modified and rechristened as Accelerated Power Development Reforms Programme (APDRP) during

2002-03. The modified programme focuses on up-gradation of sub-transmission and distribution system in densely electrified zones in the urban and industrial areas and improvement in commercial viability of the State Electricity Boards. The State of Himachal Pradesh was categorised as a Special Category State (SCS) with 100 *per cent* finance *i.e.* 90 *per cent* grant and 10 *per cent* loan. To reform the Power Sector, Memorandum of Understanding (MOU) between the MOP and the Government of Himachal Pradesh (GHP) and the Memorandum of Agreement (MOA) between the MOP and the Board were executed in March 2001 and December 2002 respectively. The MOU and the MOA were valid for five years. The MOU expired on 31 March 2006 and has not been extended thereafter. The MOA is valid up to 30 November 2007. Non-compliance to various terms and conditions of MOU/MOA has been discussed in paragraphs 3.2.20 to 3.2.26 *infra*.

The main objectives of the APDRP were to:

- reduce aggregate technical and commercial (AT & C) losses to around 15 *per cent*;
- bring about commercial viability in the Board;
- reduce outages and interruptions; and
- increase consumer satisfaction.

The APDRP schemes are being implemented through 12 operation circles of the Himachal Pradesh State Electricity Board (Board). The Superintending Engineers (SEs), being incharge of circles, have been designated as Chief Executive Officers (CEOs) for the implementation of APDRP schemes. They are assisted by the Executive Engineers. The Chief Engineer (System Planning) is the nodal officer responsible for preparation, approval and monitoring of APDRP schemes. The implementation is being carried out under the overall supervision of the Member (Operation) and Member (Technical) of the Board. The organisational chart is given in **Annexure-XXVII**.

Scope of audit

3.2.2 The implementation of APDRP schemes by the Board during April 2002 to March 2007 was reviewed by Audit between July 2006 and March 2007 in five (Bilaspur, Hamirpur, Una, Kullu and Solan) out of 12 circles selected on simple random sampling method without replacement. As against the total sanctioned amount of Rs.322.78 crore for various schemes in all the 12 circles of the Board, an amount of Rs.127.32 crore was sanctioned for the above five circles. Up to March 2007, the Board incurred an expenditure of Rs.343.12 crore in all the 12 circles and Rs.127.76 crore in these five circles.

Audit objectives

3.2.3 The audit objectives of the Performance review were to ascertain whether:

- the Detailed Project Reports (DPRs) were prepared realistically to achieve the programme objectives;
- the funding requirements were assessed realistically and funds were sanctioned and released by the Government of India/State Government in time and the same were utilised efficiently/economically and effectively for achievement of the objective of the programme;
- schemes/programmes were implemented in an efficient, economical and effective manner;
- the AT & C losses were reduced in accordance with the action plan and targets;
- monitoring of the programme was effective in securing timely and corrective remedial measures at all levels;
- satisfaction level of consumers had improved in terms of quality, regularity and cost of power supplied; and
- an effective and efficient system of evaluation for assessing the achievements of objectives with reference to the envisaged results was in place.

Audit criteria

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

- Projections/targets set out in the DPRs;
- Guidelines/instructions of MOP on APDP/APDRP;
- Target and bench marks/conditions laid down in the MOU/MOA;
- Targets set for reduction of AT & C losses; and
- Monitoring mechanism envisaged in the guidelines and MOA.

Audit methodology

3.2.5 The following mix of audit methodology was adopted for achieving the audit objectives with reference to Audit criteria of the performance review:

- review of instructions/guidelines issued by MOP/State Government from time to time for implementation of APDRP;
- review of agenda papers and minutes of the meetings of Whole Time Members (WTMs) of the Board;
- examination of DPRs/Cost Estimates of the projects/schemes;

- review of details of funds received and utilised;
- review of records relating to procurement of material/equipment, implementation of projects and scrutiny of monthly reports on benchmarks/milestone of MOU/MOA;
- review of monthly progress reports and returns on physical and financial performance; and
- issue of audit enquiries and interaction with the Management.

Audit findings

3.2.6 Audit findings arising from the performance audit were issued (May 2007) to the State Government/Board and were discussed (16 August 2007) in the meeting of the Audit Review Committee for State Public Sector Enterprises (ARCPSE). The Secretary, Multi-purpose Project and Power, Government of Himachal Pradesh and Member (Finance), Member (Technical), Member (Operation), Chief Auditor, Chief Accounts Officer, Chief Engineer (System Planning) Chief Engineer (Technical) and Chief Engineer (Central Zone) of the Board attended the meeting. The views expressed by the members have been taken into consideration while finalising the review.

3.2.7 Audit analysis of the implementation of various APDRP schemes revealed major shortcomings/deficiencies such as non-execution of works provided in the DPRs, deviation during execution of works, delay in completion of projects, diversion of APDRP funds, incorrect reporting to the MOP, avoidable extra expenditure, unfruitful expenditure, non-achievement of objectives of APDRP, etc. These are discussed in the succeeding paragraphs:

Project planning

There were cases of deviations/variations in the execution of projects indicating that the DPRs were not prepared keeping in view the requirements of the field units.

3.2.8 Optimum benefit from investment in any project is best derived if the execution of the project is undertaken after conducting proper survey of the ground realities in the field and collection of inputs for conducting cost benefit analysis.

Scrutiny of records revealed that there were cases of deviations/variations in the execution of projects indicating that the DPRs were not prepared keeping in view the requirements of the field units. These are discussed as follows:

Non-execution of works provided in the DPR

3.2.9 DPR of Solan circle envisaged (March 2002) a provision of Rs.58.95 lakh for installation of LT switched capacitors on 13 feeders for reduction of T&D losses to the extent of 1.50 MUs and thereby saving Rs.44.25 lakh. It was however, noticed that against the installation of LT switched capacitor on 13 feeders, installation was done (December 2006) only on one feeder at a cost of Rs.0.10 lakh. Consequently, reduction in T&D losses could be achieved to the extent of 0.11 MUs only against 1.50 MUs envisaged. The unutilised

amount of Rs.58.85 lakh was diverted to other component/works under APDRP and energy saving of 1.39 MUs as envisaged in the DPR could not be achieved.

The Government stated (August 2007) that installation of LT capacitors was not desirable. The reply is not tenable as the installation of capacitors is necessary to maintain the required power factor. The Government also did not furnish the details as to the components on which funds of Rs.58.85 lakh were ultimately utilised.

3.2.10 Physical and financial achievement of work in six* circles revealed non-execution/negligible execution of certain works provided in the DPRs (March 2002 and March 2003). As a result, the major portion of the funds of Rs.10.42 crore provided (March 2002 and March 2003) for works as detailed below were diverted to other works. These works were not executed due to lack of planning in regard to arrangement of material.

(Rupees in lakh)

| Name of circle | Name of work | Physical provision | Financial provision | Expenditure | Non-utilisation of provision | Percentage completion |
|----------------|--|--------------------|---------------------|--------------|------------------------------|-----------------------|
| Hamirpur | Computerised billing, | 79 Nos. | 83.40 | 4.88 | 78.52 | 5.85 |
| | Computerised data loggers, | 15 Nos. | 45.00 | Nil | 45.00 | 0 |
| | LT to HT conversion | 413 KM | 478.57 | Nil | 478.57 | 0 |
| Bilaspur | Computerisation | Lumpsum | 70.00 | 0.92 | 69.08 | 0 |
| Kullu | 11 KV ring main | 5 | 30.15 | Nil | 30.15 | 0 |
| | Computerisation | Lumpsum | 70.00 | 2.23 | 67.77 | 0 |
| Mandi | DTR control & Protection | Job | 49.50 | 5.37 | 44.13 | 10.85 |
| | Computerisation | Job | 70.00 | 5.14 | 64.86 | 7.34 |
| Solan | Protection devices | Job | 134.95 | 32.04 | 102.91 | 23.74 |
| | Computerised billing | Lumpsum | 59.40 | 40.00 | 19.40 | 67.34 |
| Shimla | 1x3.15 MVA sub station at Summer Hill with 4 outgoing feeder | Lumpsum | 41.27 | Nil | 41.27 | 0 |
| Total: | | | 1132.24 | 90.58 | 1041.66 | 8.00 |

Source: Compiled from relevant DPRs and records of the Board.

The Government stated (August 2007) that funds were placed with the CE (P&M) for computerisation. The execution of Summer Hill sub-station was not required due to system improvement. Conversion of LT line into HT line was also not required. The reply brings out the fact that the provisions in the schemes were made without proper and careful study of the data submitted by the field units.

Deviation during execution of work provided in the DPR

3.2.11 Hamirpur circle completed (March 2007) re-conductoring of 159.212 Km LT line with higher size (7/4.26 mm) of conductor having current carrying

* Hamirpur, Bilaspur, Kullu, Mandi, Solan and Shimla

capacity of 189 Ampere at a cost of Rs.2.51 crore without any provision in the DPR. It was observed that the existing AAAC conductor of 7/3.10 mm and 7/2.21 mm size having current carrying capacity of 107 to 139 Ampere was sufficient to cater the present requirement of 50 Ampere current of the area and there was no justification for replacement of existing conductor with conductor of higher current carrying capacity of 189 Ampere. Thus, the expenditure of Rs.2.51 crore incurred on the above work without any provision in the DPR was irregular and unfruitful. There were no reasons on record for replacement of existing conductor with higher size of conductor.

The Government stated (August 2007) that the existing conductor was very old and damaged at many places which caused disruption of power. The reply is not tenable as this work was not included in the DPR of the circle and no justification for using higher size of conductor was on record.

Funding pattern

An amount of Rs.1.96 crore received (2000-01) under APDP was neither utilised nor refunded to the MOP.

3.2.12 APDP: Himachal Pradesh being a special category state was entitled to 100 per cent finance (90 per cent grant and 10 per cent loan at interest rate of 12 per cent per annum) from the MOP. During 2000-01, the Board received Rs.25.32 crore (Grant: Rs.22.79 crore and Loan: Rs.2.53 crore). The amount was kept in the current account of the Board where other funds were also being kept in contravention of MOP orders. Out of the above amount, the Board utilised Rs.23.23 crore (2001-02). An amount of Rs.2.09 crore (Rs.1.88 crore as grant and Rs.0.21 crore as loan) remained un-utilised which was neither transferred for utilisation for the APDRP schemes nor refunded to the MOP.

The Government stated (August 2007) that Rs.13 lakh had been adjusted by the CE (South) and Central Zone. The fact remains that Rs.1.96 crore remained unutilised/unadjusted as of September 2007.

3.2.13 APDRP: For all the 12[&] projects in the State, the MOP sanctioned (August 2002 to May 2003) Rs.322.78 crore of which 90 per cent (Rs.290.50 crore) was to be released by way of grant and 10 per cent (Rs.32.28 crore) by way of loan. The MOP, however, released the funds to the State Government as detailed below:

| (Rupees in crore) | | | |
|--------------------------|-----------------------|----------------------|---------------|
| Year | Grant released | Loan released | Total |
| 2002-03 | 38.74 | 4.30 | 43.04 |
| 2003-04 | 108.78 | 12.09 | 120.87 |
| 2004-05 | - | - | - |
| 2005-06 | 78.41 | -- | 78.41 |
| 2006-07 | 64.55 | -- | 64.55 |
| Total | 290.48 | 16.39 | 306.87 |

Source: Compiled from the relevant records of the Board.

[&] Shimla, Solan, Nahan, Rohroo, Rampur, Kangra, Dalhousie, Una, Mandi, Kullu, Bilaspur and Hamirpur

Against the loan component of Rs.32.28 crore, the MOP disbursed Rs.16.39 crore only as the loan facilities were dispensed with by the MOP with effect from November 2005. With the result the Board had to arrange the remaining amount of loan (Rs.15.89 crore) from the REC at interest rate of 6.75 per cent per annum. The amount was received by the Board in October 2006 (Rs.14.30 crore) and March 2007 (Rs.1.59 crore).

Delay in release of funds by the State Government to the Board

3.2.14 According to the APDRP guidelines, the State Government shall release funds to the Board within a week of their receipt from the MOP. Failure to do so was to be deemed as diversion of funds and the MOP was to adjust an equivalent amount along with 10 per cent penal interest against subsequent instalments of assistance. It was noticed that the State Government delayed the release of funds aggregating Rs.228.46 crore (grant:Rs.212.07 crore and loan:Rs.16.39 crore) to the Board by 7 to 637 days, thereby making itself liable to pay Rs.9.09 crore as penal interest to MOP. Besides, the Board also had to bear the burden of Rs.1.01 crore on account of interest at the rate of 12 per cent on loan component of Rs.16.39 crore for the period of delay in release of the same by the State Government to the Board as tabulated below:

The State Government delayed release of funds to the Board by 7 to 637 days, which made it liable to pay Rs.9.09 crore as penal interest to the GOI.

| Funds released by the GOI to the State Government | | | Released by the State Government to the Board | | Delay in days after allowing seven days grace allowed by GOI | 10 per cent penal interest | Extra burden of interest on loan at the rate of 12 per cent (Rs.in lakh) |
|---|-----------------|----------------|---|---------------|--|----------------------------|---|
| Date | Amount of Grant | Amount of loan | Date | Amount | | | |
| 4.4.02 | 12.00 | 1.33 | 28.5.02 | 13.33 | 47 | 0.17 | 0.02 |
| 28.1.03 | 17.74 | 1.97 | 27.3.03 | 19.71 | 51 | 0.28 | 3.30 |
| 31.3.03 | 9.00 | 1.00 | 29.5.03 | 4.00 | 47 | 0.05 | 0.62 |
| | | | 19.6.03 | 3.00 | 72 | 0.06 | 0.71 |
| | | | 4.7.03 | 3.00 | 87 | 0.07 | 0.86 |
| 23.10.03 | 108.78 | 12.09 | 13.1.04 | 58.00 | 74 | 1.18 | 14.11 |
| | | | 30.1.04 | 3.98 | 91 | 0.10 | 1.20 |
| | | | 3.7.04 | 30.00 | 245 | 2.01 | 24.16 |
| | | | 31.3.05 | 10.34 | 516 | 1.46 | 17.47 |
| | | | 30.7.05 | 18.55 | 637 | 3.24 | 38.95 |
| 19.9.06 | 35.39 | | 7.11.06 | 35.39 | 42 | 0.41 | |
| 14.3.07 | 29.16 | | 28.3.07 | 29.16 | 7 | 0.06 | |
| Total: | 212.07 | 16.39 | -- | 228.46 | - | 9.09 | 101.40 |

It was also observed that the Board had not claimed reimbursement of the above interest of Rs.1.01 crore from the State Government so far (August 2007). No reasons were on record for delay in release of funds to the Board by the State Government.

The Board stated (August 2007) that the reply in regard to delay in release of funds would be given by the State Government and claim for reimbursement of interest of Rs.1.01 crore would be lodged with the State Government. The State Government endorsed the reply of the Board without offering any comments.

Non-maintenance of a separate account and diversion of APDRP funds

3.2.15 The general terms and conditions for utilisation of funds issued by the MOP, *inter alia*, include that:

- the utilities shall open a separate bank account in the first instance itself in a scheduled/nationalised bank for the purpose of implementing the Schemes under APDRP. Funds from the Government/internal resources or loans from REC earmarked for the purpose shall be credited to this account.
- The funds received under APDRP shall not be diverted for other purposes either by the State Government or utilities.

Audit scrutiny revealed the following:

3.2.16 The Board did not open separate bank account for APDRP funds as required. The funds were kept in the existing current account of the Board.

The Government admitted (August 2007) the fact of routing the transaction through the existing current account without intimating the reasons for the same.

3.2.17 The DPR of each circle provided for component-wise physical and financial targets. During scrutiny of records, it was noticed that in nine cases pertaining to seven circles, APDRP funds of Rs.8.76 crore were utilised on the execution of works not provided in the DPRs resulting in diversion of APDRP funds to that extent without concurrence/approval of the MOP. Such cases are detailed in **Annexure-XXVIII**. The cases of deviation were not reported to the MOP separately for information and approval.

APDRP funds of Rs.8.76 crore were diverted for execution of works not provided in the DPRs of seven circles.

Non-receipt of incentive component

3.2.18 As per guidelines of APDRP, the Board would be eligible for incentive up to 50 *per cent* of the reduction in actual total loss taking 2000-01 as the base year. This incentive was to be utilised for improvement in the power sector only.

The details of loss reduction and eligibility for incentive on this account during the last five years ended on 31 March 2006 are given as under:

| (Rupees in lakh) | | | | | | | |
|--------------------------------|---|--------------|---------------|--------------|--------------|-------------|------------------|
| Sr. No. | Particulars | 2000-01 | 2001-02 | 2002-03 | 2003-04 | 2004-05 | 2005-06 |
| 1 | Surplus (+)/ deficit (-) | (-) 3,688.26 | (-) 10,655.77 | (-) 5,224.38 | (-) 4,621.88 | (-)3,724.64 | (-) 2,047.56 |
| 2 | Less increase in sundry debtors w.r.t. the base year (other than debtors of electricity dues) | (-) 604.31 | (-) 94.14 | (-) 195.53 | (-) 468.58 | (-) 921.91 | (-) 1,572.31 |
| 3 | Less qualifications of Auditors for the current year (qualification for the prior period not to be included) | (-) 6,498.70 | (-) 82.23 | (-) 3,181.62 | (-) 782.00* | (+)3,233.00 | (-) 2,645.00 |
| 4 | Net eligible loss for the year | 10,791.27 | 10,832.14 | 8,601.53 | 5,872.46 | 1,413.55 | 2,169.75 |
| 5 | Eligibility for incentive | | | 2,189.74 | 4,918.81 | 9,377.72 | 8,621.52 |
| Total reduction in loss | | | | | | | 25,107.79 |

Source: Compiled from accounts of the Board.

The Board has not received the incentive of Rs.125.54 crore on account of reduction in cash loss during 2002-06 so far due to submission of incorrect claims.

It would be seen from the above table that the Board was eligible for incentive of Rs.125.54 crore (50 per cent of the cash loss reduction of Rs.251.08 crore during 2002-06) as compared to the base year 2000-01.

The Board's first claim of Rs.10.32 crore for 2002-03 was rejected (October 2003) by the MOP due to non-submission in the required format. The Board's subsequent claim of Rs.36.78 crore (December 2004) for 2002-03 to 2003-04 was pending with the MOP as on March 2007. The Board submitted (March 2007) the revised claim of Rs.253.58 crore for 2002-06 which has been overstated by Rs.2.50 crore. Submission of incorrect claim would result in further delay in receipt of claim from the MOP. Due to non-receipt of claim, the amount could not be utilised for making improvement in power sector.

The Government admitted (August 2007) non-receipt of incentive claims. In regard to submission (March 2007) of incorrect claim for 2002-06, it was stated that the Board had submitted the claim without waiting for the final comments of the Statutory Auditors. The reply is not tenable as the claim was lodged (March 2007) after finalisation of audit of accounts.

* *The qualification of Auditors for the year 2003-04 was Rs.782 lakh as per Balance Sheet. However, the Board in its claim had indicated it as Rs.532 lakh. As such, the qualification was understated to the extent of Rs.250 lakh. Consequently, the incentive claim was also overstated to that extent*

Execution of projects

Slow pace of execution

3.2.19 During the last five years ended March 2007, the expenditure incurred by the Board on APDRP projects *vis-à-vis* the funds sanctioned by the MOP was as under:

(Rupees in crore)

| Sr. No | Name of circle | Funds sanctioned by MOP | Date of sanction | Expenditure ending March 2003 | Expenditure ending March 2004 | Expenditure ending March 2005 | Expenditure ending March 2006 | Expenditure ending March 2007 |
|--------|----------------|-------------------------|------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| 1 | Shimla | 23.00 | 25.8.02 | 3.30 | 5.51 | 13.80 | 20.83 | 24.21 |
| 2 | Solan | 20.59 | 25.8.02 | 2.95 | 4.53 | 7.29 | 19.76 | 24.41 |
| 3 | Nahan | 24.42 | 25.8.02 | 2.13 | 5.09 | 10.39 | 20.32 | 23.80 |
| 4 | Rampur | 38.08 | 26.5.03 | | 2.30 | 10.20 | 26.34 | 42.19 |
| 5 | Rohru | 14.83 | 26.5.03 | | 1.56 | 7.26 | 17.94 | 17.75 |
| 6 | Kangra | 27.24 | 26.5.03 | | 1.49 | 7.12 | 23.60 | 29.50 |
| 7 | Dalhousie | 27.28 | 26.5.03 | | 1.50 | 10.06 | 27.19 | 32.13 |
| 8 | Una | 22.02 | 26.5.03 | | 2.21 | 6.38 | 18.44 | 23.16 |
| 9 | Mandi | 40.61 | 26.5.03 | | 1.46 | 8.68 | 31.10 | 45.78 |
| 10 | Hamirpur | 32.47 | 4.12.02 | 1.46 | 6.77 | 18.16 | 28.64 | 30.43 |
| 11 | Kullu | 26.30 | 26.5.03 | | 0.47 | 6.03 | 19.15 | 29.71 |
| 12 | Bilaspur | 25.94 | 26.5.03 | | 0.78 | 7.38 | 15.23 | 20.05 |
| | Total | 322.78 | | 9.84 | 33.67 | 112.75 | 268.54 | 343.12* |

Source: Compiled from relevant records of the Board.

It would be seen from the above, that utilisation of funds during the initial three years *i.e.* 2002-05 was very less. Had the works been executed equitably over the period of the scheme, the cost overruns in execution of the works (as mentioned in Paragraph 3.2.30 *infra*) could have been avoided to some extent.

The Government attributed (August 2007) the slow pace of execution in the initial years to delay in receipt of material, administrative approval and sanction for expenditure. The reply is not tenable as all these factors should have been kept in view at the planning stage itself.

Non-compliance with the MOU/MOA

3.2.20 As per MOU, the State Government was required to undertake computerised billing and put in place the system of accounting and audit of all consumers by March 2005. It was observed that out of 227 consumer sub-divisions having about 17.56 lakh consumers in the State, the Board had taken up computerisation of only 2.40 lakh consumers (13.67 *per cent*) in 49 consumer (21.59 *per cent*) sub-divisions up to 31 March 2007. Thus, even after two years from March 2005, the status of computerisation in the State was only 13.67 *per cent*. As against the total provision of Rs.12.20 crore for computerisation in all the 12 circles, the Board spent an amount of Rs.70.97

* The excess expenditure of Rs.20.34 crore was met by the Board from its own funds

lakh (5.82 per cent) only up to March 2007. Due to non-computerisation of billing process, the Board was not able to bill the maximum consumers each month resulting in delay in receipt of revenue.

The Government stated (August 2007) that the computer cell of the Board had started (May 2005) the work of computerisation and packages of Rs.23.38 crore for the work had been awarded to a firm. The firm had assured to complete the work by November 2007. The reply is not acceptable as the work which was to be completed by March 2005 has been taken up only in May 2005 and only 13.67 per cent work has been completed by 31 March 2007. Hence, the question of completion by November 2007 does not arise. The excess cost involved in award of work and the source from which it was to be met was not made available to Audit.

3.2.21 As per MOA and MOU, the Board was required to undertake energy audit and commercial accounting at all levels to identify and reduce the transmission and distribution losses (T&D) by March 2005. To achieve this objective, Energy Audit and Energy Accounting (EAEA) for each 11 KV feeder and distribution transformer (DTRs) on actual meter reading basis was to be done.

The progress achieved in this regards by the Board is detailed below:

| Sr. No. | Total numbers | | Metering status | | Energy accounting | | Energy audit | |
|---------|---------------|--------|-----------------|-------------|-------------------|-------------|--------------|-------------|
| | | | No. | Per-centage | No. | Per-centage | No. | Per-centage |
| 1 | Feeders | 1,024 | 1,008 | 98.44 | 970 | 94.73 | 967 | 94.43 |
| 2 | DTRs | 18,860 | 18,325 | 97.16 | 18,325 | 97.16 | 16,703 | 88.56 |

Source: Compiled from relevant records of the Board.

In this regard, it was observed (March 2007) as under:

- The Board had not achieved *cent per cent* target of EAEA of all the feeders and DTRs.
- The Board had neither rescheduled the billing cycle for all the consumers fed from particular feeders/DTRs nor re-grouped the consumers as per billing cycle to locate the actual pockets of higher energy loss.
- In Parwanoo town under Solan circle, where the Board had installed electronic meters on 417 DTRs the percentage of T&D losses was recorded as (-) 2.32, (-) 0.82, (-) 9.00 and (-) 12.75 in March, July, October and November 2006 respectively. This was due to the fact that energy received and sold by the Divisions in a particular month was not recorded correctly and energy audit was not conducted *cent per cent*.
- The EAEA data was not being prepared strictly as per billing cycle (monthly, bi-monthly and tri-monthly) and compared with the consumption of energy in the DTR for the same period.
- The Board did not identify the accredited agencies for the purpose of EAEA, project formulation, turnkey implementation, project monitoring and project evaluation.

- The Board had reported to the MOP that EAEA in Solan circle has been done as 100 *per cent* and 99.38 *per cent* respectively whereas the actual achievement of EAEA was to the tune of 67.73 *per cent* only. Test check of records of Parwanoo and Solan divisions of Solan circle revealed that EAEA had not started in 224 out of 417 and 293 of 398 DTRs of Parwanoo and Solan divisions respectively. Thus, in these divisions, actual achievement of EAEA itself was only 36.56 *per cent* and the reporting by the Board to MOP was, thus, not correct.

The Government stated (August 2007) that in Solan circle as a whole, EAEA is close to target of 100 *per cent* whereas in Parwanoo and Electrical Division Solan, EAEA could not be completed due to shortage of staff and 100 *per cent* EAEA would be ensured with in one month time. The reply of the Government itself is contradictory and the fact remains that EAEA has not been done to that extent as reported to MOP.

3.2.22 As per MOA, the beneficiary (Board) should fix allocation of power to a circle at the point of import in the circle and evolve a mechanism of transfer pricing of energy to the circle within four months of the signing of the MOA. Mechanism for regulating over draws and/or under draws should also be put in place. The Board has not evolved any such mechanism so far (March 2007).

The Government stated (August 2007) that it was decided (September 2003) in the Ist Distribution Reforms Committee (DRC) meeting to restrict the activities to circle wise computation of T & D losses. The reply is not tenable as the DRC was not empowered to alter the conditions of MOA.

3.2.23 As per MOA, the Board has to adopt turnkey packaging concept or evolve a rate contract for procurement of equipment of repetitive nature, adopt the standard specifications so that the CEOs are able to operate the rate contract for procurement of equipments to meet the respective project implementation schedule. The standard specification for turnkey contract with reliability and quality norms and performance guarantee provisions as well as list of accredited contractors were to be in place within two months of signing of the MOA. The project execution mechanism was to be finalised by the Board and informed to the MOP within four months of signing of the agreement.

In this regard, it was observed (March 2007) as under:

- The Board floated tenders for procurement of material. Standard specifications were not evolved for procurement of equipment of repetitive nature resulting in incurring of avoidable extra cost of Rs.32.33 crore on purchase of different material from different suppliers (**Annexure-IV**) referred to in paragraph 3.2.30 *infra*.
- Rate contract system as envisaged had not been evolved so far (August 2007).
- The project execution mechanism had also not been evolved and intimated to the MOP as required (August 2007).

- The PGCIL (consultant) had also not prepared any model bidding document for use by the utility for awarding contracts (August 2007).

The Government stated (August 2007) that purchases were made according to the year-wise requirement, efforts were made to finalise rate contract in respect of non-critical items but the same could not materialise due to poor response from manufacturing firms/suppliers based in Himachal Pradesh, the mode of scheme execution was intimated to the MOP/DRC and standard bid document framed by the National Productivity Council in respect of three circles was forwarded to the CE (South). The reply confirms Audit contention.

3.2.24 The Board did not comply with the requirement of the MOA in regard to outsourcing of activities like consumers indexing, meter reading, billing, bill delivery and periodical maintenance of DTRs and sub-station equipments, lines, *etc.* It had also not declared the policy frame work for outsourcing of above activities so far (August 2007) though the same was required to be declared within six months of signing of the MOA.

The Government stated (August 2007) that outsourcing of such activities had not been considered as general policy in view of varying conditions in various areas. Need based outsourcing for bills distribution was, however, resorted to by Mandi, Hamipur, Una and Kangra circles partially. The reply is not tenable as the compliance with the requirement of the provisions/conditions of MOA was mandatory.

3.2.25 As per MOA, the CEO should be retained for a minimum period of three years irrespective of promotion. In Kullu circle, the CEO was, however, changed three times within a period of two years. There were no recorded reasons for these changes.

Further, the CEO should be allowed to open a separate account with a bank within a month of signing the MOA for depositing the increased revenue resulting as a consequence of investment made to assess benefits accrued in each circle in terms of revenue. This had not been done so far (August 2007) in any of the circles test checked.

3.2.26 The Board had not established the distribution circle as a profit centre and as an independent administrative unit with delegation of technical and financial powers for operation, maintenance, project implementation and outsourcing so far (August 2007).

In addition to above, the following conditions of the MOA were not complied with (August 2007) in any of the five circles test checked.

- Digital interface for automatic logging of data into a computer at the sub-stations to be provided within nine months.
- Necessary installations to be provided within two months of signing of the MOA for entering feeders outages in the computer, causes for the same and corrective and preventive action taken at the sub-stations.
- A system of recording consumer's complaints to be developed and the corrective and preventive action to be recorded along with maintenance of

monthly summary of such complaints. This would have assured better service to the consumers/increased consumers' satisfaction.

- The computerised billing centers were not established in each circle within one year from the date of agreement though this was required to be done as per the MOA.

The Government stated (August 2007) that computerised billing and EAEA would be completed by November 2007.

Delay in completion of turnkey projects

3.2.27 APDRP guidelines provide for adoption of turnkey contract system for completion of APDRP packages in time. Accordingly, the Board decided (March/August 2004) to award construction of 33/11 KV sub-station, 22 KV control point, 33 KV lines, remote metering, express feeders, re-conductoring of High Tension (HT) lines and Low Tension (LT) panels on turnkey basis. It was observed (March 2007) that in five^s circles, the Board awarded (August 2004 to February 2007) 24 contracts on turnkey basis after a delay of about 6 to 28 months (March/August 2004) for Rs.32.78 crore against the provision of Rs.19.57 crore in the DPR. The awarded cost was 67.50 *per cent* higher than the provision in the DPR. The circles took 3 to 19 months in finalising the turnkey award. The award of turnkey projects was delayed due to the fact that the Board had made provision in the DPR on the lower side and the specific geographic locations/conditions and cost escalation due to delay in award were not taken into account.

The Government attributed (August 2007) delay to poor response of bidders, increased civil works, tough geographical conditions and difficulties in getting the site ready for construction. The cost overrun was due to hike in prices of steel and other related material. The reply is not tenable as initially the Board delayed the awarding of works on turnkey basis and after award, it was not ensured that contractors adhere to the prescribed time schedule. The factors like increased civil works, tough geographical conditions and difficulties in getting the sites ready for construction were not new to the Board and should have been managed by proper and timely planning.

Non-levy of penalty for delay in completion of turnkey projects

3.2.28 As stated in paragraph 3.2.23 *supra*, the Board should have adopted turnkey concept for execution of works. It was, however, observed that:

- Out of seven[#] circles, two^{*} circles did not award any contract on turnkey basis.
- Five[@] circles awarded 15 contracts on turnkey basis during March 2005 to October 2006 and the completion of the same was delayed by six to 65 weeks.

^s Kullu, Una, Mandi, Rampur and Solan

[#] Solan, Una, Kullu, Rampur, Bilaspur, Mandi and Hamirpur

^{*} Bilaspur and Hamirpur

Penalty of Rs.1.17 crore was not recovered from the contractors for delay in completion of works resulting in extending of undue favour to them.

Delay in completion/non-execution of targeted works resulted in loss of potential revenue of Rs.15.32 crore.

In six cases, avoidable extra expenditure of Rs.35.99 crore was incurred due to allotment of work at higher rates, failure to purchase material in bulk, etc.

- As per the standard terms and conditions of turnkey projects, the extension of time for completion was to be granted only if the delay was due to natural calamities or unavoidable circumstances. Without adhering to above criteria for granting extension of time, the Board granted extension in three out of 16 cases and recovered only Rs.18.58 lakh as penalty against the total recoverable penalty of Rs.1.36 crore. Thus, grant of extension without justifiable reasons and non-recovery of penalty resulted in extension of undue favour to the contractors and loss to the Board to the extent of Rs.1.17 crore.

The Government stated (August 2007) that the delay occurred due to miscellaneous site problems and the penalty was recovered wherever it was due. The reply is not tenable as the extensions were given to the contractors without justifiable reasons and penalty for delayed completion should have been recovered by the Board.

Loss of revenue due to delay/non-execution of works

3.2.29 During scrutiny of records, it was noticed that work of construction of new sub-stations[§] was included in the annual working programme for 2002-05. The work of construction of new sub-stations at seven places* was included in the annual working programme for 2004-05. These works awarded to various contractors on turnkey basis were not completed within the annual working programme framed by the Board. In Bilaspur circle, the target of re-conductoring of lines was not achieved due to non-availability of conductor. Delay in completion/non-execution of targeted works resulted in loss of potential revenue of Rs.15.32 crore as envisaged in the schemes (**Annexure-XXIX**). In the cases of construction of new sub-stations the delay was attributable to contractors and in case of re-conductoring, the Board itself was responsible as the work was executed departmentally.

The Government stated (August 2007) that delay in execution/construction occurred due to miscellaneous reasons (geographical conditions, increased civil works etc.) as well as on the part of the contractors. Delay in reconductoring in Bilaspur circle was due to late receipt of requirement of material from the Bilaspur circle. The reply is not tenable as these issues were not new to the Board and could have been overcome through proper planning.

Avoidable extra expenditure

3.2.30 It was noticed that in six cases (**Annexure-XXX**), the Board incurred avoidable extra expenditure of Rs.35.99 crore due to allotment of works at higher rates, failure to purchase the material in bulk, use of conductor of higher size, delay in completion of works, non-receipt of material, etc.

@ Solan, Una, Mandi, Rampur and Kullu

§ Kharooni, Ramshehar, Subathu, Darlaghat and Nalagarh

* Nagwain, Sauli Khud, Baggi, Tikken, Makreri, Bhadarwar and Cholthra

Un-utilised sub-standard cable

3.2.31 The Board purchased (February to December 2004) 2087 KM PVC cable valued at Rs.1.57 crore for replacement in various work of APDRP. Out of above, sub-standard cable valued at Rs.42.90 lakh was still lying in the stores awaiting replacement (September 2007).

The Government stated (August 2007) that the suppliers were requested to replace the cable from time to time and if the cable was not replaced within two months, the earnest money deposits would be forfeited. Further developments are awaited.

Undue benefit to the industrial consumers

3.2.32 There was provision in DPR of Una circle for construction of 2x3.15 MVA, 33/11KV manned sub-station at Tahliwala. The CE (Operation), North Zone, Dharamshala awarded (July 2005) the work to YGC Projects on turnkey basis for Rs.1.56 crore. The scope of work was subsequently (March 2006) changed due to increase in load demand of the area by increasing the capacity of the transformers from 2x3.15 MVA to 2x 6.30 MVA and the size of the conductor from 100 mm to 150 mm at an extra cost of Rs.86 lakh. The Tahliwala sub-station was commissioned in October 2006. As per the decision taken in the 35th meeting of Sub-Transmission Committee of the Board, the extra cost of Rs.86 lakh was to be recovered from the existing and the new industrial consumers as per HPERC regulations. Audit, however, observed (March 2007) that the excess cost was charged to APDRP, which tantamounts to extension of undue benefit to the industrial consumers to that extent and burdening and irregular utilisation of APDRP allotments. The Board issued (December 2006/January 2007) demand notices for recovery of excess cost of Rs.28.73 lakh to three existing consumers. But no effective steps were taken for recovery of the same. On this being pointed out, the Board, however, issued (January 2007) demand notices to the remaining consumers and Rs.50.80 lakh has been recovered from 20 consumers. The balance amount of Rs.35.20 lakh is still outstanding.

3.2.33 The Electrical Division at Parwanoo constructed (June to September 2006) 33 KV double circuit line from Baddi to Malpur under Solan circle through turn key contract awarded by the CE (Operation), South Shimla against which an expenditure of Rs.1.58 crore had been incurred though there was no provision for the same in the scheme. The line was required for fast developing industrial areas at Baddi and Barotiwala and 50 *per cent* of the cost of this line was to be recovered from the beneficiaries.

The Government stated (August 2007) that the Board had recovered Rs.1.80 crore from the consumers. The reply is, however, not correct as the Division had recovered/adjusted only Rs.32 lakh up to August 2007. Thus, balance expenditure of Rs.1.26 crore remained un-recovered from the concerned consumers (September 2007).

Un-fruitful investment

3.2.34 As mentioned in paragraph 3.2.8 *supra*, the DPRs were prepared without conducting proper survey and collection of complete information from the field. During scrutiny of records relating to execution of works in the field, it was noticed that in two cases (**Annexure-XXXI**), the Board incurred expenditure of Rs.1.10 crore on the works which were not being utilised as envisaged. This rendered the expenditure as unfruitful.

Incorrect reporting to the MOP

3.2.35 During scrutiny of records relating to furnishing of financial progress to the MOP, it was noticed that the Board did not take due care of the expenditure actually incurred by the field units. As detailed in **Annexure-XXXII**, the figure of financial progress intimated to the MOP was higher by Rs.6.67 crore in first three cases while in the fourth case, the incurring of expenditure of Rs.4.80 crore was not intimated at all.

Installation of old equipments

3.2.36 As per instructions for implementation of APDRP, only new equipment/material was to be utilised in APDRP projects. Audit, however, observed (March 2007) that old/dismantled equipments lying in stock having residual value of Rs.43.71 lakh as tabulated below were installed in violation of the instructions during 2005-07 in APDRP projects and the amount was booked to APDRP:

| Sr. No. | Particulars of project | Residual value of old/dismantled equipment used (Rupees in lakh) | Remarks |
|--------------|--|--|---|
| 1. | 33/11 KV sub-station at Sundernagar | 24.00 | Two transformers dismantled from Rakkar sub-station |
| 2. | 33/11 KV sub-station at Swarghat | 2.47 | One dismantled transformer from Sundernagar |
| 3. | 33/11 KV sub-station at Jawalamukhi | 12.30 | Old HT Shunt Capacitor transferred from Transmission Division Tutu |
| 4. | 2x2.5 MVA sub-station at Beri | Without value | Dismantled transformers from Sundernagar were diverted to Beri Sub-station. |
| 5. | 2x2.5 MVA sub-station at Subathu | Without value | Dismantled transformers from Nalagarh were diverted to Subathu sub-station. |
| 6. | 63 KVA, 25 KVA, 100 KVA and 250 KVA (Una division) | 4.94 | Repaired transformer utilised/installed. |
| Total | | 43.71 | |

Source: Compiled from relevant records of the Board.

The MOP has not been informed about installation of old equipments.

The Government stated (August 2007) that old equipments were installed due to non-availability of new equipments. The reply is not tenable as the instructions for implementation of APDRP prohibited installation of old equipments in APDRP works.

Non-achievement of objectives of APDRP

Against the target of AT & C losses of 15 per cent, the Board could achieve only 25.34 per cent up to 2006-07.

Higher Aggregate Technical and Commercial losses (AT&C)

3.2.37 Against the target of total AT&C losses of 15 per cent to be achieved by 31 March 2007, the Board could reduce AT & C losses to the extent of 25.34 per cent only up to 2006-07. Further, as on 31 December 2006, the AT & C losses in the circles test checked by Audit ranged between 23.21 and 75.16 per cent as detailed below:

| Circle | 2002-03 | 2003-04 | 2004-05 | 2005-06 | 2006-07 |
|-------------------------|--------------|--------------|--------------|--------------|--------------|
| Una | 66.89 | 46.70 | 34.90 | 41.11 | 30.00 |
| Hamirpur | 75.16 | 49.02 | 46.67 | 41.77 | 33.57 |
| Kullu | 43.57 | 44.25 | 43.24 | 42.68 | 46.62 |
| Bilaspur | 34.56 | 24.04 | 30.30 | 24.33 | 23.21 |
| Rohru | - | 61.55 | 68.38 | 70.43 | 65.91 |
| Board as a whole | 48.46 | 38.64 | 35.89 | 30.98 | 25.34 |

Source: Compiled from the relevant records of the Board.

The Government stated that there was no target for reduction of AT & C losses to 15 per cent. It was further stated that except for Rohru circle, losses had been reduced in other circles. The reply is not tenable as the ultimate objective of the scheme as per direction of the MOP was to bring down the AT & C losses to 15 per cent. Thus, non-reduction of AT & C losses as per targets resulted in potential loss of revenue of Rs.494.39 crore in the above five circles.

Reliability and quality of power

3.2.38 The main objective of APDRP was to increase the consumer satisfaction in respect of quality, reliability and cost of power. To achieve this objective, the MOA prescribed target/bench marks for strengthening of the system, achieving self sufficiency and interruption free power supply to the consumers. Audit scrutiny revealed that the Board failed to achieve these objectives in respect of DTRs failure rate, HT/LT line ratio and gap between average revenue realisation (ARR) and average cost of supply (ACS) as discussed below:

Excess failure rate of DTRs

3.2.39 With a view to increase the consumers' satisfaction and reliability of power, the PGCIL had fixed the benchmark of 1.5 per cent for failure of DTRs. The Board, however, fixed the bench mark of two to 4.5 per cent for

failure of DTRs for six[&] circles and 1.5 per cent for the Board as a whole. It was observed that two (Kullu and Solan) out of five circles test checked could not achieve the fixed bench mark (in percentage) as detailed below:

| Circle | Bench mark in percentage (up to 2006-07) | Achievement (in percentage) | | | | |
|----------|--|-----------------------------|---------|---------|---------|---------|
| | | 2002-03 | 2003-04 | 2004-05 | 2005-06 | 2006-07 |
| Una | 3.38 | 4.34 | 3.48 | 3.89 | 3.45 | 2.65 |
| Hamirpur | 2.00 | 1.70 | 2.46 | 1.88 | 2.04 | 2.02 |
| Kullu | 4.50 | 6.04 | 4.91 | 6.85 | 4.94 | 6.31 |
| Bilaspur | 4.40 | 5.55 | 5.60 | 4.90 | 3.94 | 3.39 |
| Solan | 2.54 | - | - | 2.91 | 4.14 | 4.74 |

In almost all the circles, the Board attributed failure of DTRs to internal faults, areas being lightning prone and shortage of staff which led to inadequate maintenance without finding out the actual reason for failure of each DTR with a view to taking remedial action.

The Government stated (August 2007) that there were no specific target for reduction to 1.5 per cent. The reply is not tenable as the bench mark of 1.5 per cent was contained in the DPRs of the circles.

Non-reduction in HT/LT line ratio

3.2.40 Long distance LT lines without adequate spacing of transformers are the main cause for line losses, LT faults and failure of DTRs. The CEA recommended 1:1 ratio of HT/LT line as an ideal ratio for minimising the losses. As against the above ratio, the Board fixed the HT/LT ratio bench mark of 1:1.5 for the circles test checked as well as Board as a whole. The detail of bench mark actually achieved by the Board as a whole as well as by the circles test checked was as under:

| Circle | Target | 2002-03 | 2003-04 | 2004-05 | 2005-06 | 2006-07 |
|----------|--------|---------|---------|---------|---------|---------|
| Una | 1:1.5 | 1:2.01 | 1:1.98 | 1:1.98 | 1:1.92 | 1:1.84 |
| Hamirpur | 1:1.5 | 1:1.86 | 1:1.84 | 1:1.77 | 1:1.72 | 1:1.72 |
| Kullu | 1:1.5 | 1:2.63 | 1:2.61 | 1:1.84 | 1:1.73 | 1:1.70 |
| Bilaspur | 1:1.5 | 1:2.17 | 1:1.86 | 1:2.57 | 1:2.51 | 1:2.60 |
| Solan | 1:1.5 | - | - | 1:2.28 | 1:2.19 | 1:2.17 |
| Board | 1:1.5 | 1:1.97 | 1:1.89 | 1:1.85 | 1:1.80 | NA |

Source: Compiled from the relevant records of the Board.

It can be seen from the above table that in none of the circles, the benchmark of 1:1.5 was achieved by the Board. The non-achievement was due to non-construction of adequate HT lines under APDRP and non-conversion of LT lines into HT lines.

[&] Una, Hamirpur, Kullu, Bilaspur, Rohru and Solan

The Government stated (August 2007) that there was definite improvement in the ratio of HT and LT lines and the Board had not fixed bench mark to achieve the above ratio because it required huge investment. The reply is not tenable as the Board had fixed the bench mark of 1:1.5 for circles test checked as well as for the Board as a whole.

The T & D losses over and above the limits approved by the HPERC accounted for potential loss of 213.86 MUs valued at Rs.63.08 crore in four out of five circles test checked in audit.

Non-reduction of T&D losses

3.2.41 Reduction of T & D losses is necessary to generate more revenue. The HPERC approved the T & D losses of 23.5 per cent with one per cent reduction per year for energy sold within the State in the tariff order approved (October 2001) by it. The losses beyond this limit were to be treated as inefficiency and were not to be passed on to the consumers through tariff. It was noticed that the Board failed to achieve the above targets during 2004-05 to 2006-07 (December 2006) in four out of five circles test checked, as the actual losses ranged between 25.82 and 40.25 per cent which accounted for potential loss of 213.86 MUs valued at Rs.63.08 crore as detailed below:

| Name of circle | Year | Energy input (MUs) | Actual loss (percentage) | HPERC (percentage) | Excess loss (percentage) | Loss (MU) | Rate (Rs.) | Revenue loss (Rs.in crore) |
|----------------|---------|--------------------|--------------------------|--------------------|--------------------------|---------------|------------|----------------------------|
| Una | 2004-05 | 223.693 | 26.39 | 20.50 | 5.89 | 13.18 | 2.95 | 3.89 |
| | 2005-06 | 251.474 | 26.85 | 19.50 | 7.35 | 18.48 | 2.95 | 5.45 |
| | 2006-07 | 229.182 | 25.82 | 18.50 | 7.32 | 16.78 | 2.95 | 4.95 |
| Hamirpur | 2004-05 | 170.461 | 29.54 | 20.50 | 9.04 | 15.41 | 2.95 | 4.55 |
| | 2005-06 | 174.917 | 29.04 | 19.50 | 9.54 | 16.69 | 2.95 | 4.92 |
| | 2006-07 | 136.921 | 29.40 | 18.50 | 10.9 | 14.92 | 2.95 | 4.40 |
| Kullu | 2004-05 | 131.37 | 33.41 | 20.50 | 12.91 | 16.96 | 2.95 | 5.00 |
| | 2005-06 | 141.247 | 35.33 | 19.50 | 15.83 | 22.36 | 2.95 | 6.60 |
| | 2006-07 | 119.196 | 40.25 | 18.50 | 21.75 | 25.93 | 2.95 | 7.65 |
| Bilaspur | 2004-05 | 172.008 | 29.51 | 20.50 | 9.01 | 15.50 | 2.95 | 4.57 |
| | 2005-06 | 188.077 | 29.54 | 19.50 | 10.04 | 18.88 | 2.95 | 5.57 |
| | 2006-07 | 189.225 | 28.42 | 18.5 | 9.92 | 18.77 | 2.95 | 5.54 |
| Total | | | | | | 213.86 | | 63.08 |

Source: Compiled from the relevant records of the Board.

There was nothing on record to show that the Board had taken any steps to reduce the T & D losses.

The Government stated (August 2007) that the target fixed by HPERC was for the Board as a whole and not for individual circles. The reply is not tenable as the targets were also fixed in the DPR of each circle. Further, the Government had stated in reply to paragraph 3.2.22 *supra* that it was decided in the first DRC meeting to restrict the activities to circle-wise computation of T&D losses.

3.2.42 Scrutiny of records also revealed that in the Hamirpur circle, power was being supplied to different 33/11 KV sub-stations from 16 MVA 132/66/33 KV sub-station at Anu. But due to overloading in winter, 33 KV sub-stations at Barsar and Galore were fed during 2003-04 to 2006-07 from

sub-station at Rakkar (Una) through a lengthy HT line (Una-Barsar: 46 KM and Una-Galore: 57 KM) resulting in avoidable energy loss of 1.276 MUs valued at Rs.37.64 lakh. The Board should have augmented the sub-station at Anu to minimise energy losses by avoiding supply of energy through lengthy line.

The Government admitted (August 2007) the fact of incurring excess T&D losses due to supply of power to these sub-stations in winter through longer route owing to overloading of 16 MVA sub-station at Hamirpur. The Government further stated that the sub-station at Anu (Hamirpur) was being augmented shortly to obviate this problem.

Deficient monitoring and Internal audit system

3.2.43 Effective periodical monitoring is necessary for efficient and economical execution of projects. It helps in detecting deficiencies at different stages of execution and taking remedial measures in time. Effective monitoring is possible through strong management information system and internal control mechanism. Internal audit is the main tool of internal control of an organisation. In regard to monitoring, the following deficiencies were noticed:

- In terms of clause 6.1 (a) of the MOA, a State level Distribution Reforms Committee (DRC) was to be constituted by the Board within one month of signing of the MOA and the DRC was to meet once in three months to review the progress of APDRP schemes, compliance of conditions of the MOU/MOA and performance against APDRP targets and bench marks. The MOA was signed on 7 December 2002 and the DRC was constituted in February 2003. The DRC, however, held only five meetings till April 2007 as against 17 meetings required to be held.
- Clause 6.2 (d) of the MOA envisages that there shall be monthly monitoring and review of achievements in respect of technical and commercial bench marks by the CEO of the circle and the Advisor (PGCIL). The proposals for overcoming the shortfall noticed during monitoring/review were to be submitted to the MOP. This requirement was not complied with in the circles test checked during the period of review.
- The Board enhanced powers of the Chief Engineer/Superintending Engineer/Executive Engineer for making purchases for APDRP works for speedy execution of works. It was noticed that the material valued at Rs.69.08 lakh was purchased by Kullu, Una and Bilaspur circles under enhanced power but the same was utilised in works other than APDRP. Thus, the Board failed to monitor the utilisation of material purchased for APDRP works.
- The Board did not have system of internal audit for APDRP works. The already existing internal audit cell of the Board was not auditing the APDRP works.

- The implementation of APDRP works was discussed by the whole time members (WTMs) of the Board from time to time and delay in execution due to non-availability of material was noted. Though the WTMs directed the field staff to take remedial measures to speed up the works, compliance with the direction was not watched by the WTMs. Thus, the discussion at the level of WTMs did not prove fruitful.

The Government stated (August 2007) that despite holding of five DRC meetings, periodical meetings with the MOP and PGCIL were held from time to time which served the ultimate objective. The progress was also reviewed at the Board level and during reviews conducted by the MOP and necessary measures were also taken. The reply is not tenable as the Board neither complied with the terms and conditions of MOA nor monitored the implementation of schemes as envisaged.

Non-appraisal of performance

3.2.44 For assessing the usefulness of any project and ascertaining the benefits actually derived with reference to those envisaged in the DPRs, the system of appraisal of performance should be in place in an organisation. It was observed that the system of appraisal of performance was not in place in the Board. Out of 19 components of 12 projects, 14 components were completed by the Board at a cost of Rs.301.03 crore between 2002-03 and 2006-07. In the absence of system of appraisal of performance, the Board had not assessed the usefulness of execution of the above components. Thus, it could not be ascertained in audit as to whether the envisaged benefits had accrued.

Acknowledgement

3.2.45 Audit acknowledges the co-operation and assistance extended by the Board and officers of the State Government at various stages of conducting the performance audit.

Conclusion

The Board failed to prepare the DPRs for APDRP schemes/projects after keeping in view the requirements of the field units. It also failed to comply with the conditions of MOU/MOA. Consequently, there was delay in completion of projects and there were also deviations in execution resulting in time/cost overrun, diversion of APDRP funds, non-achievement of targets, etc. The monitoring was deficient due to weak management information/internal control system and absence of internal audit system for APDRP works. The system of appraisal of performance was also non-existent.

Recommendations

- **The system of formulation of DPRs needs to be streamlined to prevent subsequent changes at execution stage, time and cost overrun and non-accrual of benefits.**
- **The monitoring should be strengthened to ensure detection of deficiencies and to ensure appropriate remedial action at proper time.**
- **System of performance appraisal should be put in place to evaluate the usefulness of execution of projects and utilise the feed back for preparation of DPRs properly for future projects.**
- **Clear title to site should be ensured before execution of contracts. Provision should be made for geographical conditions, weather, *etc.* to avoid delays in project execution.**
- **Time for execution and cost should be firmed in turnkey projects.**

3.3 Information Technology Review of computerised booking in Himachal Road Transport Corporation

Highlights

The Corporation introduced (1995-96) in-house developed software for booking of tickets and loaded it on computers installed at 15 locations under eight Regional Offices at a cost of Rs. 15 lakh.

Important deficiencies noticed during audit scrutiny are given below:

During the last 11 years, the corporation had not formulated any strategic plan for computerisation.

(Paragraph 3.3.8)

There was neither any password policy nor the system of taking back ups regularly.

(Paragraph 3.3.9)

The System did not contain refund module for computerised cancellation of tickets, the depot codes were not fed correctly and the System accepted advance booking even after issuance of way bills.

(Paragraphs 3.3.12 to 3.3.14)

There was lack of consistency in executable programs working in different booking counters. Resultantly, leakage of revenue could not be ruled out.

(Paragraph 3.3.17)

Introduction

3.3.1 The Himachal Road Transport Corporation (Corporation) was established in September 1974, under Section 3 of the Road Transport Corporation Act, 1950. The Corporation introduced in-house developed software for booking of tickets in 1995-96 written in MS COBOL 85 running on SCO Unix 5.0.0.4 operating system. The software is individually loaded on each stand alone computer installed at 15 locations under eight Regional Offices and Workshops at a total cost of Rs.15 lakh (approximately).

Advance booking clerk sends the way bills³ of advance booking to the Current Booking counter 15 minutes before the departure of the bus for current

³ Way bill shows the number of seats booked alongwith details of ticket numbers issued

booking of vacant seats. Both the advance and current way bills are handed over to the conductor after current booking. The daily statement of booking (depot-wise) is sent to the accounts section for inter depot adjustment.

On line⁴ booking was assigned (April 2006) to a private firm, Shogi Communication Limited (SCL), Shimla in respect of 10 seats of Volvo/Deluxe buses plying on Delhi-Shimla and Delhi-Manali routes. The SCL stops booking four days prior to date of journey and way bill of the concerned bus is faxed on the same day for advance booking to Head Office, Shimla and concerned Regional Managers.

Organisational set-up

3.3.2 The management of the Corporation vests in the Board of Directors. The Managing Director is the Chief Executive. He is assisted in his day to day activities by the Chief General Manager.

The operational area of the State has been divided into four divisions (Shimla, Mandi, Dharamshala and Hamirpur) which are headed by the Divisional Managers. The divisions were further divided into 23 Regional Offices (RO) which are headed by Regional Managers. There are four workshops (Taradevi, Parwanoo, Mandi and Jassur) for repair and maintenance of vehicles which are headed by the Managers (Technical).

The Divisional Manager (IT) is overall in charge of computerisation in the Corporation.

Objectives of computerised booking

3.3.3 The main objectives of switching over to computerised booking from the manual booking system were to:

- exercising effective monitoring control;
- increase computerised booking to control leakage of revenue; and
- provide facility of advance booking to general public.

Scope of audit

3.3.4 The IT Audit of computerised booking was conducted during January and March 2007. The test check of records for the period 2006-07 was carried out in seven³ out of 15 computerised booking counters, selected on random basis.

Audit objectives

3.3.5 Objectives of the IT Audit were to evaluate:

- reliability, integrity and authenticity of the data;

⁴ www.Himachal.nic.in/hrtc and www.himachalhotels.in

³ Shimla, Manali, Palampur, Baijnath, Dharamsals, Chandigarh & Delhi

- availability of the data;
- safety and security of data; and
- IT environment in various booking counters and availability of related documentation.

Audit criteria

3.3.6 The audit criteria used for the IT audit were :

- the IT best practices; and
- the business rules for the charging of fares.

Audit methodology

3.3.7 The methodology adopted for attaining audit objectives with reference to audit criteria was as under:

- review of agenda and minutes of meetings of the Board of Directors (BODs) and Committee constituted by the BODs; and
- study of the computerised system.
- Before commencing audit, the audit objectives, criteria and scope were discussed (February 2007) with the Divisional Manager (IT) in an entry conference. The audit findings were discussed (March 2007) with the Divisional Manager (IT) in an exit conference.

Audit findings

General controls

Absence of planning

3.3.8 The Corporation had not formulated a strategic plan for computerisation. The Management stated (March 2007) that it had decided to computerise all the Regional/Divisional Offices in the first phase but no time schedule was fixed by the Management. In the second phase, it had planned to start Network Advance/ Current Booking through telephone lines. In the third phase, all the Divisional/ Regional Offices would be placed on WAN⁵ and current reservation would be computerised at all the bus stands. The Corporation had computerised only advance booking at 15⁶ locations in eight⁷ out of 27 Regional Offices and Workshops in a span of 11 years.

Due to deficient planning, the Corporation could computerise advance booking only in eight out of 27 Regional Offices and Workshops in 11 years.

⁵ Wide Area Network

⁶ Delhi, Himachal Bhawan - Delhi, Chandigarh, Chamba, Mclodganj, Dharamsala, Kangra, Palampur, Baijnath, Kullu, Manali, Lakkar Bazar- Shimla, The Mall- Shimla, ISBT- Shimla, Haridwar

⁷ Kullu, Nahan, Parwanoo, Palampur, Baijnath, Dharamsala, Chamba, Shimla (Local)

IT security policy and Business Continuity Plan

There was neither any password policy nor there was system of taking back up regularly.

3.3.9 No password policy has been framed by the Management. Passwords are not being changed by the users at a regular interval which may lead to risk of mis-use of password.

There is no system to take continuous back up of data which may lead to loss of data on sudden crash of the system.

Though the Management stated that weekly back ups were taken on floppy disks but the same did not support by the fact that the data could not be restored after a sudden crash of system at Dharamshala, Kangra, Mclodganj, and Palampur booking counters. The booking clerks of those locations deposited cash for that period either on the basis of manual records or on approximate basis without any detail of cash statement.

Documentation

3.3.10 Proper documentation helps in trouble free operation and maintenance of the system. The User Manuals, Operation Manuals and System Manuals are not available.

No documentation of the Feasibility Study Report, User Requirement Survey (URS), System Requirement Survey (SRS), System Design and Documentation (SDD) were available on record.

System shortcomings

The system had shortcomings such as failure to calculate fare as per distance, absence of refund module, acceptance of advance booking even after issue of waybills, etc.

Inability of the system to calculate fare as per distance

3.3.11 Fare between two places is levied on kilometers basis (except Chandigarh and Delhi). It is fixed by the concerned State Governments from time to time for their territory on the basis of hilly/plain areas and type of bus (Ordinary/Express/Semi Deluxe/Deluxe/AC, etc.).

It was noticed during audit that the provision for calculating the fare on the basis of distance had not been incorporated in the system and the fare was manually fed by the booking clerks. This resulted in disparity in fare charged between two stages ranging between Re. 1 and Rs. 70 on the same route⁸.

Non-incorporation of refund module

3.3.12 In-charges of Unit Offices (UOs)/ Central Booking Agencies (CBAs) are entitled to refund the advance booking fare subject to the condition that when tickets are submitted prior to four hours, within four hours prior to departure of bus and within four hours after departure of the bus by deducting 10, 25 and 50 per cent, respectively of cost of the ticket.

Audit revealed that no module was incorporated in the system for computerised cancellation of tickets. It was noticed that refund amounting to

⁸ Shimla to Kangra: Advance booking, Bus No. 14 Rs 185 and Current Booking, Bus No. 1 Rs. 172

Rs.1.19 crore (in five units⁹ test checked) was made during the period from 2002-03 to 2006-07 (up to January 2007) on cancellation of advance booking/tickets by the concerned booking clerks manually without following the prescribed procedure. Further, in some cases time of refund was also not recorded on the refund application form to restrict the ceiling of refund admissible.

Wrong accountal of income due to incorrect depot codes

3.3.13 During test check of daily cash deposit schedule of Manali and Kullu booking counters, it was noticed that depot codes were not fed correctly by booking clerks due to which, the System generated faulty reports and all inter unit adjustments of computerised booking income was done manually by Accounts Section.

System accepts advance booking even after issuance of way bill

3.3.14 It was noticed that though the advance booking is stopped 15 minutes before departure of the bus, the System accepts booking till departure time of the bus and even after issuing of way bill. This may lead to issue of duplicate tickets against the same seat number which may not only result in chaos in the bus but also loss of business.

The Management stated that it was up to the booking officials to conduct the booking or not. Even if the booking official books the tickets, he has no other way except depositing the cash. The plea is not tenable as the System should not carry out booking after issue of way bill.

Non-updation of the System to provide free referral transport to the poor patients

3.3.15 The State Government introduced (January 2004) a scheme for free referral transport facility to the poor patients including an attendant. It was noticed in IT audit that the System had not been updated so far to accept booking in respect of such patients under this scheme depriving poor patients of the intended benefit.

Non-providing of discount for one month's advance booking through the System

3.3.16 The Corporation implemented (September 2004) the Government's decision (July 2004) for providing 25 *per cent* discount for one month's advance booking. It was noticed that the System was not updated for allowing such discount on advance booking resulting in non-extension of benefit to the consumers. Thus, the objective of attracting more passengers by allowing discount on one month's advance booking was not achieved.

⁹ *Regional Manager, Baijnath and CBAs: Kullu & Manali, Shimla, Chandigarh and Delhi*

System management

Lack of change management procedure

There was lack of consistency in executable programs working in different booking counters.

3.3.17 An organisation should ensure consistency in executable program used in different units especially for the Systems used to collect revenue. The same program should work at all places. Audit noticed lack of consistency in executable programs working in different booking counters. Resultantly, leakage of revenue could not be ruled out as different programs were running in different counters. In the absence of uniformity in program at all locations, the chances of a booking clerk clouting with a programmer to misappropriate revenue could not be ruled out. On change of fare by any State, the Systems at all the counters of the organisation are also not updated simultaneously leaving loopholes in revenue collection.

The System generates daily cash deposit schedule (Form B) that shows depot-wise fare collected in respect of each State distinctly to facilitate inter-unit booking and payment of passenger fare for those States in which tax is paid on the basis of passengers' income. It was noticed in IT audit of the computerised booking system at CBA, Kullu and Manali that the System had no field for charging Uttranchal State fare separately. The fare of Uttranchal State was being charged with the Uttar Pradesh fare. Thus, the System was generating wrong information and failed to deliver the desired results. The System not only fails to calculate the fare of Uttranchal State and Uttar Pradesh State separately but this may also lead to wrong payment of passenger tax as the passenger tax of Uttranchal State is paid on the basis of passenger income (*i.e.* 21 per cent of basic fare collected by the concerned unit) and Uttar Pradesh tax is paid on kilometers (kms) basis. The matter was reported to the Management (February 2007); their reply is awaited (August 2007).

To comply with Sub-section 3(C) of Section 146 of the Motor Vehicle Act, the BODs approved (May 2003) a scheme to create Passenger Accident Insurance Fund (PAIF) to meet out all expenses relating to bus accidents and this scheme was implemented with effect from 1 August 2003. For this purpose, additional charges were to be levied by issuance of separate tickets of the denomination of Re.1 and Rs.2 in respect of passengers traveling for 51 kms to 100 kms and more than 100 kms respectively. This was also to be ensured in the computerised booking.

Test check of records of Palampur booking counter revealed that the System was not levying additional charges in nine routes¹⁰ on account of insurance of passengers who traveled more than 50 kms in the Corporation's buses. This resulted in recurring loss to the Corporation since August 2003.

¹⁰ Shimla:3 routes, Pathankot:3 routes; Nayagram:1route ; Katra: 1 route and Chamba:1 route

Due to damage of Gagger bridge, the Corporation directed (August 2006) all the Divisional Managers to charge additional fare of Rs.4 per passenger with immediate effect for ordinary buses plying to and fro Delhi via Rajpura from different locations of the State. During test check of records of Baijnath unit, it was noticed that the unit failed to charge additional fare of Rs.4 per passenger for three buses plying for Delhi via Rajpura resulting in loss to the Corporation from 31 August 2006 to 15 February 2007.

Increment in bus fare by Uttaranchal Transport Department from 41.68 to 45 paise per passenger per km for plain area with effect from 8 July 2005 was made effective by the Corporation from 30 August 2005 resulting in less charging of enhanced fare.

The orders of Secretary, Transport, Government of Jammu & Kashmir (14 December 2005) levying 10.5 *per cent* surcharge in respect of High Speed Diesel (HSD) driven vehicles after merging the basic fare and surcharge in respect of the existing notified passenger fare subject to the rounding off to the nearest 25 paise was circulated by the Management on 12 January 2006 resulting in less charging of enhanced fare.

The Corporation decided (December 2002) to impose user charges on passengers traveling in Corporation's buses operating on the National Highway-1 (NH-1) on the basis of Haryana Transport Department notification dated December 2002 with immediate effect. These charges were to be imposed in addition to the fare as per the rates detailed below:

| Distance | Rupee/Rupees |
|--------------------|---------------------|
| 1 Km to 15 Kms | Nil |
| 16 Kms to 25 Kms | 1 |
| 26 Kms to 75 Kms | 2 |
| 76 Kms to 125 Kms | 3 |
| 126 Kms to 175 Kms | 4 |
| 176 Kms and above | 5 |

Test check of records in three¹¹ booking counters revealed that these booking counters failed to impose user charges on the passengers in 23 routes plying on NH-I on Chandigarh - Delhi route at the rate of Rs.5 per passenger and Chandigarh - Haridwar (via Ambala) route at the rate of Rs.2 per passenger. This resulted in non-realisation of user charges and consequent loss to the Corporation from December 2002 to February 2007. The matter was reported to the Management (February 2007); their reply is awaited (August 2007).

¹¹ Kullu, Manali and Palampur

Other points of interest

Excess payment of passenger tax

3.3.18 The Chandigarh Administration fixed (January 2006) the maximum rate of fare for stage carriages plying in the Union Territory of Chandigarh as Rs.5 per passenger per trip irrespective of the distance travelled. The passenger tax for Chandigarh area is paid to the Excise and Taxation Officer, Chandigarh, by the concerned units on the basis of passenger fare collected from Chandigarh area at the rate of 35 *per cent* of the basic fare.

It was observed that though the Corporation charged fare for Chandigarh area at the rate of Rs.5 per passenger through computerised booking, the fare had been charged at the rate of Rs.9 per passenger in manual booking due to non-availability of tickets of Rs.5 for Chandigarh area. Adjustment of total fare had been made by less charging of fare of Rs.4 per passenger from other States so that the total fare remains the same. During January 2006 to January 2007, 11,49,700 tickets of Rs.9 denomination for Chandigarh area were consumed by different units test checked in audit. On the total collection of Chandigarh fare of Rs.1.03 crore, the Corporation had to shell out 35 *per cent* *i.e.* Rs.26.83 lakh to the Excise and Taxation Officer, Chandigarh as tax.

Less charging of fare in comparison to Special Road Tax paid

3.3.19 It was observed that input controls were not ensured by the Corporation. For example, distances fed in the computer should be counter checked with the distance for which Special Road Tax (SRT) is to be paid. Lack of input control led to loss of Rs.1.88 lakh to the Corporation from May 2003 to January 2007 due to non-charging of fare as per distance on which SRT was payable as detailed below:

- During test check at Palampur unit, it was noticed that the unit paid SRT for two routes plying from Palampur to Shimla (via Mandi and via Panchrookhi) for 252 and 260 kms whereas through the booking system, it charged fare for only 243 and 251 kms respectively. Thus, the Corporation either suffered a loss of Rs. 6 per passenger on these routes or paid extra SRT of Rs.1.21 lakh from May 2003 to January 2007.
- During test check at Baijnath unit, it was noticed that the unit paid extra SRT for two routes plying from Baijnath to Shimla (via Bharol and via Hamirpur) for four and six kms respectively in comparison to the fare charged from the passengers. Due to non-realisation of fare on the basis of SRT paid, the Corporation suffered a loss of Rs.3 and Rs.5 per passenger on two routes respectively and or paid extra SRT of Rs.0.67 lakh from May 2003 to January 2007.

The matter was reported to the Corporation/Government in June 2007; their replies are awaited (September 2007).

Conclusion

Though the Corporation has done a commendable work in in-house development of this software, the System has certain limitations. Only major bus stands have been covered under this project though the System is in use for more than 11 years. There is no documentation of the source code/ program to ensure business continuity. Further, being operated on stand alone machines, the System is vulnerable to loss of data and cash on crash of machines. Operation of different programs at different locations also makes it vulnerable to misappropriation of funds. At certain places, the System failed to generate desired reports leading to non-achievement of desired objectives.

Recommendations

- System should be reviewed with a view to incorporate all the business rules of the Corporation. Further, it may be ensured that same version of software is installed at all the locations.
- Organisation wide back up policy and password policy should be devised for ensuring IT security.
- Management Information System and reporting features of the System need to be strengthened for effective monitoring.