## **CHAPTER-III**

## REVIEW IN RESPECT OF STATUTORY CORPORATION

# Fuel management in Madhya Pradesh State Electricity Board

#### **Highlights**

Madhya Pradesh State Electricity Board has three thermal power stations viz Amarkantak Thermal Power Station at Chachai, Satpura Thermal Power Station at Sarni and Sanjay Gandhi Thermal Power Station at Birsinghpur. The combined installed capacity of these power stations was 2,272.5 mega watt.

During the five years up to 2003-04, the three thermal power stations received 73.30 lakh tonnes of coal less than their requirement which resulted in loss of generation of 570 million units with consequential loss of revenue of Rs.114 crore.

(*Paragraph 3.4.1*)

The Board incurred an extra expenditure of Rs.24.04 crore on procurement of coal due to payment at higher rates than that notified by the Government of India.

(*Paragraph 3.4.4*)

The Board suffered a loss of Rs16.45 crore due to non enforcement of joint sampling and payment of coal on declared grade against lower grade of coal received.

(*Paragraph 3.4.5*)

Due to low thermal efficiency there was an excess consumption of heat aggregating 2.74 million kilo calories resulting in excess consumption of coal valued at Rs.491.54 crore.

(Paragraph 3.5)

The Board did not raise claim for reimbursement of cost of stone/shale and proportionate transportation cost (Rs.1.06 crore) thereon.

(Paragraph 3.7.2)

The Board did not pursue cases of missing/diverted wagons of coal valued at Rs.50.46 crore with Railways.

(*Paragraph 3.7.3*)

During 1999-2004, ATPS and STPS consumed 39,740.66 kilolitres of oil in excess of prescribed norm resulting in extra expenditure of Rs.59.62 crore.

(Paragraph 3.8.1)

The Board incurred extra expenditure of Rs.18.55 crore due to consumption of costlier fuel.

(*Paragraph 3.8.3*)

## Introduction

3.1 Madhya Pradesh State Electricity Board (Board) has three thermal power generating stations viz ATPS<sup>27</sup> at Chachai (290 MW), STPS<sup>28</sup> at Sarni, (1,142.50 MW) and SGTPS<sup>29</sup> at Birsinghpur (840 MW). These power stations require coal, light diesel oil (LDO) and high speed diesel oil (HSD) for the boilers to produce steam for operation of turbines and generators.

Coal and oil constituted 48 per cent of total generating cost of ATPS, 67 per cent of STPS, and 46 per cent of SGTPS. While the Board received coal from Western Coal Fields Limited (WCL) and South Eastern Coal Fields Limited (SECL), LDO and HSD were procured from oil companies in public sector.

# Organisational set up

3.2 A fuel section at the head office of the Board headed by the Executive Director (Operation & Maintenance) Generation was looking after the linkage, procurement and movement of coal, award of agency contracts, monitoring of quality of coal and related matters. Procurement of secondary fuel –that is furnace oil, light diesel oil and high speed diesel oil –was arranged by the Chief Engineer (Stores & Purchase) Generation.

### **Scope of Audit**

3.3 A review on the Fuel management of the Board covering 1992-1997 in respect of Satpura Thermal Power Station had been incorporated in the Report of the Comptroller and Auditor General of India (Commercial), for 1996-97. The review was discussed (June 1999) by the Committee on Public Undertakings (COPU). Action taken report on COPU's recommendations was awaited (June 2004).

The present review conducted during December 2003 to June 2004, covers the aspects relating to requirement, linkage, transportation, receipt and consumption of coal and oil and related matters in respect of STPS, ATPS and SGTPS. The

<sup>&</sup>lt;sup>27</sup> Amarkantak Thermal Power Station

<sup>&</sup>lt;sup>28</sup> Satpura Thermal Power Station.

Sanjay Gandhi Thermal Power Station.

review is the outcome of test check of records at these three power stations and at the head office of the Board at Jabalpur, during five years ended March 2004.

The audit findings were reported to the Government/Board in August 2004, with a request to attend the meeting of Audit Review Committee for State Public Sector Enterprises (ARCPSE), so that the views of Government/management were taken into account before finalising the review. The meeting of ARCPSE was held on 4 October 2004. Government was represented by the Additional Secretary, Energy Department and the Board was represented by Member (Generation) and Chief Engineer (Generation). The review was finalised after incorporating Government/Board's viewpoint.

# Procedure for purchase of coal

3.4 The Central Electricity Authority (CEA) fixes targets for power generation in thermal power stations, after considering capacity of the plant, average plant load factor and the past performance. The Board works out coal requirement on the basis of targets fixed and past coal consumption trend of its thermal power stations. The coal requirement so assessed is conveyed to a Standing Linkage Committee (SLC), which decides quantity of coal supply to thermal power stations on quarterly basis.

To meet the requirement of the coal at STPS and ATPS, the Board entered into an agreement with Western Coalfields Limited (WCL) in May 1985 (effective from 1 July 1985). This was initially valid for a period of one year, with the condition that it would remain in force till the time mutually agreed to by both the parties. As such, the said agreement is still in force. Since its formation by division of WCL in 1986, SECL<sup>30</sup> had been following the agreement. For SGTPS which was commissioned in 1993, no specific agreement was made, but provisions of the 1985 agreement were made applicable by subsequent discussion between the Board and WCL.

#### Coal linkage

Receipt of less than the required coal resulted in loss of generation of 570 MUs with consequential loss of revenue of Rs.114 crore. **3.4.1** The year-wise requirement of coal, allocation made by SLC and the quantity received during 1999-2004 are given in *Annexure-11*. It would be observed from the annexure that the quantity of coal received was always less than the linkage and requirement. During the period 1999-2004, 73.30 lakh MT of coal was received less than the requirement, which resulted in loss of generation of 570 million units with consequential loss of revenue of Rs.114 crore.

Management stated (October 2004) that the Board had no direct control over the linkage allocated by SLC. It also added that less generation could not be attributed solely to less receipt of coal and that other factors like transportation constraints, breakdowns of feeder arrangements etc. were also responsible for coal shortage.

South Eastern Coalfields Limited

The reply was not tenable because the breakdowns and transportation constraints could have been avoided by proper maintenance and planning.

# Pricing of coal procured

**3.4.2** The price of coal of various grades and specifications was regulated by the Government of India (GOI), Ministry of coal (MOC) under Essential Commodities Act, 1955. GOI amended the Colliery Control Order, 1945 from 22 March 1996. Accordingly, A,B,C and washery grades of coal and D to G grades were decontrolled with effect from April 1996 and January 2000 respectively and Coal India Limited (CIL) was authorised for fixing the rates on behalf of its subsidiaries. The agreement between the Board and WCL, however, provided for fixed rate for each grade of coal and bonus or penalty were applicable for increase or decrease in heat value of each grade on a sliding scale.

## Payment of higher price

**3.4.3** After decontrol of coal prices, CIL declared some of the mines as listed mines in SECL, and notified separate prices for the coal produced from these listed mines, which was higher than the price of long flame coal.

Payment for the coal received, without ascertaining the parameters, resulted in extra expenditure of Rs.64.29 crore.

The payment of Rs.64.29 crore (ATPS:Rs.57.56 crore and SGTPS: Rs.6.73 crore) at higher rates was made without analysing the quality of coal supplied by the coal companies.

Management stated (October 2004) that the Board paid the price as per the price notification. The reply was not tenable since the Board did not analyse the coal to ensure that the parameters of coal specified in price notifications had been met.

#### Extra expenditure due to purchase of coal at higher price

**3.4.4** The Board agreed in November 1994 to pay an additional price of Rs.179 per tonne for the coal produced on Sundays/holidays by WCL, in contravention of price notifications issued by GOI/CIL. This had resulted in additional payment of Rs.12.61 crore for 7.04 lakh tonnes of coal received during 1998-2001. The Board, however, discontinued (October 2000) the payment of the additional price, though WCL had been billing it regularly. Board stated (October 2004) that there was coal crisis at STPS, and coal transportation from farther mines was costly; hence it agreed for payment of additional price for coal produced and supplied on Sundays and holidays. It challenged the issue in court of law and the same has been pending in Supreme Court.

Additional payment of Rs.12.61 crore for coal supplies was made in contravention of GOI's price notifications.

Further, the Board agreed (February 1995) to pay Rs.65 per tonne more than the price notified by GOI/CIL for 25,000 MT of coal per month to be supplied by WCL at STPS from Tawa and Chhattarpur mines.

There was an extra payment of Rs.11.43 crore due to payment at rates higher than notified by GOI.

As a result, it incurred an extra expenditure of Rs.11.43 crore on 17.58 lakh tonnes of coal received during 1998-2001. As coal price was fixed by the GOI, the extra payment made to WCL was unwarranted. The extra cost claimed by WCL, for subsequent period, was not paid by the Board. The Board, however, filed a writ petition (No. 3238 of 2000) and the High Court directed (August 2002) the appointment of a committee of higher officials of GOI and GOMP to settle the issue by mutual consultation.

The Board stated (October 2004) that there was coal crisis in STPS and to minimise the transportation cost, payment on cost plus basis was agreed.

The reply was not tenable as the payment was to be made only on administered price. Further, committee of officials, as directed by the High Court, was not constituted so far (October 2004).

# Failure to enforce the provisions for joint sampling

**3.4.5** The fuel supply agreement (FSA) provided for raising of bills by supplier on the basis of declared grade of coal subject to adjustment, based on joint sampling.

Non-enforcement of joint sampling of coal, provided in FSA of 1985, led to extra payment of Rs.16.45 crore. Audit observed that in case of Tawa, Chhatarpur I & II mines, the bills raised by supplier at the rate of declared grade 'D' were paid by STPS. In sampling, the analysed grade was always found as grade 'E' resulting in extra payment of Rs.9.23 crore during 1999-2004. Similarly, during 2002-04 in respect of Pathakhera I & II mines, the bills raised by WCL at declared grade 'D', were paid by the Board, while the coal received was mostly of grade 'E'. This resulted in extra payment of Rs.7.22 crore. Thus, failure to enforce joint sampling, and payment for declared grade resulted in extra payment of Rs.16.45 crore.

The Board's reply (October 2004) that various meetings were held to finalise the joint sampling protocol, was not tenable because provisions of joint sampling were already available in the FSA of 1985.

#### Avoidable payment of interest due to belated payment of coal bills

**3.4.6** The FSA provided for payment of coal bills within seven days of their receipt by the purchaser. In the event of delay in payment, the supplier was entitled to charge interest at the rate payable on cash credit with State Bank of India on the sum outstanding for the period beyond seven days.

Non-payment of coal bills in time resulted in avoidable payment of interest.

Audit observed that the Board was not making payment within seven days and WCL claimed interest of Rs.81.80 crore (up to February 2001), which was not, however, paid by the Board. As per the award (September 2003) of the umpire, the Board had to bear the liability of interest of Rs.12.63 crore for earlier period. The figures of penal interest for subsequent period and actual payment made were not made available to Audit.

# Thermal efficiency

**3.5** The thermal efficiency of a power station is an index which measures the efficiency of conversion of thermal energy to electrical energy. It is the output of electrical energy denoted as a percentage of heat energy contained in the fuel used in generation. The thermal efficiency of ATPS and STPS during the five years up to 2003-04 is given in *Annexure-12*.

Audit observed that against the projected efficiency of ATPS (unit I: 35.57, unit II: 41.09), and STPS (unit I: 38.14, unit II: 32.95, unit III: 35.51), the efficiency achieved varied from 17.57 (ATPS: unit I) to 32.49 *per cent* (STPS: unit III).

There was excess consumption of coal of Rs.491.54 crore due to low thermal efficiency in power generation. As per the above thermal efficiency, the Power houses should have consumed 2,418 kilocalories (Kcal), 2,093 Kcal (ATPS I and II), and 2,255 Kcal, 26,110 Kcal and 2,422 Kcal (STPS I, II and III) for generation of one unit of electricity. However, the power houses consumed heat varying from 2,647.16 Kcal (STPS III) to 4,895 Kcal (ATPS I) due to lower thermal efficiency. The excess consumption of heat aggregating 2.74 million Kcal resulted in extra expenditure of Rs.491.54 crore.

Management stated that the low thermal efficiency was mainly due to the power houses being old, frequent breakdowns, non-running of units at designed guaranteed parameters, degraded thermal efficiency of STPS II, receipt of coal with low calorific value and partial load shedding.

The reply was not tenable because annual maintenance of power houses was done regularly and the norms were fixed keeping in view the above factors.

### Transportation of coal

3.6 Coal was transported to the power houses by rail, road and own conveyor belt. The quantity of coal transported by the three power stations during the five years ended 31 March 2004 is given in the *Annexure-13*. While the entire quantity of coal received in ATPS and SGTPS was transported only by rail, STPS got it transported by rail, road and conveyor belt.

# Payment of excess freight

**3.6.1** Supply of coal to power houses was governed by the agreement between WCL and the Board under which the coal companies would comply with all documentation formalities laid down by the Railways to ensure that freight was charged at train load rates only and any failure in this regard leading to payment of higher freight charges would be on sellers' account.

Payment of freight on wagon basis, instead of rake basis, led to extra expenditure of Rs.51 lakh. During 1999-2002 coal received in STPS was billed by Railways at wagon load rate instead of at train load rate which resulted in payment of excess freight of Rs.51 lakh.

The Board unilaterally deducted the amount from the pending coal bills, but WCL did not accept the same stating (July 2002) that there was no failure on its part in completing the documentation formalities and it requested the Board to take up the matter with Railways who were the carriers for the Board.

## Avoidable payment of demurrage charges

Delay in unloading of coal resulted in payment of demurrage of Rs.2.88 crore. **3.6.2** STPS was equipped with wagon tipplers with a total unloading capacity of 3.5 rakes per day. Railways allowed free time of 11.3 hours per rake for unloading and if the rakes were detained beyond this time, demurrage was payable to Railways. Audit observed that during 1999-2004, there was delay by the Board in clearing the rakes which led to payment of demurrage of Rs.2.88 crore to the Railways.

The Board stated (October 2004) that the incidence of demurrage was due to oversize, lumpy and wet coal supplied by the coal companies, and also due to bunching of rakes.

The reply was not tenable as these problems could have been solved had the matter been taken up by it with the coal companies and Railways.

In SGTPS, the contract for unloading of coal was awarded with the liability of demurrage charges to be borne by the contractors. However, demurrage charges of Rs.27.24 lakh were not recovered by the Board from contractors during the above period and the contracts had also expired.

The Board stated (October 2004) that civil suits were filed against three contractors and in respect of one contractor, the amount would be adjusted from the amount retained by it.

# Weighment of coal

Transit loss of coal of Rs.59.60 crore was booked by the Board, despite its having no weighment facilities at power houses. 3.7 Transit loss of coal implies difference between the billed quantity and actual quantity of coal received at power stations. The coal supplied by the coal companies is weighed on weighbridge in the power stations. The rail weighbridge in ATPS was not in working condition since 1998-99 and there was no rail weighbridge in SGTPS since the beginning of the unit. As the rail weighbridge installed (June 2003) in SGTPS was not functioning properly, it was recommissioned in February 2004 after rectification of the defects. Audit observed that despite the above position, the Board booked transit losses of Rs.59.60 crore (SGTPS: Rs.57.29 crore and ATPS: Rs.2.31 crore) during the five years ended March 2004. The basis and the calculation of transit loss particularly when there was no weighment system in the power houses, were not on record.

Further, inspite of availability of weighing arrangement at STPS, coal valuing Rs.1.30 crore was short received during 1999-2004 through un-weighed wagons. Though the claims raised by the Board were not accepted by WCL, it continued to unilaterally make deductions from coal bills.

### Physical verification of coal

**3.7.1** The Board had a system of conducting annual physical verification of coal stock in the power stations.

During the physical verification conducted at the end of each year during 1999-2004, shortage of 11.77 lakh tonnes of coal valued at Rs.82.42 crore (STPS: 5.90 lakh tonnes, ATPS: 0.24 lakh tones and SGTPS: 5.63 lakh tonnes) was noticed in the three power stations, which was written off by the Board without conducting any investigation or fixing responsibility therefor.

The Board stated (October 2004) that up to 2002-03 the physical verification was conducted annually; however, from 2003-04, as directed by Madhya Pradesh Electricity Regulatory Commission (MPERC), quarterly physical verification was taken up. The shortage indicated in the report was due to transit and stacking losses. MPERC had permitted transit loss of three per cent since 2001. Prior to this, the shortage was calculated on the basis of physical verification and

consumption of coal, duly accounting stones, shales etc. The reply was not tenable as in the case of SGTPS, the Board, had written off

Shortage of coal of 1.72 lakh tonnes valued at Rs14.37 crore was written off in excess of the norms laid down by **MPERC** without investigation.

shortages at the rate of four per cent in 2001-02, five per cent in 2002-03 and four per cent in 2003-04. Compared with the norms of MPERC, excess shortages written off by the Board worked out to 1.72 lakh tonnes valued at Rs.14.37 crore.

#### Receipt of stone/shales with coal

**3.7.2** According to the agreement with WCL and decision (November 1986) taken by GOI, WCL was to reimburse the cost of coal equivalent to the weight of stone and shales contained in the coal received and also proportionate transportation charges thereon, to the Board. The Ministry of Energy directed (January 1987) Coal India Limited to ensure that no stone was supplied to any power stations alongwith the coal.

The management of ATPS and SGTPS reported that during 1999-2004 the coal received from SECL contained 1.17 lakh tonnes (ATPS: 17,931 tonnes and SGTPS: 99,189 tonnes) of stones/shales, for which the Board did not raise any claim.

Further, the Board also failed to prefer claims for Rs.1.06 crore (ATPS: Rs.61 lakh and SGTPS: Rs.45 lakh) being the proportionate transportation charges on stones and shales.

The Board stated (October 2004) that no claim towards weight of stones/shales was lodged by ATPS but monthly details for refund was intimated to SECL, which were refuted by them. In respect of SGTPS, no claim was raised, as SECL denied the existence of FSA. The reply was not tenable because the decision was taken by GOI (MOE) in the meeting held in November 1986 to reimburse the cost of stone/shale and proportionate transportation charges thereon, by the suppliers.

# Non-settlement of claims of missing/diverted wagons

**3.7.3** Coal rakes were, sometimes, diverted by Railways to other consignees as per their convenience. In such cases the Board, being the original consignee, was to lodge claim with the Railways for the cost of coal.

Claims of Rs.50.46 crore against missing/ diverted coal wagons were pending for settlement.

Audit observed that in respect of SGTPS, the Board's claim (226 cases) for Rs.50.46 crore (inclusive of cases relating to period prior to March 1999 valuing Rs.8.07 crore) were pending for settlement due to lack of pursuance.

The Board stated (October 2004) that (a) the claims which were not settled within three years could be referred to the Railways Claims Tribunal, Bhopal, (b) as per the scheme started (August 2004) by South Eastern Railways (SER), the entire cost of the coal along with 50 *per cent* of the court fee would be reimbursed by SER.

As no action, under the scheme, was initiated by the Board, the necessity to decide quickly on the SER's offer is stressed.

# Receipt of coal with high moisture content

**3.7.4** As per agreement with coal company, moisture content should not exceed 3 to 5 *per cent* of the coal supplied to ATPS. During 1999-2004, excess moisture was noticed by the plant management in the coal supplied by SECL.

Audit observed that there had been loss of generation of 129 million units of energy valued at Rs.25.80 crore in ATPS during 1998-2002 due to receipt of wet coal.

There had been loss of generation of 129 MU valued at Rs.25.80 crore due to receipt of wet coal.

#### Procurement and consumption of oil

**3.8** Oil is procured from Indian Oil Corporation Limited (IOCL), Bharat Petroleum Corporation Limited (BPCL) and Hindustan Petroleum Corporation Limited (HPCL). There is, however, no standing agreement between the suppliers and the Board. The thermal power stations intimate the periodical requirement of oil to the Chief Engineer (Store and Purchase) Generation, who issues rate contract orders after observing the tender formalities.

During test check of the records relating to procurement and consumption of oil, the following points were noticed in audit.

## Excess consumption of oil

**3.8.1** Oil is required for ignition and to give support to furnace stability in thermal power stations. Central Electricity Authority (CEA) had fixed a norm of 3.5 millilitre (ml) fuel oil for generation of one unit (Kwh) of electricity by the power stations. Quantity of electricity generated, fuel consumed, and excess quantity of fuel consumed by those units of ATPS and STPS which could not achieve the above norm during 1999-2004 is given in *Annexure-14*.

Thermal power stations consumed oil worth Rs.59.62 crore in excess of norm.

Audit observed that consumption of oil was higher than the norm during 1999-2003, ranging from 4.58 *per cent* in STPS (2002-03) to 769.99 *per cent* in ATPS (2001-02) resulting in excess consumption of 39,740.66 kilolitres (KL) of oil valued at Rs.59.62 crore.

The Board stated (October 2004) that the above norms were applicable for thermal power stations of National Thermal Power Corporation, and that excess consumption was due to aged plants, wet coal, outage of auxiliaries etc. It, however, achieved an over all average of 3.3 ml/Kwh.

The reply was not tenable, since the excess consumption could have been avoided by taking remedial action and the norms fixed by CEA were applicable to the Board also.

# Non-availing of concessional rate of commercial tax

**3.8.2** State Government extended (May 2001) concessional rate of six *per cent* of Commercial Tax on HSD, LDO etc. for their use as raw material, in generation of power during 2001-02. IOCL, Itarsi also confirmed the concessional rate of tax within the state of Madhya Pradesh.

The Board suffered a loss of Rs.1.66 crore due to non availing of concessional rate of commercial tax on HSD, LDO. Though plant management took up the matter with the Chief Engineer, (Store & Purchase) Generation, Jabalpur, who was the authority for placing order for oil, no action was taken to avail the concessional rate of tax. As a result, during 2001-02 commercial tax at higher rate (25 *per cent*) was paid by the Board. This led to extra expenditure of Rs.1.66 crore (STPS: Rs.1.30 crore, ATPS: Rs.10 lakh and SGTPS: Rs.26 lakh).

The Board stated (October 2004) that set off on Sales Tax paid on petrol, diesel and lubricants was not allowed by the Sales Tax Authorities. However, the matter was being pursued.

The reply was not relevant because the Board did not avail the concessional rate of tax in 2001-02.

#### Extra expenditure due to consumption of costlier fuel

The Board incurred extra expenditure of Rs.18.55 crore due to consumption of costlier fuel.

**3.8.3** The Board used furnace oil, light diesel oil (LDO) and high speed diesel (HSD) oil as secondary fuel in its power stations and price was the criterion for purchase and consumption. However, during 1998-2003 unit II and III of STPS, consumed 18,557 KL of HSD oil which was costlier than the other fuel oil. This resulted in extra expenditure of Rs.18.55 crore. The reply of the management that HSD was used since commissioning of the plant, was not tenable since boilers were designed to use FO/LDO only.

### Loss due to excess inventory of oil

The Board suffered loss of interest of Rs.6.12 crore due to holding of excess inventory of oil.

**3.8.4** Central Electricity Authority has fixed the norm for holding inventory of oil equivalent to 60 days' consumption. Compared with the norm, the excess inventory held in the three power stations during 1999-2004 ranged from 1.06 months' consumption in ATPS (2003-04) to 3.93 months' consumption in SGTPS (2003-04), resulting in blocking of Rs.40.77 crore and consequential loss of interest of Rs.6.12 crore.

According to quality control manual of Indian Oil Corporation, storage tanks were required to be cleaned at least once in five years. Audit observed that none of the five furnace oil storage tanks was cleaned in STPS since their respective commissioning (1977 and 1984). This resulted in accumulation of sludge of 500 KL which was not disposed of. This led to forgoing revenue of Rs.50 lakh (approximately).

The Board stated (October 2004) that instructions were being issued to take up cleaning of oil tanks and that the matter was being investigated vis-à-vis arrangement of sludge handling. A proposal of IOC to hire oil tanks of the Board on lease was under active consideration which would enable it to operate on zero inventory basis.

# Loss in settlement of old claims

In the absence of foolproof procedure for collection and testing of coal samples, the Board, suffered a loss of Rs.43.62 crore.

3.9 Mention was made in paragraphs 3A.4.1, 4.3 and 4.5 of the Report of the Comptroller and Auditor General of India (Commercial), Government of Madhya Pradesh for the year ended 31 March 1997, about non-recovery of Rs.37.45 crore by the Board. The above cases were referred to an umpire and according to his final award (September 2003), Board had to pay Rs.6.17 crore including interest of Rs.2.84 crore, (instead of recovery of Rs.37.45 crore) which led to loss of Rs.43.62 crore. The Board did not, however, analyse (October 2004) the reasons for getting the adverse award.

Further, according to decision (September 2003) of the umpire, for the transactions up to March 1996, the Board had to bear the liability of Rs.46.03 crore (including interest of Rs.34.00 crore) on account of unilateral recoveries. However, the Board did not take any action on the recommendations made by umpire for prescribing the period for preferring claims, after which they would become time barred and for prompt settlement of disputes. As a result, unilateral recoveries aggregating Rs.460.33 crore (STPS: Rs.266.87 crore, SGTPS: Rs.193.46 crore) on account of grade, and rate differences, shale/stones, punitive freight, etc. made by the Board from coal bills of coal companies for the period up to March 2004 remained unsettled (September2004).

#### Conclusion

Thermal power stations had been suffering loss of generation and revenue due to short receipt of coal against requirement, excess consumption of coal due to its inferior quality and low calorific value, excess payments to coal companies due to payments at rates, terms and conditions different from those notified by the Government of India, payment of higher rates for lower grade of coal, payment of demurrage charges, excess consumption of oil, and holding of excess inventory of oil, etc.

The Board needs to take measures to reduce its generation and revenue loss by ensuring adequate and regular supply of quality coal, strengthening of the working of the quality and inspection wing of thermal power stations, payment to the coal supplier strictly as per the rates and terms and conditions notified by the Government of India/Coal India Limited, prompt reconciliation/adjustment of various claims pending with coal suppliers, and reduction in payment of demurrage charges to Railways.

The matter was reported to the Government (August 2004); their replies had not been received (October 2004).