

## Overview

### 1. Overview of Government companies and Statutory corporations

*Audit of Government companies is governed by Section 619 of the Companies Act, 1956. The accounts of Government companies are audited by Statutory Auditors appointed by the CAG. These accounts are also subject to supplementary audit conducted by the CAG. Audit of Statutory corporations is governed by their respective legislations. As on 31 March 2010, the State of Karnataka had 75 working Public Sector Undertakings - PSUs (69 companies and 6 statutory corporations) and 15 non-working PSUs (all companies), which employed 1.77 lakh employees. The State PSUs registered a turnover of ₹36,369.87 crore for 2009-10 as per their latest finalised accounts. This turnover was equal to 12.19 per cent of State Gross Domestic Product indicating the important role played by the PSUs in the economy. The PSUs had accumulated loss of ₹ 197.93 crore as per their latest finalised accounts.*

#### **Investments in PSUs**

*As on 31 March 2010, the investment (Capital and long term loans) in 90 PSUs was ₹ 54,231.30 crore. Infrastructure Sector accounted for about 58.23 per cent of total investment and Power Sector about 27.97 per cent in 2009-10. The Government contributed ₹ 8,113.61 crore towards equity, loans and grants / subsidies in 2009-10.*

#### **Performance of PSUs**

*The working State PSUs earned a profit of ₹545.78 crore in the aggregate for 2009-10 as per their latest finalised accounts. The major contributors to profit were Karnataka Power Corporation Limited (₹711.05 crore), Mysore Minerals Limited (₹200.54 crore), and The Hutti Gold Mines Company Limited (₹124.71 crore). Heavy losses were incurred by Chamundeshwari Electricity Supply Corporation Limited (₹ 217.15 crore ), Gulbarga Electricity Supply Company Limited (₹ 216.25 crore) and Hubli Electricity Supply Company Limited (₹173.64 crore).*

*Audit noticed various deficiencies in the functioning of PSUs. A review of three years Audit Reports of CAG shows that the PSUs' losses of ₹ 417.48 crore and infructuous investments of ₹ 302.40 crore were controllable with better management. Thus, there was tremendous scope to improve the functioning and enhance the profits. The PSUs can discharge their role efficiently only if they are financially self-reliant. There is a need for greater professionalism and accountability in the functioning of PSUs.*

#### **Quality of accounts**

*The quality of accounts of working companies needs improvement. During the year, out of 70 accounts finalised, the statutory auditors had given unqualified reports for ten accounts, qualified reports for 51 accounts, adverse reports (which means that accounts do not reflect a true and fair position) for seven accounts and disclaimers (meaning the auditors are unable to form an opinion on accounts) for two accounts. There were 106 instances of non-compliance with Accounting Standards in 35 accounts during the year. Reports of Statutory Auditors on internal control of the companies indicated several weak areas.*

#### **Arrears in accounts and winding up**

*Twenty working PSUs had arrears of accounts of twenty accounts as of September 2010. The arrears pertain only to the current year (2009-10). There were fifteen non-working PSUs including seven under liquidation. The Government may consider winding up these non-working companies.*

## 2. Performance reviews relating to Government companies

The Report includes Performance reviews relating to *Working of Karnataka Power Corporation Limited* and *Implementation of Rural Load Management System scheme* by *Electricity Supply Companies*. Executive summary of audit findings is given below:

### ➤ *Working of Karnataka Power Corporation Limited.*

*Power is an essential requirement for all facets of life and has been recognised as a basic human need. In compliance with the Electricity Act, 2003, Government of India prepared (February 2005) National Electricity Policy (NEP) in consultation with State Governments and Central Electricity Authority (CEA) with a view to achieve 'Power for All' by 2012.*

*Karnataka Power Corporation Limited was incorporated on 20 July 1970 under the Companies' Act, 1956, as a wholly-owned Company under the administrative control of Energy Department of the Government of Karnataka (GoK). As on 31 March 2010, the Company had two thermal power stations (1,970 MW), eighteen hydro generation stations (3,637.35 MW), two renewable energy stations (10.56 MW) and one Diesel Generating (DG) plant (127.92 MW) with a total installed capacity of 5,745.83 MW. The turnover of the Company was ₹ 4,397.25 crore in 2009-10, which was equal to 12.09 per cent and 1.47 per cent of the turnover of State PSUs and State Gross Domestic Product respectively. As on 31 March 2010, the Company had employee strength of 6,281.*

#### *Capacity addition*

*Though the installed capacity in the State increased from 7,084.80 MW at the beginning of 2005-06 to 10,387.81 MW at the end of 2009-10, yet the State was not in a position to meet the peak demand. The peak demand, which was 5,949 MW in 2005-06 increased to 8,094 MW in 2009-10 and the deficit which was 6.57 per cent in 2005-06 increased to 12.91 per cent in 2009-10. Even the purchase of power from private producers could not suffice the required demand forcing the State to impose load shedding. The shortfall as compared to required demand increased from 1,326 MU in 2005-06 to 5,059 MU in 2009-10.*

*Against the required capacity addition of 8,050 MW during 2005-10, the actual capacity addition was 3,183.11 MW, leaving a shortfall of 4,866.89 MW. Though 1,644 MW of capacity was planned to be added by the Company (KPCL) during 2005-10, the actual*

*addition was only 861 MW, leaving a deficit of 783 MW.*

#### *Achievement of Power for All by 2012*

*Karnataka Electricity Regulatory Commission (KERC) had forecast (December 2008) peak requirement of 10,120 MW by the end of 2012. In order to meet this demand, the installed capacity required worked out to 14,913 MW. Considering the installed capacity of 10,387.81 MW at the end of 2009-10, the capacity addition required to be commissioned between 2010-11 and 2011-12 worked out to 4,525 MW. The projects on hand, however, would add capacity to the extent of 2,053 MW, still leaving a gap of 2,472 MW. Thus, the primary objective of power for all by 2012 may not be achieved.*

#### *Project management*

*Of the ten projects planned by the Company during 2005-10, only seven were taken up, of which only four were completed and three were under implementation. Of the balance three projects, one project was shelved and the two were yet to be taken up for want of environmental clearance and assured gas supplies. The implementation period of the completed projects was beyond the scheduled period and the time overrun ranged from 1.5 months to 36 months due to delay in supply of materials and commissioning of critical equipments.*

#### *Contract management*

*The Company failed to levy liquidated damages of ₹ 82.85 crore on contractors for delayed completion / supply and also failed to recover excess payment towards duties and taxes. Undue benefit was extended to the supplier of coal due to incorrect interpretation of the term 'pro-rata' while adjusting for coal with excess moisture content.*

#### *Operational performance*

*Life extension works of RTPS Units 1 and 2 were not taken up as per CEA norms though due for replacement or refurbishment. Failure to undertake R&M works of Diesel Generating plant resulted in higher maintenance costs.*

Delay in execution of uprating works in Nagihari Power House resulted in loss of generation of 2,671 MU. The norm for operation and maintenance (O&M) expenditure was exceeded in thermal power stations whereas it was within the norm in hydro stations. Against the average O&M cost of ₹18.20 lakh per MW up to 2007-08 and ₹16.88 lakh per MW thereafter, the actual O&M cost per MW was ₹33.34 lakh, ₹33.78 lakh, ₹34.75 lakh, ₹39.90 lakh and ₹38.52 lakh during 2005-10.

### **Procurement of fuel**

Shortages in lifting of allotted quantity of coal were observed leading to loss of generation valued ₹78.46 crore. Though the thermal power stations had sufficient capacity to unload the rakes within the time allowed by Railways, delay was noticed in clearing the rakes resulting in payment of demurrage of ₹31.30 crore.

### **Consumption of fuel**

Coal valued ₹905.36 crore was consumed in excess of norms specified by the equipment supplier.

### **Deployment of manpower**

The Company had not assessed the required manpower. Excess non-technical staff was observed in hydro stations while there was shortage of technical and non-technical staff in thermal power stations as compared to norms. The salaries and wages paid to excess non-technical staff in hydro stations was to the tune of ₹185.15 crore

### **Auxiliary consumption**

Auxiliary consumption of hydro stations exceeded the norm fixed by CEA and such excess consumption was 528.49 MU valued at ₹29.21 crore. As regards thermal power stations, it was within the norms fixed by KERC / Central Electricity Regulatory Commission (CERC).

### **Plant Load Factor**

The generation and Plant Load Factor (PLF) achieved were far below the designed generation and PLF in thermal power stations. The Company was not able to achieve the norm prescribed by CERC in 2008-09 and 2009-10 due to longer duration of forced shutdown. Though the PLF achieved by RTPS during 2006-10 was above the norm fixed by CERC and national average, it showed a declining trend i.e. from 89.18 per cent in 2006-07 to

80.78 per cent in 2009-10. This was due to ageing of Units, quality of coal, frequent breakdown of Units, running on partial load, back-down instructions from Load Despatch Centre (LDC) and non-achievement of rated parameters.

Bellary Thermal Power Station (BTPS) had not achieved the norm for PLF specified by CERC.

The targets for generation as approved by CEA were achieved by hydro stations.

### **Outages**

The number of hours lost due to planned outages in thermal power stations increased from 2,283.82 hours in 2006-07 to 3,757.25 hours in 2009-10 i.e., from 3.72 per cent to 5.36 per cent of the available hours. The forced outage hours were within the norm of 10 per cent of the available hours fixed by CEA in all the years except 2008-09. In RTPS, 1.65 per cent to 7.45 per cent of the operated capacity remained unutilised resulting in loss of generation of 2,388 MU due to running of Units on partial load and reduced capacity due to their ageing. Loss of generation at BTPS due to operation below the rated capacity was 1,147 MU.

### **Financial management**

The dues receivable from ESCOMs increased from ₹2,525.02 crore at the end of March 2006 to ₹4,032.16 crore at the end of March 2010 due to poor realisation resulting in increased dependence on short term loans for meeting operational requirements. The borrowings increased from ₹4,552.40 crore at the end of March 2006 to ₹7,381.97 crore at the end of March 2010 leading to additional interest burden of ₹284.79 crore. As at the end of March 2010, RTPS held spares valued ₹136.43 crore which was in excess of the prescribed guidelines by ₹77.63 crore resulting in locking up of funds and loss of interest of ₹4.77 crore for one year alone.

Although the Power Purchase Agreements empowered the Company to appropriate payments received from ESCOMs first towards outstanding interest and thereafter towards principal dues, the Company failed to do so resulting in accumulation of interest to the extent of ₹1,170.83 crore.

### **Environmental issues**

The Company had exceeded the parameters prescribed by Central Pollution Control Board / Environmental Acts in respect of air, water and noise pollution. As RTPS failed to comply with

*the directions of State Pollution Control Board, it could not avail of concessional rates on water cess leading to extra expenditure of ₹1.16 crore.*

***Conclusion and Recommendations***

*The State is not in a position to achieve 'Power for All by 2012' due to lack of concerted efforts for augmentation of capacity. The project management was ineffective as instances of time overrun were noticed. New hydro projects proposed to be taken up by the Company were either awaiting clearance from MoEF or held up due to local agitation. Renewable Energy Sources in the State also remained underutilised. The operational performance of thermal power stations was sub-optimal due to fixation of generation targets below the available hours, low plant load factor, inefficient fuel management, failure to undertake timely renovation and modernisation and life extension schemes. The consumption of coal was in excess as compared to designed parameters. The poor realisation of dues and consequent accumulation of outstandings from ESCOMs forced the Company to resort to borrowings entailing payment of interest. This had also affected its ability to take up new projects.*

*The review contains eight recommendations:*

*The Company needs to streamline procedures for procurement, acceptance and consumption of coal and strive to improve efficiency;*

*The thermal power stations should strive to improve performance to the level of norms of CERC / KERC and CEA and achieve the specifications prescribed by equipment suppliers;*

*The Company should also analyse / investigate reasons for excess consumption of fuel, higher outage hours, higher auxiliary consumption and other higher operating parameters;*

*The Company needs to take up renovation and modernisation and life extension programmes as per schedule. This would result in optimum utilisation of existing facilities;*

*The Government needs to evolve a long-term strategy for capacity augmentation through its own agencies and by private sector participation;*

*From a long-term perspective there is a need to diversify energy sources and provide clean energy. Development of hydro and renewable energy sources needs to be accorded top priority for energy security;*

*The Government also needs to encourage, adopt and implement Demand Side Management and Energy Efficiency measures in addition to capacity addition; and*

*The Government should consider setting up a task force on priority so that the objective of providing power for all by the end of 2012 is achieved.*

***(Chapter 2.1)***

➤ **Implementation of Rural Load Management System scheme by Electricity Supply Companies.**

*In Karnataka there is a wide gap between demand and supply of power, which affects both irrigation and domestic consumers. To overcome the gap through better demand side management, a scheme called Rural Load Management Scheme (RLMS) was conceived. The main objective of the RLMS was to provide assured hours of power supply to Irrigation Pump (IP) set consumers and 24 hours power supply a day to non-IP consumers. Other benefits such as reduction in peak load, transmission and distribution losses and improvement in tail end voltage were also envisaged under the scheme.*

**RLMS scheme**

*Under the RLMS, a Rural Load Management Unit (RLMU) box is installed on the Low Tension side (output side) of the transformer. The RLMU box comprises of Programmable Logic Controllers (PLC), circuit breaker, modem, electronic meter etc. The main idea behind RLMS is to segregate IP loads on the transformer into two groups. The feeder (11KV) is kept charged for 24 hours in a day. While power supply is given for entire 24 hours to non-IP set consumers, power supply to IP set consumers is regulated by the PLC for specified hours in a staggered manner as per a pre-determined programme. The PLC switches between the two groups alternatively, thereby ensuring assured power supply to IP set consumers.*

**Audit objectives**

*A performance audit review was undertaken in three Electricity Supply Companies (BESCOM, HESCOM and MESCOM) to ascertain whether the RLMS scheme was carefully designed with adequate planning; whether the scheme was implemented economically, efficiently and effectively; whether the intended benefits in reduction of distribution losses and improvement in tail end voltage were achieved; and whether the main objective of providing assured hours of power supply to IP set consumers and 24 hours power supply to non-IP set consumers was achieved.*

**Audit findings**

*The RLMS scheme was taken up in the ESCOMs without proper planning. The scheme was not scrutinized by Technical Audit. The total cost incurred from December 2004 to*

*March 2010 was ₹589.34 crore. In BESCOM and HESCOM system improvement works were taken up by utilizing higher capacity materials than those specified in the policy of the companies resulting in extra expenditure of ₹4.33 crore in test checked divisions. In HESCOM, qualification requirements of tenderers for supply of RLMU boxes were altered after invitation of tenders.*

*Tampering was noticed when power supply was not provided to farmers during May 2007 in test checked feeder. The Vigilance Wing of BESCOM noticed tampering of RLMU boxes during April-May 2008 also as power was not provided to farmers for long hours and non-supply hours were not compensated with power supply in other hours. The power supply position (post April 2008) deteriorated. Power cut in RLMS feeders' resulted in non supply of power during the stipulated time to a group of IP set consumers and such periods of non-supply were not compensated with power supply during some other time of the day.*

*The vicious cycle of power cut in RLMS feeders, non-rotation of timings of power supply and supply during evening hours, led to large scale tampering. The maintenance contractor could not maintain the RLMU boxes being tampered on a large scale. The situation was aggravated by the rising demand-supply gap scenario of power supply. Hence, the scheme, which was modelled to work in a demand-supply gap situation failed in BESCOM and HESCOM. The expenditure made on RLMU boxes in six and five test checked divisions of BESCOM and HESCOM were ₹19.73 crore and ₹8.62 crore respectively, served only limited purpose and was largely wasteful.*

*The incidental benefits of reduction in peak load, reduction in transmission and distribution losses and improvement in tail end voltage were achieved in 20 test checked feeders of three ESCOMs, but the main objective of providing assured hours of power supply to IP set consumers and 24 hours power supply to non-IP set consumers, however, failed in BESCOM and HESCOM. BESCOM stopped implementing RLMS in August 2008, while HESCOM decided in January 2009 not to go ahead with the execution of RLMS in the remaining feeders where work had not commenced.*

*In MESCOM, however, load shedding was not resorted in RLMS feeders. Under extreme conditions, the feeders were treated at par with Urban feeders (minimum power cut). Instances of tampering noticed were attended to by the maintenance contractor. This led to the success of the scheme only in MESCOM, indicating that the scheme was a workable model if the companies provided power supply to IP set consumers as per Government policy.*

*To meet the same objective, BESCO has now embarked upon another scheme called Niranthara Jyothi in which separate lines would be drawn to supply power to IP sets.*

### ***Recommendations***

*All schemes undertaken by the ESCOMs should be scrutinised by Technical Audit so as to assess their viability and sustainability under the then existing conditions.*

*The objective of the companies should be to provide assured hours of power supply to IP set consumers rather than focusing on preventing tampering. This would entail a win-win situation to the consumers and the companies. Proper maintenance of the assets is also a key to the success of any scheme.*

*In view of the success of RLMS scheme in MESCOM and as the Expert Committee appointed by the company had also estimated the cost under Niranthara Jyothi to be double the cost under RLMS, BESCO and HESCO need to take a re-look at the alternatives to meet the desired objective of providing assured power supply to IP set consumers.*

*(Chapter 2.2)*

## **3. Transaction audit observations**

Transaction audit observations included in this Report highlight deficiencies in the management of PSUs, which resulted in serious financial implications. The irregularities pointed out are broadly of the following nature:

*Loss of ₹ 44.15 crore in six cases due to non compliance with rules, directives, procedures, terms and conditions of contracts.*

*(Paragraphs 3.1, 3.3, 3.4, 3.6, 3.9 and 3.13)*

*Loss of ₹ 27.87 crore in six cases due to non-safeguarding the financial interests of organization.*

*(Paragraphs 3.2, 3.5, 3.8, 3.10, 3.11 and 3.12)*

*Loss of ₹ 2.05 crore in one case due to lack of competitiveness in operations*

*(Paragraph 3.7)*

Gist of some of the important audit observations is given below:

- **Karnataka Power Corporation Limited, Karnataka Power Transmission Corporation Limited and Electricity Supply Companies** made irregular payments of ₹ 40.38 crore as ex-gratia to their employees in contravention of the guidelines issued by the Department of Public Enterprises.

*(Paragraph 3.1)*

- The **Karnataka Neeravari Nigam Limited** paid re-handling charges in addition to excavation and transportation charges resulting in inadmissible benefit to the contractor amounting to ₹ 9.93 crore.

*(Paragraph 3.5)*

- Deficiencies in preparation of quotations without including the relevant costs coupled with slow progress of works resulted in loss of ₹ 2.05 crore in **Karnataka Rural Infrastructure Development Limited**.

*(Paragraph 3.7)*

- The decision of the **Mysore Electrical Industries Limited** to venture into an area of work in which it had no expertise resulted in a loss of ₹ 0.95 crore.

*(Paragraph 3.9)*

