सत्यमेव जयते

Report of the
Comptroller and Auditor General of India
on
Public Sector Undertakings

for the year ended 31 March 2016

भारतीय लेखापरीक्षा और लेखा विभाग ✦ INDIAN AUDIT AND ACCOUNTS DEPARTMENT

सत्यमेव जयते

झारखण्ड सरकार

Government of Jharkhand

Report No. 2 of the year 2017

Report of the
Comptroller and Auditor General of India
on
Public Sector Undertakings

For the year ended 31 March 2016

Government of Jharkhand
Report No.2 of the year 2017

Table of Contents

Preface

This Report deals with the results of audit of Government companies of Jharkhand for the year ended 31 March 2016.

The accounts of Government Companies (including companies deemed to be Government companies as per the provisions of the Companies Act) are audited by the Comptroller and Auditor General of India (CAG) under the provisions of Section 619 of the Companies Act 1956 and Sections 139 and 143 of the Companies Act, 2013. The Accounts certified by the Statutory Auditors (Chartered Accountants) appointed by the CAG under the Companies Act are subject to supplementary audit by officers of the CAG and the CAG gives his comments or supplements the reports of the Statutory Auditors. In addition, these companies are also subject to test audit by the CAG.

Reports in relation to the accounts of a Government Company or Corporation are submitted to the Government by the CAG for laying before State Legislature of Jharkhand under the provisions of Section 19-A of the Comptroller and Auditor General's (Duties, Powers and Conditions of Service) Act, 1971.

The instances mentioned in this Report are those, which came to notice in the course of test audit during the year 2015-16 as well as those which came to notice in earlier years, but could not be reported in the previous Audit Reports; matters relating to the period subsequent to 2015-16 have also been included, wherever necessary.

The Audit has been conducted in conformity with the Auditing Standards issued by the Comptroller and Auditor General of India.

Overview

Overview

This report contains three Chapters. Chapter – I contains functioning of State Public Sector Undertakings, Chapter – II includes Report of one Performance Audit on 'Working of Tenughat Vidyut Nigam Limited' and one Audit on 'Billing and Revenue collection in respect of High Tension Services Consumers' of Jharkhand Bijli Vitaran Nigam Limited. Chapter – III contains six Transaction Audit Paragraphs on Government companies. The total financial impact of audit findings is ₹ 2025.36 crore.

1. Functioning of State Public Sector Undertakings

Audit of Government companies is governed by Section 139 and 143 of the Companies Act, 2013. As on 31 March 2016, the State of Jharkhand had 19 unlisted Government Companies (all working). The accounts of Government companies are audited by Statutory Auditors appointed by the Comptroller and Auditor General of India (CAG). These accounts are also subject to supplementary audit conducted by the CAG.

The State PSUs registered a turnover of ₹ 1865.69 crore and incurred loss of ₹ 164.92 crore as per their latest finalised accounts as of September 2016. They had 5544 employees as at the end of March 2016

(Paragraphs 1.1 and 1.3)

Investments in State PSUs

As on 31 March 2016, the investment (Capital and Long term loans) in 19 State PSUs was ₹ 2,361.43 crore. It decreased by 61.87 *per cent* from ₹ 6,192.40 crore in 2011-12 because investment in erstwhile JSEB had not been transferred to its successor companies after its unbundling into four companies *viz*. Jharkhand Urja Vikas Nigam Limited (JUVNL), Jharkhand Bijli Vitran Nigam Limited (JBVNL), Jharkhand Urja Sancharan Nigam Limited (JUSNL) and Jharkhand Urja Utpadan Nigam Limited (JUUNL) in January 2014. The thrust of investment was mainly in power sector which was 94.92 *per* cent of total investment as of 31 March 2016. The Government contributed ₹ 829 crore towards equity, loans and grants/subsidies to PSUs during 2015-16.

(Paragraphs 1.6, 1.7 and 1.8)

Performance of State PSUs as per their latest finalised accounts

As per latest finalised accounts, out of 19 working PSUs, six PSUs earned profit of ₹ 37.69 crore and eight PSUs incurred loss of ₹ 202.61 crore. Five working PSUs had not finalised even their first accounts. The losses were mainly incurred by Tenughat Vidyut Nigam Limited (₹ 110.22 crore) and Jharkhand Bijli Vitran Nigam Limited (₹ 70.98 crore).

(Paragraph 1.14)

Accounts Comments

Out of 13 accounts finalised by nine working companies during October 2015 to September 2016, the Statutory Auditors had given qualified certificates for nine accounts and unqualified certificates for four accounts. There were 31 instances where compliance of Accounting Standards was not done in nine Accounts. The Audit reports of Statutory Auditors and the supplementary audit by the CAG indicates that the quality of accounts needs to be improved substantially.

(Paragraph 1.17)

Arrears in finalisation of Accounts

Nineteen PSUs had arrears of 66 accounts as of September 2016. The extent of arrears was one to ten years. The PSUs need to set targets for the work relating to preparation of accounts with special focus on clearance of arrears.

(Paragraph 1.10)

2. Performance Audit of Government Companies

2.1 Working of Tenughat Vidyut Nigam Limited

Tenughat Vidyut Nigam Limited (Company) is a power generating company incorporated in November 1987 under the Companies Act, 1956 with the main objectives of construction, generation and maintenance of thermal power station and sells the power so generated to licensees/traders and other agencies. The Company has its thermal power station *viz*. Tenughat Thermal Power Station (TTPS) with installed capacity of 420 MW (210 MW x 2 units) located at Lalpania in Bokaro district.

The Performance Audit of the Company revealed multiple and chronic deficiencies affecting its finances and efficient operation. The Company is plagued by disputed ownership, weak governance, lack of finances, deficient planning, weak internal controls, and general apathy of most stakeholders which are showcased in this report.

Financial health of the Company

As of 31 March 2016, the Company has accumulated losses of ₹ 824.53 crore due to its poor operational performance since inception. The main reasons for the poor performance were (a) failure to achieve the projected output against the installed capacity (Plant Load Factor), (b) lower actual operation hours of the plant against maximum hours available (Plant Availability Factor), (c) consumption of excess auxiliary power (d) excess consumption of coal and oil etc.

The Company earned a profit of ₹ 0.02 per unit of energy sold in 2011-12 which increased to ₹ 0.33 per unit in 2012-13 as highest generation of power was achieved during that year. However, it suffered losses while selling energy during 2013-14 to 2015-16 at ₹ 0.66, ₹ 0.07 and ₹ 0.86 per unit of energy sold respectively. This was mainly due to increase in provision for penal interest on loans, prior period adjustments relating to outstanding energy dues, provisions for depreciation *etc.*

(Paragraphs 2.1.8.2 and 2.1.8.3)

Finalisation of Annual Accounts

The annual accounts of the company for the years 1994-95 to 2010-11 were finalised belatedly during 2011-12 to 2015-16. However, the annual accounts for the years 2011-12 to 2015-16 were not finalised till December 2016. The failure to finalise the accounts was mainly due to ownership dispute over the Company between GoJ and Government of Bihar. The delay in finalisation of accounts violated the provisions of the Companies Act, 1956/2013 and rendered it difficult for the Company to detect/prevent any lapse/fraud.

(Paragraph 2.1.8.1)

Financial Management

The State Government had not taken any proactive steps to create a common platform to bring together the Generator and the Distributor (JUVNL) and resolve the payment disputes arising out of outstanding dues of ₹ 3082.72 crore that had resulted in default in repayment of loans and accumulation of avoidable penal interests and losses to the Company. Further, unnecessary restraint to invoke the existing agreement clauses has resulted in inordinate delay in realisation of sales revenue leading to poor debt servicing on Government loans (₹ 665.89 crore) and accrual of interest amounting to ₹ 2181.79 crore.

Further, Ministry of Heavy Industries and Public Enterprises, Department of Public Enterprises, Government of India issued model Memorandum of Understanding (MoU) to be executed by State Governments for monitoring the performance of State PSUs through setting targets. However, the Energy Department, GoJ has not adopted any such MoU with the Company. As a result, GoJ could not set operational and financial targets for the Company and monitor its performance so as to improve the financial position and profitability.

The Company has also failed to utilise the opportunity to expand its sales to others (50 MW) despite available opportunities.

(Paragraphs 2.1.7.2, 2.1.8.2, 2.1.8.6 and 2.1.8.7)

Plant Load Factor

The Plant Load Factor (PLF) of the Company ranged between 61.32 *per cent* and 79.42 *per cent* only during the years 2011-12 to 2015-16 as against the target of 85 *per cent* set by Jharkhand State Electricity Regulatory Commission (JSERC). This resulted in generation loss of 2809.48 MU of electricity valued at ₹ 870.78 crore during 2011-12 to 2015-16. The reasons for the low PLF were evacuation system constraints resulting in plant shutdowns, obsolete machines, lack of preventive and regular maintenance and use of poor grade coal in the plant.

The low PLF also caused financial losses to the Company as tariff had been calculated taking into account the PLF as 85 *per cent* instead of the actual PLF being worked out each year. Thus, during 2015-16, the Company suffered a financial loss of ₹ 0.446 per unit on 2328.28 MU of energy generated as compared to the tariff which was worked out with 85 *per cent* PLF instead of the actual PLF of 71.46 *per cent*.

The actual losses in 2015-16 were even more at ₹ 0.86 per unit. It was also observed that the Company failed to apprise JSERC that 85 *per cent* PLF was on the higher side and it had never been able to achieve this. The failure to finalise accounts since 2011-12 meant that higher cost of debt servicing (higher penal interest on loan) and prior period adjustments etc. could not be considered by JSERC while fixing the tariff.

(Paragraph 2.1.9.1)

Auxiliary Power Consumption (APC)

During 2011-12 to 2015-16, the Company consumed excess Auxiliary Power than the JSERC norms by 173.80 MU valued at ₹ 56.79 crore owing to ageing of machines, failure to conduct timely overhauling of machines and frequent tripping of transmission lines. The Company claimed that the APC was high because they could not take up overhauling of machines due to paucity of funds. However, it was observed that during 2011-16, the Company kept funds ranging from ₹ 275.26 crore to ₹ 392.41 crore under Short Term Deposits which could have perhaps been utilised. Further, the JSERC did not approve the higher Auxiliary Power Consumption (APC) of the Company while truing up the Aggregate Revenue Requirement (ARR) for the years 2011-12 to 2013-14 as it was a controllable parameter as per the Generation Tariff Regulations, 2010. Truing up for the subsequent years was yet to be done by JSERC.

(Paragraph 2.1.9.3)

Repairs, Maintenance and Capital overhauling

Capital overhauling of Unit I of the Plant was taken up after a delay of 49 months from its due date and that of Unit II is yet to be taken up though overdue for 28 months. This has caused frequent breakdowns of boiler and rotor of the generation units causing plant shut downs. During 2011-12 to 2015-16, the plant shutdowns exceeded the JSERC norms by 7095 hours resulting in generation loss of 1490 MU valued at ₹ 409.10 crore. This could have been controlled by timely repair and maintenance and capital overhauling of the plant and equipment.

(Paragraphs 2.1.9.2 and 2.1.9.4)

Capacity expansion

The envisaged capacity expansion of TTPS could not be undertaken even after 19 years of its commissioning despite an investment of ₹ 359 crore due to deficient planning and indecision by the Government of Jharkhand/Company.

(Paragraph 2.1.13.1)

Merry-Go-Round rail system and other projects

The Merry-Go-Round (MGR) rail system of the Company meant for transportation of coal was commissioned in October 2015 after a delay of 24 years at an additional cost of ₹ 51.34 crore. The delay was due to delayed acquisition of land, funding constraints *etc*. During this period, the coal requirement for the plant had to be transported by road. Though the MGR rail system was commissioned in October 2015, transportation of coal is still being done partially by road due to shortage of wagons. Though the Company paid an advance of ₹ 2.88 crore in 1998 for 34 wagons, it could not take delivery of a single one till date.

(Paragraphs 2.1.13.3 and 2.1.13.4)

Upgradation of Switchyard of the power plant

Switchyard upgradation was left incomplete by the contractor, M/s Bharat Heavy Electricals Limited at the time of erection of the plant in the year 1997. When taken up again by the Company (July 2010), it was delayed by further 52 months and remained incomplete as of December 2016. This led to backing down of generation units caused by power evacuation constraints. As a result, Company suffered loss of power generation of 971 MU and a revenue loss of ₹ 267.51 crore during 2011-12 to 2015-2016. However, JSERC has directed (September 2016) the Company to complete the upgradation by March 2017.

(Paragraph 2.1.10.1)

Procurement of coal and quality of coal

The power plant suffered generation loss of 326 MU valued at ₹ 50.24 crore during 2011-12 to 2015-16 due to coal shortage and poor quality of coal such as grade slippage, higher percentage of moisture, and oversized stones supplied by Central Coalfields Limited (CCL). However, the Company could not realise the claims of ₹ 49.62 crore from CCL as it failed to conduct joint sampling of coal for quality testing. CCL also confirmed that in many cases, the Company did not participate in joint sampling at loading points. The Company stated (November 2016) that Central Institute of Mining and Fuel Research have been authorised to conduct sampling at loading and unloading points.

(Paragraphs 2.1.12.1 and 2.1.12.2)

The Company suffered a loss of ₹ 8.14 crore during 2011-12 to 2015-16 due to its failure to claim loss of 43,857 MT of coal due to wind, rain, and evaporation of moisture in the tariff petitions.

(Paragraph 2.1.12.5)

During 2011-12 to 2015-16, there was high unburnt carbon in bottom ash ranging from 9.96 *per cent* to 12.66 *per cent* against the plant design norm of two *per cent*. During the period, the unburnt carbon in fly ash ranged between 4.87 *per cent* and 5.53 *per cent* against plant design norm of 0.5 *per cent*. This led to excess consumption of coal measuring 1,68,545 MT which increased the cost of generation by ₹ 35.10 crore. Also, there was excess consumption of 7329 Kilo litre of Light Diesel Oil valuing ₹ 38.57 crore over the JSERC norms during 2011-12 to 2015-16.

(Paragraphs 2.1.11.1 and 2.1.11.2)

Monitoring and Internal Control

The Energy Department, GoJ has not signed any Memorandum of Understanding (MoU) with the Company. As a result, Energy Department could not set operational and financial targets for the Company and monitor its performance so as to improve its financial position and profitability.

Effective monitoring of the activities of the Company was not done by the Board of Directors as its meetings were not held regularly. Further, the proposed appointment of the two functional directors and induction of independent directors was not done to strengthen the functioning of the Board.

(Paragraphs 2.1.7.2 and 2.1.15.3)

Human Resource Management

The Human Resource Management of the Company was deficient. As against a sanctioned strength of 510 technical manpower there were only 258 in place *i.e* deficit of 252 employees which would adversely impact the operational performance of the Company.

(Paragraph 2.1.12.7)

Thus, the failure of the Government/Management to strengthen the finances of the Company and augment its power generation contributed to the poor power supply in the State. This could adversely affect the overall business environment of the State. Consequently the State may jeopardise its position as seventh rank holder in 'Ease of Doing Business' as reported by the World Bank in its report for the period ending June 2016.

2.2 Audit on 'Billing and Revenue Collection in respect of High Tension Service Consumer' of Jharkhand Bijli Vitaran Nigam Limited.

Audit on Billing and Revenue Collection in respect of High Tension Service consumers of Jharkhand Bijli Vitaran Nigam Limited included in the Report highlights deficiencies in billing and revenue collection in respect of High Tension Services (HTS) and High Tension Special Services (HTSS) consumers of Jharkhand Bijli Vitaran Nigam Limited.

In Jharkhand, electricity sold to HT consumers ranged between 30 *per cent* and 38 *per cent* of total energy sold and revenue billed against HT consumers ranged between 36 *per cent* and 55 *per cent* of total energy billed during 2011-12 to 2015-16. Jharkhand State Electricity Regulatory Commission (JSERC) had framed the tariff, with effect from January, 2004, for the High Tension Service (HTS) consumers having contract demand (CD) of 100 Kilo Volt Ampere (KVA) and above and separately for the High Tension Special Service (HTSS) consumers having electric induction furnace with a contract demand of 300 KVA or more.

The important audit findings are detailed below:

- Four HTSS consumers were utilising load for other purposes in addition to induction furnace, however, the Company had not segregated the load into HTSS and HTS tariff as required under JSERC (Electric Supply Code) Regulation, 2005 and suffered a loss of ₹ 9.90 crore;

(Paragraph 2.2.2.1)

- In five cases the Company failed to provide new connections/enhancement of load within the time limit of 153 days as prescribed in JSERC Regulations resulting in revenue loss of ₹ 5.43 crore;

(Paragraph 2.2.3.2)

- Actual Demand of 61 HTS consumers exceeded the Contract Demand for continuous three months during the period 2011-12 to 2015-16; however, the Company failed to increase the contract demand as per JSERC tariff orders resulting in revenue loss of ₹ 3.42 crore;

(Paragraph 2.2.4.1)

- The Company failed to collect additional security deposits of ₹ 54.03 crore against 62 HTS/HTSS consumers based on their actual billing as per JSERC Regulations; and

(Paragraph 2.2.4.2)

- As of 31 March 2016, dues of ₹ 1487.11 crore were outstanding against 873 HTS/HTSS consumers including ₹ 450 crore against 468 running consumers in seven test checked Electric Supply Circles of the Company.

(Paragraph 2.2.4.9)

3 Transaction Audit Observations

Transaction Audit observations included in the Report highlights deficiencies in the management of Public Sector Undertakings involving serious financial implications. The irregularities pointed out are broadly of the following nature:

- There were three cases of violation of statutory obligations amounting to ₹ 18.53 crore.

(Paragraphs 3.2, 3.5 and 3.6)

- There were two cases of defective/ deficient planning leading to avoidable and wasteful expenditure of ₹ 31.75 crore.

(Paragraphs 3.1 and 3.4)

- There was one case of inadequate/deficient monitoring resulting in extra cost of ₹ 4.95 crore.

(Paragraph 3.3)

Gist of important paragraphs is given below:

- Jharkhand Bijli Vitran Nigam Limited incurred avoidable expenditure of ₹ 31.19 crore towards transmission charges in the absence of dedicated transmission system.

(Paragraph 3.1)

- Jharkhand Bijli Vitran Nigam Limited failed to deduct income tax and works contract tax from the running accounts bills of the contractors and deposited/paid the same from its own funds thereby causing loss of ₹ 15.31 crore.

(Paragraph 3.2)

- Jharkhand Police Housing Corporation Limited failed to recover from the contractor, the extra cost of ₹ 4.95 crore, incurred on execution of left over incomplete works due to failure to verify the genuineness of the bank guarantees submitted by the contractor.

(Paragraph 3.3)

- Jharkhand Urja Utpadan Nigam Limited incurred infructuous expenditure of ₹ 38.24 lakh due to its failure to inspect the procured materials before dispatch and to get the defective materials replaced. The Company also incurred extra expenditure of ₹ 17.94 lakh on subsequent procurement of the material on nomination basis.

(Paragraph 3.4)

- Jharkhand Urja Vikas Nigam Limited incurred wasteful expenditure of ₹ 1.27 crore for failure to adhere to the provisions of Employees' Provident Fund and Miscellaneous Provisions Act, 1952.

(Paragraph 3.5)

- Jharkhand State Beverages Corporation Limited failed to pay advance income tax resulting in avoidable payment of interest of ₹ 1.95 crore.

(Paragraph 3.6)

Chapter - I

CHAPTER – I

1. Functioning of State Public Sector Undertakings

Introduction

1.1 The State Public Sector Undertakings (PSUs) are State Government companies or Statutory Corporations established to carry out activities of commercial nature while keeping in view welfare of people and occupy an important place in the State economy. As on 31 March 2016, in the State of Jharkhand, there were 19 unlisted Government companies[1] (all working) and no statutory corporation. During the year 2015-16, one PSU (Jharkhand Medical and Health Infrastructure Development and Procurement Corporation Ltd.) was entrusted to audit whereas none was closed down.

The State PSUs registered a turnover of ₹ 1865.69 crore and incurred a loss of ₹ 164.92 crore as per their latest finalised accounts of September 2016. They had 5544 employees as at the end of March 2016.

Accountability framework

1.2 The process of audit of Government companies is governed by respective provisions of Section 139 and 143 of the Companies Act, 2013 (Act). According to Section 2 (45) of the Act, Government company means any company in which not less than 51 *per cent* of the paid up share capital is held by Central Government or by any State Government or Governments or partly by the Central Government and partly by one or more State Governments and also includes a company which is a subsidiary company of such a Government company.

Further, as per sub-Section 7 of Section 143 of the Act, the CAG may, in case of any company covered under sub-Section (5) or sub-Section (7) of Section 139, if he considers necessary, by an order, cause test audit to be conducted of the accounts of such company and the provisions of Section 19A of the Comptroller and Auditor General's (Duties, Powers and Conditions of Service) Act, 1971 shall apply to the report of such test audit. An audit of the financial statements in respect of the financial years that commenced on or before 31 March 2014 shall continue to be governed by the provisions of the Companies Act, 1956.

Statutory Audit

1.3 The financial statements of the Government companies (as defined in Section 2 (45) of the Companies Act, 2013) are audited by Statutory Auditors,

---

[1] (i) Jharkhand State Forest Development Corporation Limited (JSFDC) (ii) Jharkhand Hill Area Lift Irrigation Corporation Limited (JHALCO) (iii) Jharkhand Industrial Infrastructure Development Corporation Limited (JIIDCO) (iv) Jharkhand Police Housing Corporation Limited (JPHCL) (v) Greater Ranchi Development Agency Limited (GRDA) (vi) Jharkhand Silk Textile and Handicraft Development Corporation Limited (JHARCRAFT) (vii) Jharkhand State Mineral Development Corporation Limited (JSMDC) (viii) Tenughat Vidyut Nigam Limited (TVNL) (ix) Karanpura Energy Limited (KEL) (x) Jharkhand Tourism Development Corporation Limited (JTDC) (xi) Jharkhand State Beverages Corporation Limited (JSBCL) (xii) Jharkhand State Food & Civil Supplies Corporation Limited (JSFCSCL) (xiii) Jharkhand State Minorities Finance Development Corporation (JSMFDC) (xiv) Jharkhand Urja Vikas Nigam Limited (JUVNL) (xv) Jharkhand Urja Utpadan Nigam Limited (JUUNL) (xvi) Jharkhand Urja Sancharan Nigam Limited (JUSNL) and (xvii) Jharkhand Bijli Vitran Nigam Limited (JBVNL) (xviii) Jharkhand Urban Infrastructure Development Company Ltd (JUIDCO) (xix) Jharkhand Medical and Health Infrastructure Development and Procurement Corporation Limited (JM&HID&PCL).

who are appointed by CAG as per the provisions of Section 139 (5) or (7) of the Act. They shall, under Section 143 (5) of the Act submit a copy of the Audit Report to the CAG which, among other things, includes financial statements of the Company. These financial statements are also subject to supplementary audit conducted by CAG under the provisions of Sections 143 (6) of the Act.

Role of Government and Legislature

1.4 The State Government exercises control over the affairs of these PSUs through its administrative departments. The Chief Executive and Directors of the Board are appointed by the Government.

The State Legislature also monitors the accounting and utilisation of Government investment in the PSUs. For this, the Annual Reports together with the Statutory Auditors' Reports and comments of the CAG, on the accounts of State Government Companies are placed before the State Legislature under Section 394 of the Act**.** The Audit Reports of CAG are submitted to the Government under Section 19A of the CAG's (Duties, Power and Conditions of Service) Act, 1971.

Stake of Government of Jharkhand

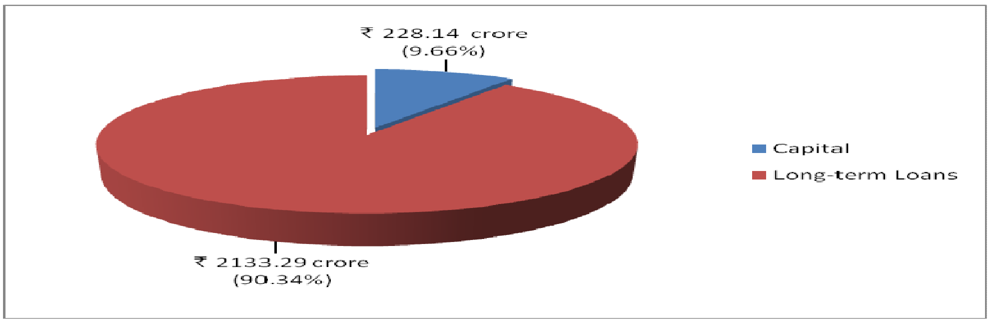
1.5 The State Government has financial stake in its PSUs of mainly three types:

- **Share Capital and Loans-** In addition to the share capital contribution, State Government also provides financial assistance by way of loans to the PSUs from time to time.
- **Special Financial Support-** State Government provides budgetary support by way of grants and subsidies to the PSUs as and when required.
- **Guarantees-** State Government also guarantees the repayment of loans with interest availed by the PSUs from financial institutions.

Investment in State PSUs

1.6 As on 31 March 2016, the investment in 19 State PSUs was ₹ 2361.43 crore comprising of capital and long-term loans as depicted in **Chart 1.1.**

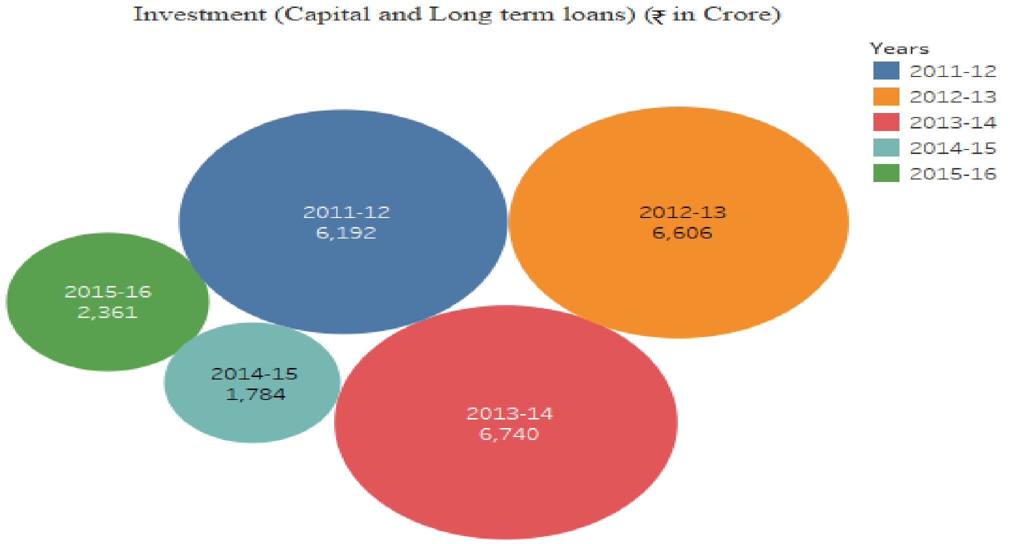
Chart 1.1: Investment in State PSUs



(Source: Data compiled from the information furnished by the PSUs.)

The total investment consisted of 9.66 *per cent* towards capital and 90.34 *per cent* in long term loans. The investment has decreased by 61.87 *per cent* from ₹ 6192.40 crore in 2011-12 to ₹ 2361.43 crore in 2015-16 (as shown in graph below) mainly due to decrease in investment in power sector as discussed in paragraph 1.7.

Chart 1.2: Total investment in PSUs during 2011-12 to 2015-16



1.7 The sector wise summary of investment in the State PSUs as on 31 March 2016 is given in **Table 1.1.**

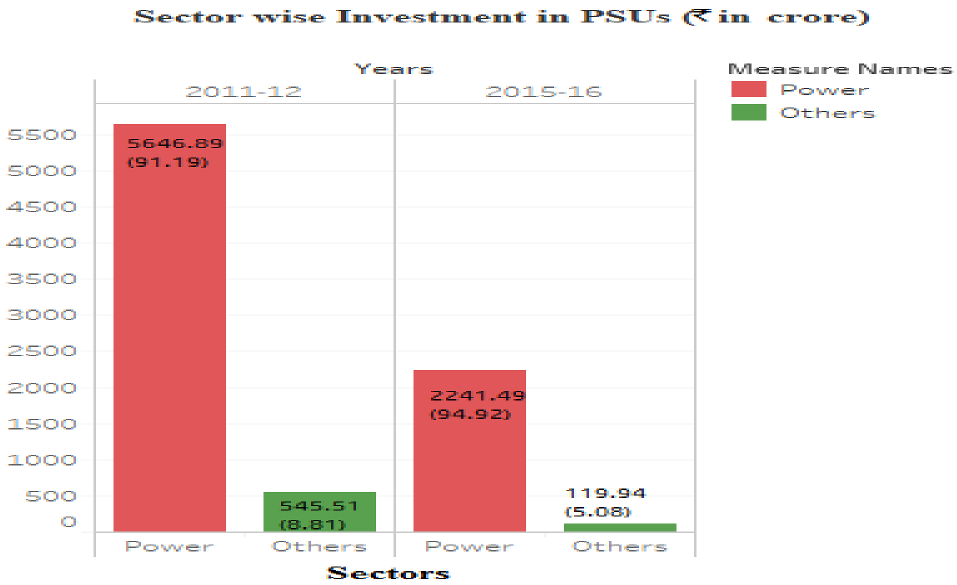
Table 1.1: Sector-wise investment in PSUs

Name of Sector	Working Government companies	Government companies not working	Total Investment (₹ in crore)
Power	2241.49	-	2241.49
Manufacturing	12.00	-	12.00
Agriculture & Allied	10.30	-	10.30
Service	23.50	-	23.50
Infrastructure	74.14	-	74.14
Finance	0	-	0
Total	**2361.43**	**-**	**2361.43**

(Source: Data compiled from the information furnished by the PSUs.)

The investment in significant sectors and percentage thereof as of 31 March 2012 and 31 March 2016 are indicated below in the **Chart 1.3**.

Chart 1.3: Sector wise investment in PSUs



The thrust of PSU investment was mainly in the power sector which was 94.92 *per cent* of total investment as of 31 March 2016. The investment in power sector was ₹ 5646.89 crore in 2011-12 which decreased to ₹ 2241.49 crore in 2015-16 due to the reason that investment in erstwhile JSEB had not been transferred to its successor companies after its unbundling into four companies *viz.* JUVNL, JBVNL, JUSNL and JUUNL in the year 2013-14.

Special support and returns during the year

1.8 The State Government provides financial support to PSUs in various forms through its annual budget. The summarised details of budgetary outgo towards equity, loans, grants/subsidies in respect of State PSUs for three years ended 2015-16 are given in **Table 1.2**.

Table 1.2: Details regarding budgetary support to PSUs

(₹ in crore)

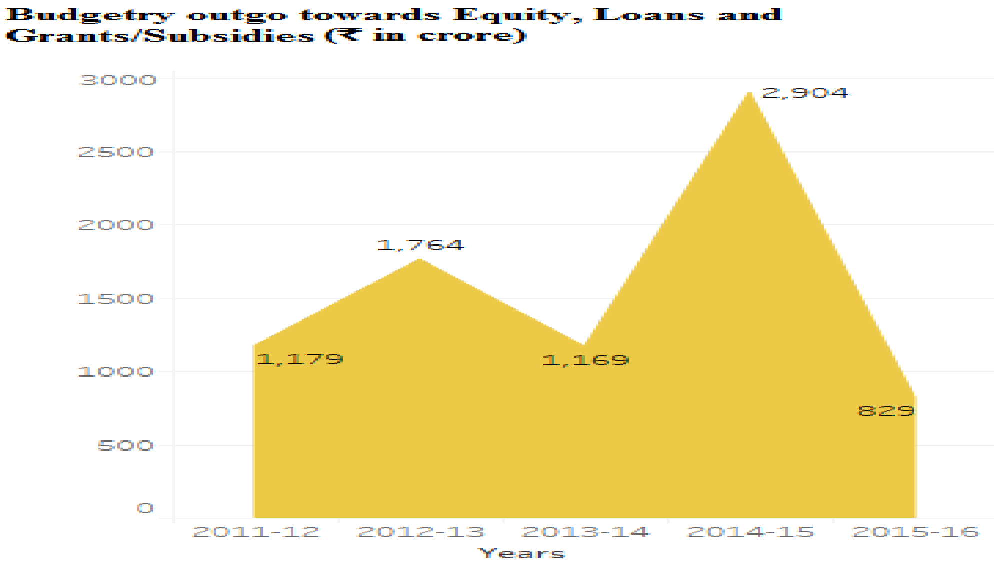
Sl. No.	Particulars	2013-14		2014-15		2015-16	
		No. of PSUs	Amount	No. of PSUs\	Amount	No. of PSUs[2]	Amount
1.	Equity Capital outgo from budget	4	20.65	5	9.25	2	18.14
2.	Loans given from budget	1	175.34	3	782.54	3	802.72
3.	Grants/Subsidy received	2	972.80	2	2112.00	1	8.14
	Total outgo		**1168.79**		**2903.79**		**829.00**

(Source: Data compiled from the information furnished by the PSUs.)

The budgetary outgo towards equity, loans and grants/ subsidies to State PSUs for past five years is indicated in **Chart 1.4**

[2] Total outgo for six PSUs (JHALCO, GRDA, JUUNL, JUSNL, JBVNL and JTDC).

Chart 1.4: Budgetary outgo towards Equity, Loans and Grants/Subsidies



The budgetary outgo decreased from ₹ 2903.79 crore in 2014-15 to ₹ 829.00 crore in 2015-16**.** This was because during 2014-15 Government had given grants to JBVNL amounting to ₹ 2106.63 crore, but no grants were given to the Company during 2015-16.

Reconciliation with Finance Accounts

1.9 The figures in respect of equity and loans outstanding as per records of State PSUs should agree with the figures appearing in the Finance Accounts of the State. In case the figures do not agree, concerned PSUs and the Finance Department should carry out reconciliation of differences. The position in this regard as at 31 March 2016 is stated in **Table 1.3**.

Table 1.3: Equity and loans outstanding as per Finance Accounts vis-a-vis records of PSUs

(₹ in crore)

Outstanding in respect of	Amount as per Finance Accounts	Amount as per records of PSUs	Difference
Equity	63.30	228.14	164.84
Loans	6818.30	2133.29	4685.01

(Source: State Finance Accounts for the year 2015-16 and information furnished by the PSUs.)

Audit observed that the differences occurred in respect of sixteen[3] PSUs and the differences were pending reconciliation since 2001-02. The Principal Accountant General had taken up (the latest being in December 2016) the issue with the Chief Secretary, Government of Jharkhand and Additional Chief Secretary, Planning cum Finance Department, Government of Jharkhand and the PSUs to reconcile the differences but no measures were initiated for reconciliation by the Government. The Government and the PSUs should take concrete steps to reconcile these differences in a time-bound manner.

[3] GRDA, JBVNL, JIIDCO, JSMFDC, JUSNL, JSBCL, JTDC, JHALCO, JUUNL, JUVNL, JM & HIDPCL, KEL, JUIDCO, JHARCRAFT, JSFCS and TVNL.

Arrears in finalisation of accounts

1.10 The financial statements of the companies for every financial year are required to be finalised within six months from the end of the relevant financial year *i.e.* by September end in accordance with the provisions of Section 96 (1) read with Section 129 (2) of the Companies Act, 2013 (Act). Failure to do so may attract penal provisions under Section 99 of the Act which provides that every officer of the company who is in default shall be punishable with fine which may extend to one lakh rupees and in case of continuing default, with a further fine which may extend to five thousand rupees every day during the period of such default.

Table 1.4 below provides the details of progress made by working PSUs in finalisation of accounts as of 30 September 2016.

Table 1.4: Position relating to finalisation of accounts of working PSUs

Sl. No.	Particulars	2011-12	2012-13	2013-14	2014-15	2015-16
1.	Number of Working PSUs	13	14	18	18	19
2.	Number of accounts finalised during the year	8	20	14	10	17
3.	Number of accounts in arrears	52	45	45	57	66[4]
4.	Number of Working PSUs with arrears in accounts	13	14	14	18	19
5.	Extent of arrears (numbers in years)	1 to 16	1 to 13	1 to 9	1 to 9	1 to 10

(Source: Data compiled from the information furnished by the PSUs.)

It can be observed that the number of accounts in arrears of the PSUs had increased over the years from 52 accounts in respect of 13 PSUs in 2011-12 to 66 accounts in respect of 19 PSUs in 2015-16. Out of 57 accounts in arrears as of 30 September 2015, only 17 accounts were finalised during the current year. Out of the 19 PSUs, no PSU had finalised their accounts for the year 2015-16 and the extent of arrears was ranging from one to 10 years.

The administrative departments have the responsibility to oversee the activities of these entities and to ensure that the accounts are finalised and adopted by these PSUs within stipulated period. The concerned administrative departments were informed regularly about the need to finalise the accounts during 2011-12 to 2015-16. In addition, attention of the Chief Secretary, Government of Jharkhand and Principal Secretary, Finance Department was also invited (September 2016) by the Principal Accountant General for liquidating the arrears in accounts. However, no improvement was noticed.

1.11 The State Government had invested ₹ 3779.85 crore (equity: ₹ 33.69 crore, loans: ₹ 1526.31 crore, grants: ₹ 2219.85 crore) in 19 PSUs during the years for which accounts have not been finalised as detailed in ***Annexure 1.1***. In the absence of finalisation of accounts and their subsequent audit, it could not be ascertained whether the investments and expenditure incurred were properly accounted for or that the purpose for which the amount was invested was achieved. Thus, Government's investment in such PSUs remained outside the control of State legislature.

---

[4] Including arrears of accounts (2013-14) of four power companies *viz.* JUVNL, JUUNL, JUSNL and JBVNL incorporated on 16 September 2013 and (JM&HID&PCL) incorporated on 24 May 2013.

Impact of accounts not finalised

1.12 As pointed out above (paragraph 1.10 to 1.11), the delay in finalisation of accounts may result in the risk of not detecting frauds and leakages of public money as well as violations of the provisions of the relevant statutes. In view of the arrears of accounts as stated above the actual contribution of PSUs to the State GDP for the year 2015-16 could not be ascertained, and it was also not reported to the State legislature.

It is, therefore, recommended that:

- The Government may set up a cell to oversee the clearance of arrears and set targets for individual companies which should be monitored by the cell.
- The Government may consider outsourcing the work relating to preparation of accounts wherever the staff is inadequate or lacks expertise.

Performance of PSUs as per their latest finalised accounts

1.13 The financial position and working results of PSUs are detailed in **Annexure 1.2**. A ratio of PSUs turnover to State GSDP shows the extent of PSU activities in the State economy. **Table 1.5** below provides the details of working PSUs turnover and State GSDP for a period of five years ending 2015-16.

Table 1.5: Details of PSUs turnover vis-à-vis State GSDP

(₹ in crore)

Particulars	2011-12	2012-13	2013-14	2014-15	2015-16
Turnover[5]	2139.72	2563.86	3065.85	3205.87	1865.69
State GSDP[6]	150918	174724	188567	217107	241955
Percentage of Turnover to State GSDP	1.42	1.47	1.63	1.48	0.77

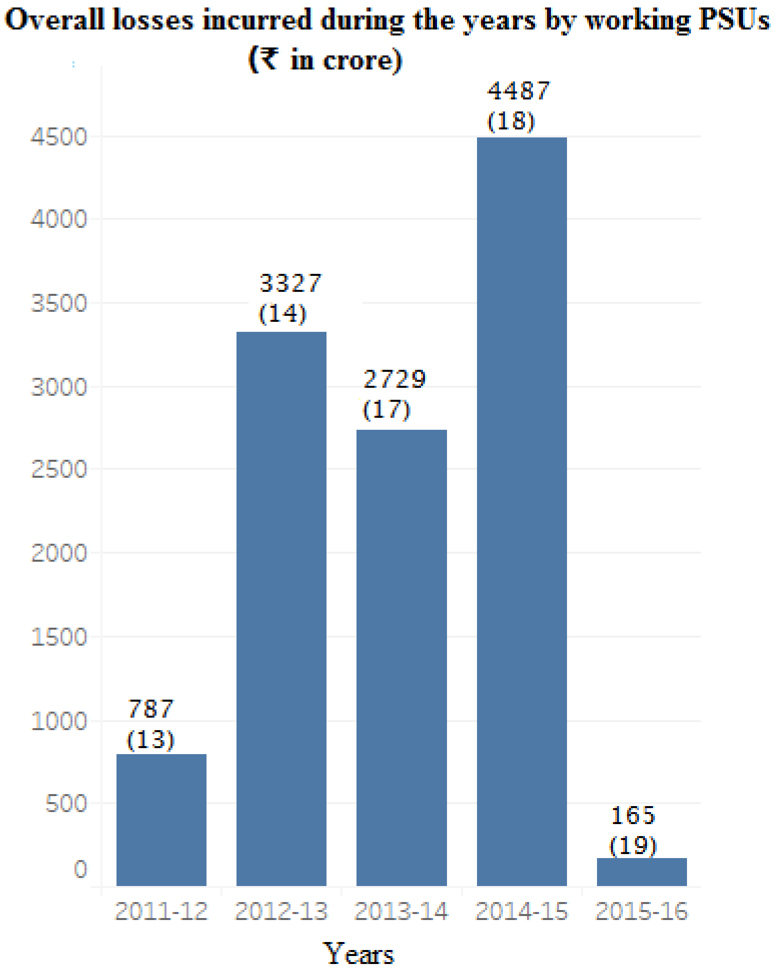
(Source: Website of Ministry of Statistics and Programme Implementation, Government of India and information furnished by the PSUs)

The percentage of turnover of the PSUs to the State GSDP decreased from 1.48 in 2014-15 to 0.77 in 2015-16. The turnover of ₹ 1865.69 crore in 2015-16 does not include turnover of five State PSUs (KEL, JUVNL, JUUNL, JSFCSCL and JM&HID&PCL) in the absence of finalisation of their first accounts.

1.14 Overall losses[7] incurred by the State PSUs during 2011-12 to 2015-16 as per their latest finalised accounts as of 30 September 2016 are depicted in **Chart 1.5**.

[5] Turnover as per latest finalised accounts as on 30 September 2016.
[6] The figures of State GSDP were taken at the current prices as of June 2016.
[7] As per the latest finalised accounts as on 30 September 2016.

Chart 1.5: Loss of State PSUs



(Figures in brackets show the number of Working PSUs in respective years)

The above chart depicts that losses incurred by working PSUs have decreased from ₹ 786.68 crore in 2011-12 to ₹ 164.92 crore in 2015-16.The reason for decrease in losses is because the losses of JSEB which was unbundled in the year 2013-14, were not factored in while calculating the overall losses.

Six PSUs earned profit of ₹ 37.69 crore and eight PSUs incurred loss of ₹ 202.61 crore as per their latest finalised accounts. Remaining five[8] PSUs did not finalise their first accounts. The main contributors to profit were Jharkhand State Mineral Development Corporation (₹ 13.09 crore), Jharkhand State Forest Development Corporation (₹ 10.43 crore), Jharkhand Police Housing Corporation Limited (₹ 5.95 crore) and Greater Ranchi Development Agency (₹ 4.33 crore). Heavy loss was incurred by Tenughat Vidyut Nigam Limited (₹ 110.22 crore) and Jharkhand Bijli Vitran Nigam Limited (₹ 70.98 crore).

[8] KEL, JUVNL, JUUNL, JSFCSCL and JM&HID&PCL.

1.15 Some other key parameters of PSUs are given in **Table 1.6**.

Table 1.6: Key Parameters of State PSUs

(₹ in crore)

Particulars	2011-12	2012-13	2013-14	2014-15	2015-16
Return on Capital Employed (*per cent*)	-	-	-	-	-
Debt	6022.30	6435.29	6540.97	7736.75	2508.21
Turnover	2139.72	2563.86	3065.85	3205.87	1865.69
Debt/Turnover Ratio	2.81:1	2.51:1	2.13:1	2.41:1	1.51:1
Interest payment	477.72	600.02	875.62	812.61	921.10
Accumulated losses	(-)6385.11	(-) 9437.93	(-) 12298.80	(-) 16755.73	(-)1221.64

(Source: Data compiled from the information furnished by the PSUs.)

During 2011-12 to 2015-16, there was no return on capital employed as the PSUs suffered losses. Further, the debt has decreased from ₹ 6022.30 crore in 2011-12 to ₹ 2508.21 crore in 2015-16 and accumulated loss decreased from ₹ 6385.11crore in 2011-12 to ₹ 1221.64 crore in 2015-16 as losses of JSEB which was unbundled in the year 2013-14 were not factored in while calculating overall losses.

1.16 The State Government had not formulated any dividend policy under which PSUs are required to pay a minimum return on the paid up share capital contributed by the State Government. As per their latest finalised accounts, six PSUs earned an aggregate profit of ₹ 37.69 crore but did not declare any dividend.

Accounts Comments

1.17 Nine Government companies forwarded their thirteen audited accounts to Principal Accountant General during 01 October 2015 to 30 September 2016. Of these, eleven accounts of eight companies were selected for supplementary audit. The audit reports of statutory auditors appointed by CAG and the supplementary audit of CAG indicate that the quality of maintenance of accounts need to be improved substantially. The details of aggregate money value of comments of Statutory Auditors and CAG are given in **Table 1.7.**

Table 1.7: Impact of audit comments on working Companies

(₹ in crore)

Sl. No	Particulars	2013-14		2014-15		2015-16	
		No. of accounts	Amount	No. of accounts	Amount	No. of accounts	Amount
1.	Increase in profit	-	-	-	-	2	0.94
2.	Decrease in profit	3	0.63	3	6.65	7	9.46
3.	Increase in loss	2	33.72	1	2.10	7	14.68
4.	Decrease in loss	1	1.49	7	267.99	5	452.46
5.	Material facts not disclosed	-	-	5	-	9	-

(Source: figures worked out by Audit)

During the year, the Statutory Auditors had given unqualified certificates for four accounts and qualified certificates for nine accounts. The compliance of Government Companies with the Accounting Standards was poor as there were thirty one instances where compliance with Accounting Standards was not made in nine accounts during the year.

Response of the Government to Audit

Performance Audits and Paragraphs

1.18 For the Report of the CAG of India for the year ended 31 March 2016, one performance audit *viz*. Working of Tenughat Vidhyut Nigam Limited, one audit on Billing and Revenue collection in respect of High Tension Services Consumers and six audit paragraphs involving three departments were issued to the Principal Secretaries/Secretaries of the respective Departments with requests to furnish replies within six weeks. However, replies in respect of one performance audit and seven audit paragraphs were awaited from the State Government (November 2016).

Follow up action on Audit Reports

Replies outstanding

1.19 The Report of the Comptroller and Auditor General (CAG) of India represents the culmination of the process of audit scrutiny. It is therefore, necessary that they elicit appropriate and timely response from the executive. The Finance Department, Government of Jharkhand issued (November 2015) instructions to all Administrative Departments to submit replies/ explanatory notes to paragraphs/reviews included in the Audit Reports of the CAG of India within a period of three months of their presentation to the Legislature in the prescribed format without waiting for any questionnaires from the Committee on Public Sector Undertakings (COPU). The replies/explanatory notes awaited as on 30 September 2016 are given in **Table 1.8**.

Table 1.8: Explanatory notes not received as on 30 September 2016

Year of the Audit Report (Commercial\PSU)	Date of placement of Audit Report in the State Legislature	Number of performance audits (PAs) and Paragraphs in the Audit Report		Total PAs/paragraphs for which explanatory notes were not received	
		PAs	Paragraphs	PAs	Paragraphs
2005-06	04.04.2007	1	3	-	1
2006-07	26.03.2008	1	6	1	5
2007-08	10.07.2009*	1	8	1	7
2008-09	13.08.2010	1	4	1	4
2009-10	29.08.2011	1	6	1	6
2010-11	06.09.2012	1	3	-	1
2011-12	27.07.2013	1	5	1	4
2012-13	05.03.2014	1	5	-	5
2013-14	26.03.2015	1	6	-	4
2014-15	15.03.2016	2	5	1	1
Total		**11**	**51**	**6**	**38**

(Source: figures worked out by Audit) * placed in parliament.

From the above, it could be seen that out of 62 paragraphs/performance audits, replies/explanatory notes to 44 paragraphs/performance audits in respect of seven departments, which were commented upon, were awaited (September 2016).

Discussion of Audit Reports by COPU

1.20 The status as on 30 September 2016 of Performance Audits and paragraphs that appeared in Audit Reports (PSUs) and discussed by the Committee on Public Undertakings (COPU) is as given in **Table 1.9**.

Table 1.9: Performance Audits/Paragraphs appeared in Audit Reports *viz-a-viz* discussed as on 30 September 2016

Period of Audit Report	Number of PAs/paragraphs			
	Appeared in Audit Report		Paragraphs discussed	
	Performance Audit	Paragraphs	Performance Audit	Paragraphs
2004-05	2	1	2	1
2005-06	1	3	1	2
2006-07	1	6	-	1
2007-08	1	8	-	1
2008-09	1	4	-	-
2009-10	1	6	-	-
2010-11	1	3	1	2
2011-12	1	5	-	1
2012-13	1	5	1	-
2013-14	1	6	1	2
2014-15	2	5	1	4
Total	**13**	**52**	**7**	**14**

(Source: figures worked out by Audit)

Compliance to Reports of Committee on Public Undertakings (COPU)

1.21 Action Taken Notes (ATN) to 17 paragraphs/sub-paragraphs pertaining to nine Reports of the COPU presented to the State Legislature between August 2006 and August 2014 had not been received (November 2016) as indicated in **Table 1.10.**

Table 1.10: Compliance to COPU Reports

Year of COPU Report	Total number of COPU Report	Total no. of recommendations in COPU Report	No. of recommendations where ATNs not received
2007-08	2	2	2
2008-09	1	1	1
2012-13	3	7	7
2013-14	3	7	7
Total	**9**	**17**	**17**

(Source: figures worked out by Audit)

These Reports of COPU contained recommendations in respect of paragraphs pertaining to one department, which appeared in the Reports of the CAG of India for the years 2002-03 to 2005-06.

It is recommended that the Government may ensure:

(a) Sending of replies to inspection reports/explanatory notes/draft paragraphs/performance audits and ATNs on the recommendations of COPU as per the prescribed time schedule;

(b) Recovery of loss/ outstanding advances/ overpayments within the prescribed period; and

(c) Revamping of the system of responding to audit observations**.**

Chapter - II

CHAPTER - II

2. Performance Audit relating to Government Companies

2.1 Working of Tenughat Vidyut Nigam Limited

Executive Summary

Tenughat Vidyut Nigam Limited (Company) is a power generating company incorporated in November 1987 under the Companies Act, 1956 with the main objectives of construction, generation and maintenance of thermal power station and sells the power so generated to licensees/traders and other agencies. The Company has its thermal power station *viz*. Tenughat Thermal Power Station (TTPS) with installed capacity of 420 MW (210 MW x 2 units) located at Lalpania in Bokaro district.

The Performance Audit of the Company revealed multiple and chronic deficiencies affecting its finances and efficient operation. The Company is plagued by disputed ownership, weak governance, lack of finances, deficient planning, weak internal controls, and general apathy of most stakeholders which are showcased in this report.

Financial health of the Company

As of 31 March 2016, the Company has accumulated losses of ₹ 824.53 crore due to its poor operational performance since inception. The main reasons for the poor performance were (a) failure to achieve the projected output against the installed capacity (Plant Load Factor), (b) lower actual operation hours of the plant against maximum hours available (Plant Availability Factor), (c) consumption of excess auxiliary power (d) excess consumption of coal and oil etc.

The Company earned a profit of ₹ 0.02 per unit of energy sold in 2011-12 which increased to ₹ 0.33 per unit in 2012-13 as highest generation of power was achieved during that year. However, it suffered losses while selling energy during 2013-14 to 2015-16 at ₹ 0.66, ₹ 0.07 and ₹ 0.86 per unit of energy sold respectively. This was mainly due to increase in provision for penal interest on loans; prior period adjustments relating to outstanding energy dues, provisions for depreciation *etc.*

(Paragraphs 2.1.8.2 and 2.1.8.3)

Finalisation of Annual Accounts

The annual accounts of the company for the years 1994-95 to 2010-11 were finalised belatedly during 2011-12 to 2015-16. However, the annual accounts for the years 2011-12 to 2015-16 were not finalised till December 2016. The failure to finalise the accounts was mainly due to ownership dispute over the Company between GoJ and Government of Bihar. The delay in finalisation of accounts violated the provisions of the Companies Act, 1956/2013 and rendered it difficult for the Company to detect/prevent any lapse/fraud.

(Paragraph 2.1.8.1)

Financial Management

The State Government had not taken any proactive steps to create a common platform to bring together the Generator and the Distributor (JUVNL) and resolve the payment disputes arising out of outstanding dues of ₹ 3082.72 crore that had resulted in default in repayment of loans and accumulation of avoidable penal interests and losses to the Company. Further, unnecessary restraint to invoke the existing agreement clauses has resulted in inordinate delay in realisation of sales revenue leading to poor debt servicing on Government loans (₹ 665.89 crore) and accrual of interest amounting to ₹ 2181.79 crore.

Further, Ministry of Heavy Industries and Public Enterprises, Department of Public Enterprises, Government of India issued model Memorandum of Understanding (MoU) to be executed by State Governments for monitoring the performance of State PSUs through setting targets. However, the Energy Department, GoJ has not adopted any such MoU with the Company. As a result, GoJ could not set operational and financial targets for the Company and monitor its performance so as to improve the financial position and profitability.

The Company has also failed to utilise the opportunity to expand its sales to others (50 MW) despite available opportunities.

(Paragraphs 2.1.7.2, 2.1.8.2, 2.1.8.6 and 2.1.8.7)

Plant Load Factor

The Plant Load Factor (PLF) of the Company ranged between 61.32 *per cent* and 79.42 *per cent* only during the years 2011-12 to 2015-16 as against the target of 85 *per cent* set by Jharkhand State Electricity Regulatory Commission (JSERC). This resulted in generation loss of 2809.48 MU of electricity valued at ₹ 870.78 crore during 2011-12 to 2015-16. The reasons for the low PLF were evacuation system constraints resulting in plant shutdowns, obsolete machines, lack of preventive and regular maintenance and use of poor grade coal in the plant.

The low PLF also caused financial losses to the Company as tariff had been calculated taking into account the PLF as 85 *per cent* instead of the actual PLF being worked out each year. Thus, during 2015-16, the Company suffered a financial loss of ₹ 0.446 per unit on 2328.28 MU of energy generated as compared to the tariff value which was worked out with 85 *per cent* PLF instead of the actual PLF of 71.46 *per cent*.

The actual losses in 2015-16 were even more at ₹ 0.86 per unit. It was also observed that the Company failed to apprise JSERC that 85 *per cent* PLF was on the higher side and it had never been able to achieve this. The failure to finalise accounts since 2011-12 meant that higher cost of debt servicing (higher penal interest on loan) and prior period adjustments etc. was not considered by JSERC while fixing the tariff.

(Paragraph 2.1.9.1)

Auxiliary Power Consumption (APC)

During 2011-12 to 2015-16, the Company consumed excess Auxiliary Power than the JSERC norms by 173.80 MU valued at ₹ 56.79 crore owing to ageing of machines, failure to conduct timely overhauling of machines and frequent tripping of transmission lines. The Company claimed that the APC was high because they could not take up overhauling of machines due to paucity of funds. However, it was observed that during 2011-16, the Company kept funds ranging from ₹ 275.26 crore to ₹ 392.41 crore under Short Term Deposits which could have perhaps been utilised. Further, the JSERC did not approve the higher Auxiliary Power Consumption (APC) of the Company while truing up the Aggregate Revenue Requirement (ARR) for the years 2011-12 to 2013-

14 as it was a controllable parameter as per the Generation Tariff Regulations, 2010. Truing up for the subsequent years was yet to be done by JSERC.

(Paragraph 2.1.9.3)

Repairs, Maintenance and Capital overhauling

Capital overhauling of Unit I of the Plant was taken up after a delay of 49 months from its due date and that of Unit II is yet to be taken up though overdue for 28 months. This has caused frequent breakdowns of boiler and rotor of the generation units causing plant shut downs. During 2011-12 to 2015-16, the plant shutdowns exceeded the JSERC norms by 7095 hours resulting in generation loss of 1490 MU valued at ₹ 409.10 crore. This could have been controlled by timely repair and maintenance and capital overhauling of the plant and equipment.

(Paragraphs 2.1.9.2 and 2.1.9.4)

Capacity expansion

The envisaged capacity expansion of TTPS could not be undertaken even after 19 years of its commissioning despite an investment of ₹ 359 crore due to deficient planning and indecision by the Government of Jharkhand/Company.

(Paragraph 2.1.13.1)

Merry-Go-Round rail system and other projects

The Merry-Go-Round (MGR) rail system of the Company meant for transportation of coal was commissioned in October 2015 after a delay of 24 years at an additional cost of ₹ 51.34 crore. The delay was due to delayed acquisition of land, funding constraints *etc*. During this period, the coal requirement for the plant had to be transported by road. Though the MGR rail system was commissioned in October 2015, transportation of coal is still being done partially by road due to shortage of wagons. Though the Company paid an advance of ₹ 2.88 crore in 1998 for 34 wagons, it could not take delivery of a single one till date.

(Paragraphs 2.1.13.3 and 2.1.13.4)

Upgradation of Switchyard of the power plant

Switchyard upgradation was left incomplete by the contractor, M/s Bharat Heavy Electricals Limited at the time of erection of the plant in the year 1997. When taken up again by the Company (July 2010), it was delayed by further 52 months and remained incomplete as of December 2016. This led to backing down of generation units caused by power evacuation constraints. As a result, Company suffered loss of power generation of 971 MU and a revenue loss of ₹ 267.51 crore during 2011-12 to 2015-2016. However, JSERC has directed (September 2016) the Company to complete the upgradation by March 2017.

(Paragraph 2.1.10.1)

Procurement of coal and quality of coal

The power plant suffered generation loss of 326 MU valued at ₹ 50.24 crore during 2011-12 to 2015-16 due to coal shortage and poor quality of coal such as grade slippage, higher percentage of moisture, and oversized stones supplied by Central Coalfields Limited (CCL). However, the Company could not realise the claims of ₹ 49.62 crore from CCL as it failed to conduct joint sampling of coal for quality testing. CCL also confirmed that in many cases, the Company did not participate in joint sampling at loading points. The

Company stated (November 2016) that Central Institute of Mining and Fuel Research has been authorised to conduct sampling at loading and unloading points.

(Paragraphs 2.1.12.1 and 2.1.12.2)

The Company suffered a loss of ₹ 8.14 crore during 2011-12 to 2015-16 due to its failure to claim loss of 43,857 MT of coal due to wind, rain, and evaporation of moisture in the tariff petitions.

(Paragraph 2.1.12.5)

During 2011-12 to 2015-16, there was high unburnt carbon in bottom ash ranging from 9.96 *per cent* to 12.66 *per cent* against the plant design norm of two *per cent.* During the period, the unburnt carbon in fly ash ranged between 4.87 *per cent* and 5.53 *per cent* against plant design norm of 0.5 *per cent.* This led to excess consumption of coal measuring 1,68,545 MT which increased the cost of generation by ₹ 35.10 crore. Also, there was excess consumption of 7329 Kilo litre of Light Diesel Oil valuing ₹ 38.57 crore over the JSERC norms during 2011-12 to 2015-16.

(Paragraphs 2.1.11.1 and 2.1.11.2)

Monitoring and Internal Control

The Energy Department, GoJ has not signed any Memorandum of Understanding (MoU) with the Company. As a result, Energy Department could not set operational and financial targets for the Company and monitor its performance so as to improve its financial position and profitability.

Effective monitoring of the activities of the Company was not done by the Board of Directors as its meetings were not held regularly. Further, the proposed appointment of the two functional directors and induction of independent directors was not done to strengthen the functioning of the Board.

(Paragraphs 2.1.7.2 and 2.1.15.3)

Human Resource Management

The Human Resource Management of the Company was deficient. As against a sanctioned strength of 510 technical manpower there were only 258 in place *i.e* deficit of 252 employees which would adversely impact the operational performance of the Company.

(Paragraph 2.1.12.7)

Thus, the failure of the Government/Management to strengthen the finances of the Company and augment its power generation contributed to the poor power supply in the State. This could adversely affect the overall business environment of the State. Consequently the State may jeopardise its position as seventh rank holder in 'Ease of Doing Business' as reported by the World Bank in its report for the period ending June 2016.

2.1.1 Introduction

Tenughat Vidyut Nigam Limited (Company) is a power generating company incorporated in November 1987 under the Companies Act, 1956. The main objectives of the Company *inter alia* were construction, generation and maintenance of Thermal Power Station (TPS) and to sell the power so generated to licensees/traders and other agencies as stipulated in the Electricity Act, 2003.

The Company has set up its thermal power station *viz*. Tenughat Thermal Power Station (TTPS) located at Lalpania in Bokaro district of Jharkhand with a current installed capacity of 420 MW (210 MW x 2 units). Unit-I of TTPS was put under commercial operation in September 1996 and Unit II commenced its commercial operation in September 1997. The entire electricity generated in its power station is sold to Jharkhand Urja Vikash Nigam Limited[9] (JUVNL), which procures about 20 *per cent* of its total power requirement from the Company.

Consequent upon re-organisation of Bihar, the ownership of the Company was vested in Government of Jharkhand (GoJ) under Section 47 of the Bihar Re-organisation Act, 2000. Accordingly, GoJ issued notification (February 2001) assuming the ownership of the Company. However, the same was disputed and challenged by the State of Bihar in the court of law. The Hon'ble Supreme Court (SC) in its Interim Order (August 2008) directed the parties to maintain status quo which would not however, prevent the state of Jharkhand from proceeding with any expansion works in respect of the Company, although no equity would be claimed for any such expansion or works. The final decision of the Supreme Court was yet to come (November 2016).

The Detailed Project Report (DPR) of TTPS envisaged capacity expansion by setting up three units of 210 MW each in stage-II and one Unit of 500 MW in stage-III of the Project.

2.1.2 Organisational Set-up

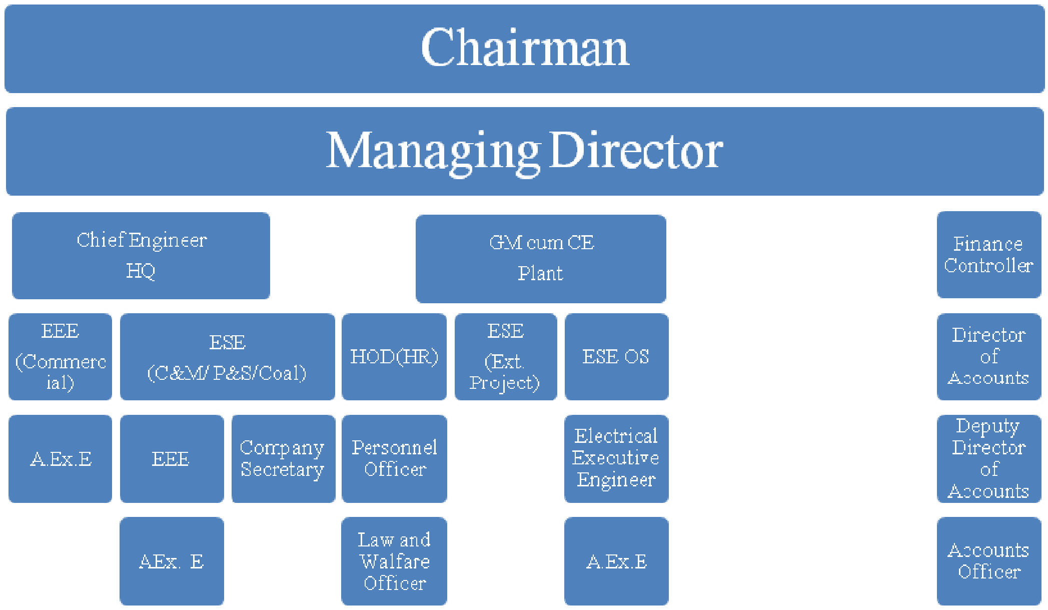
Company is under the administrative control of the Energy Department of the Government of Jharkhand (GoJ). The Management of Company is vested in its Board of Directors (BoD). As of 31 March 2016, there were four Directors *i.e.* two non-executive Directors *viz*. the Principal Secretary, Finance Department and the Principal Secretary, Energy Department, GoJ and two functional Directors *viz*. the Chairman[10] and the Managing Director of the Company.

The day-to-day operations of the company are carried out by the Managing Director. The General Manager, TTPS heads the Power Station at Lalpania and is the overall In-charge for running the TPS smoothly. The Finance Controller is the head of Finance Wing who is responsible for the financial management and accounting functions of the Company. Organisation chart of the Company is given in **Chart 2.1.1:**

[9] JUVNL is the holding company of Jharkhand Bijli Vidyut Nigam Limited (JBVNL), which procures energy for distribution by JBVNL.

[10] The post of Chairman, TVNL is vacant since 2 March 2015.

Chart 2.1.1: Organisation Chart of the Company



2.1.3 Audit Objectives

The objectives of the performance audit were to assess whether:

- A plan of action is in place for augmentation of generation capacity and optimisation of generation from the existing plant;
- Adequate funds were provided for operation of the plant and its upgradation; the funds were utilised for the intended purpose and all claims for sale of power were properly raised and recovered;
- The power plants were operated efficiently; renovation, modernisation and preventive maintenance as prescribed was carried out minimising the forced outages;
- Requirements of fuels were worked out realistically, procured economically and utilised efficiently;
- The company complied with various environmental laws and regulations; and
- Monitoring system and internal control mechanism was efficient and effective.

2.1.4 Audit criteria

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

- Regulations for power generation issued by Jharkhand State Electricity Regulatory Commission (JSERC);
- Prescribed norms of JSERC for operation of Power Plant and planned outages;
- Standard procedures for award of contract with reference to principles of economy, efficiency and effectiveness;
- Targets fixed for generation of power; and
- Environmental laws, rules and regulations.

2.1.5 Audit Scope and Methodology

The Performance Audit was conducted during April 2016 to June 2016 to assess the performance of the Company during the period 2011-12 to 2015-16. Audit examination of the records of Corporate Office at Ranchi and TTPS was done during the Performance Audit.

The methodology adopted for attaining the audit objectives with reference to audit criteria consisted of scrutiny of records of Corporate Office and TTPS, interaction with the auditee personnel, analysis of data with reference to audit criteria, discussion of audit findings with the Management and issue of draft review to the Management for comments. A physical verification of the Central Stores and Plants of TTPS was conducted jointly with the officers of the Company, the observations on which have been incorporated in the present report. Also, interview of the company officials were taken regarding the affairs of the Company and their response on the macro and micro issues have been suitably incorporated in the Performance Audit Report.

An entry conference was held with the Managing Director of the Company on 21 April 2016 to discuss the objectives, scope and methodology of audit. The Audit findings were issued (July 2015) to the Company and to the Government and discussed with the Additional Chief Secretary, Energy Department, GoJ and the MD of the Company in an exit conference held on 9 November 2016. Reply of the Company has been received (October 2016) and reply of the Government is awaited. Reply of the Company and views expressed by the Government in exit conference have been suitably incorporated in the Report.

Audit Findings

2.1.6 Unsatisfactory performance of the Company

The audit findings in the present report indicate that the Company failed to perform as per the operational norms set by Jharkhand State Electricity Regulatory Commission (JSERC) during 2011-12 to 2015-16. It could not achieve the Plant Load Factor (PLF) target which ranged between 61.32 to 79.42 and suffered loss of power generation of 2809.48 MU valued at ₹ 870.78 crore. The Plant Availability Factor (PAF) of the plant was lower than the JSERC norms by 5.33 *per cent* to 21.25 *per cent* except in 2012-13 and 2015-16 and it consumed excess auxiliary power of 173.80 MU valuing ₹ 56.79 crore. Optimal utilisation of plant and equipment was not achieved due to failure to carry out proper maintenance of the plant as the capital overhauling of Unit I was conducted after a delay of 49 months and that of Unit II was yet to be taken up even after 28 months from the due date. Upgradation of the switchyard to 400 KV undertaken in July 2010 was not completed even after a delay of 52 months entailing loss of power generation of 971 MU valued at ₹ 267.51 crore during 2011-12 to 2015-16.

There was excess consumption of 1,68,545 MT of coal valued at ₹ 35.10 crore due to unburnt carbon in ash in excess of the designed parameter of the plant and excess consumption of Light Diesel Oil (LDO) over JSERC norm valued at ₹ 38.57 crore. The plant suffered generation loss of 326.39 MU valued at ₹ 50.24 crore due to trippings of generation units owing to shortage/poor quality of coal and it failed to realise the claims of ₹ 56.02 crore from Central Coalfields Limited (CCL) for grade slippage, higher percentage of moisture, and supply of oversized stones in coal.

The GoJ and the Company failed to undertake the envisaged capacity expansion of the power plant even after 19 years of commissioning of TTPS. The Merry-Go-Round (MGR) rail system for transportation of fuel was commissioned after a delay of 24 years with an additional cost of ₹ 51.34 crore and the delivery of 34 wagons for the MGR system against purchase order placed in March 1989 was yet to be taken from CIMMCO despite payment of ₹ 2.88 crore in 1998. Further, the provision in the Power Purchase Agreement (PPA) relating to payment security mechanism was not enforced resulting in outstanding dues of ₹ 3082.72 crore against JUVNL. Besides, it failed to augment its revenue by sale of power to other licensees as allowed in the PPA. Hence, the Company failed to function strictly on prudent financial principles and it did not take effective action to realise its outstanding dues from JUVNL though it was facing difficulty in meeting the expenditure on purchase of coal, capital overhauling, repair and maintenance, upgradation of its plants and equipment and payment for the wagons.

Thus, the Company failed to perform as per the operational norms set by JSERC, equipment installed and infrastructure created by it since inception of the plant remained idle, inordinate delay occurred in creation of required infrastructure and upgradation of existing infrastructure. It is imperative that unless the Company operates as per the parameters set by JSERC and carries out capital overhauling and preventive maintenance of the plant on regular basis, the Company will not be financially viable and its sustainability in the long term may be compromised. The audit findings are discussed in the succeeding paragraphs.

2.1.7 Planning

Short term and long term plans not prepared

2.1.7.1 Proper Planning assists in identifying the activities to be undertaken to achieve the envisaged objectives. It increases the efficiency and reduces the risks involved in execution of schemes/projects and carrying out the activities of the Company.

Audit noticed that the Company had not prepared any short term or long term plan during the years 2011-12 to 2015-16 for capacity augmentation of the plant, its renovation and modernisation and to improve the operational efficiency of the plant. However, the Company was preparing the annual budgets by allocating funds for the renovation and modernisation works only. The budgeted works were not taken up for execution also during the respective years in which funds were allocated thereby indicating that funds for renovation and modernisation works were provided without proper planning for execution of the works. As a result, neither the renovation and modernisation works nor the capacity augmentation works were implemented. Thus, in absence of proper planning, the financial resources of the Company were not utilised in an efficient and effective manner.

MoU with Government of Jharkhand not signed

2.1.7.2 The Department of Public Enterprises (DPE), GoI had evolved a model Memorandum of Understanding (MoU) system for State PSUs for improving their performance and to ensure adequate autonomy with accountability. The State Government may adopt the model with or without modification as per need. The Government thus monitors the performance of these undertakings through setting targets at the beginning of the year in the MoU signed with them and performance evaluation at the end of the year.

Audit noticed that the administrative department *viz.* Energy Department, GoJ has not signed any Memorandum of Understanding (MoU) with the Company setting the target for power generation, capacity expansion, financial and operational parameters *etc.* for monitoring the performance of the Company. Thus, effective monitoring and evaluation of the performance of the Company has not been done by the GoJ.

As of 31 March 2016, the Company has accumulated losses of ₹ 824.53 crore and outstanding energy dues of ₹ 3082.72 crore from JUVNL indicating weak financial position and performance of the Company. GoJ should sign MoU with the Company so that Energy Department could set operational and financial targets for the Company and monitor performance of the Company so as to improve its financial position and profitability.

2.1.8 Financial Management

The main source of earning of the Company was the revenue realised from sale of power[11] generated by it and the day to day expenditure of the Company is met from such revenue. Following deficiencies were observed during the review of financial management of the Company:

Delay in finalisation of Annual Accounts

2.1.8.1 As per Section 210 read with Section 166 of the Companies Act 1956 and Section 129(2) read with 96 (1) of the Companies Act 2013 (applicable from April 2014), every Company has to finalise and place its Annual Financial Statements in the Annual General Meetings within six months from the end of the financial year.

Audit noticed that the annual accounts of the company for the years 1994-95 to 2010-11 were finalised belatedly during 2011-12 to 2015-16, the reason for which was stated to be ownership dispute over the Company between GoJ and Government of Bihar. However, finalisation of the annual accounts for the years 2011-12 to 2015-16 was pending (October 2016). Delay in finalisation of accounts is not only a violation of provisions of the Companies Act, 1956/2013, but also renders it difficult for the Company to detect/prevent any lapse/fraud and take immediate corrective action. Also, in absence of finalisation of accounts the Company has failed to watch over its financial health. Consequently, opportunities, if any, to initiate appropriate measures and follow up for a profitable operation were lost.

Audit further noticed that the Company in its petitions to JSERC for true up of tariff orders for the years 2011-12 to 2013-14 submitted the provisional accounts for the respective years stating these as audited accounts of the Company. JSERC issued the true up orders based on the expenditures as per these accounts. Submission of provisional accounts as audited annual accounts by the Company was improper.

Financial Position

2.1.8.2 The financial position of the Company for 2011-12 to 2015-16 based on the provisional Accounts of the Company is given in ***Annexure 2.1.1.*** As on 31 March 2016, the unsecured loans of the Company were ₹ 3016.09 crore. This included loan of ₹ 608.89 crore from Government of

[11] Ranged between *95 per cent* to 96 *per cent* of total earnings.

Bihar and ₹ 57 crore from Government of Jharkhand (GoJ). No repayment of the loans has been made by the company which has resulted in accrual of interest payble over the years. Outstanding interest on the loans as of 31 March 2016 was ₹ 2181.79 crore.

Audit noticed that the Company, in its tariff petition filed (August 2015) with JSERC, stated that it has not been able to make repayments of its loans due to outstanding dues from Jharkhand Urja Vikash Nigam Limited (JUVNL). JSERC however, was of the view that repayment of loans should not be linked with the recovery of dues. Due to failure in repayment of loan, JSERC disallowed interest of ₹ 36.73[12] crore as an expenditure item in the Annual Revenue Requirement for the years 2012-13 to 2015-16 thereby lowering the tariff of the Company.

Audit further noticed that the Company requested (January 2017) Government of Jharkhand for conversion of loan of ₹ 665.89 crore and accumulated interest of ₹ 1334.01 crore into equity share capital. It was also requested to waive/adjust the remaining accrued interest along with penal interest of ₹ 845.74 crore, with the outstanding dues of JUVNL. However, no further action has been initiated in this regard so far.

As of 31 March 2016, the Company has accumulated losses of ₹ 824.53 crore which was mainly caused by failure in achieving the JSERC norms in respect of Plant Load Factor (PLF), Plant availability Factor, auxiliary power consumption, excess consumption of coal and oil due to its failure to undertake proper repair and maintenance of the plant.

Working Results

2.1.8.3 The details of working results of the Company as per the provisional accounts of the company are given in the ***Annexure 2.1.2***. The revenue from operations of the Company was ₹ 490.38 crore in 2011-12, ₹ 810.86 crore in 2012-13, ₹ 612.60 crore in 2013-14, ₹ 741.38 crore in 2014-15 and ₹ 815.03 crore in 2015-16. Thus, annual revenues increased during the period, though it did not grow consistently.

The Company incurred loss per unit of energy sold of ₹ 0.66 in 2013-14, ₹ 0.07 in 2014-15 and ₹ 0.86 in 2015-16.

The Company earned a profit of ₹ 4.73 crore and ₹ 86.05 crore during the year 2011-12 and 2012-13 respectively. It however, registered a loss of ₹ 131.53 crore, ₹ 14.78 crore and ₹ 200.36 crore in the years 2013-14, 2014-15 and 2015-16 respectively. The profit per unit of energy sold was ₹ 0.02 per unit in 2011-12 which increased to ₹ 0.33 per unit generated in 2012-13 as the highest generation of power was achieved in 2012-13. The loss per unit of energy sold was ₹ 0.66 in 2013-14, ₹ 0.07 in 2014-15 and ₹ 0.86 in 2015-16 which was mainly due to steep increase in provision made for penal interest on loans in 2013-14 and prior period adjustments in the figures of provision for depreciation, revenue from sale of energy, outstanding dues, loans payable and stores and spares etc. made in the accounts of 2014-15 and 2015-16.

Audit noticed that the expenses of repair and maintenance, depreciation and interest and finance charges together constituted 21.88 *per cent* to 55.19 *per cent* of total expenditure during 2011-12 to 2015-16. The interest and finance charges comprising of interest on long term loans taken from Government of Bihar and Jharkhand increased from ₹ 83.14 crore (11.51 *per cent* of total

[12] Calculated at 13 *per cent* on the amount of ₹ 282.56 crore due for repayment in the years 2012-13 to 2015-16.

expenditure) in 2012-13 to ₹ 324.87 crore (41.84 *per cent* of total expenditure) in 2013-14 due to provision of penal interest of ₹ 221.72 crore on the loans. Interest and finance charges however, declined to ₹ 103.06 crore in each year during 2014-15 and 2015-16.

Policy/guidelines for investment of funds not framed

2.1.8.4 The Company had cash and cash equivalents ranging from ₹ 303.87 crore to ₹ 427.01 crore at the end of the years 2011-12 to 2015-16. However, it had not framed policy/guidelines for investment of funds, though it kept substantial funds[13] in banks as short term deposits at the end of the years 2011-12 to 2015-16. Audit noticed that the funds were invested in short term deposits on the basis of the rate obtained from some nationalised/private banks and avenues for better investment of funds was not explored. Thus, in absence of documented policy/guidelines for investment of funds, optimum return on investment of available funds was not ensured.

The Company stated (June 2016) that funds were kept in short term deposits to utilise it in the projects of capacity expansion and that the deposits were made after tendering.

The reply is not acceptable as funds were invested in short term deposits on the basis of the rate offers called for from some selected banks without open tendering giving fair and equal opportunity of participation to all banks.

Penalty imposed due to failure to deduct TDS on payment of coal bills

2.1.8.5 As per Section 45(1) Jharkhand Value Added Tax Act 2005 (Act), the Company was to deduct Jharkhand Value Added Tax at Source (TDS-JVAT) at the rate of two *per cent* of the price payable to Central Coalfields Limited (CCL) for purchase of coal. In case of contravention of the above provision penalty of twice the amount of the tax deductible was to be recovered from the Company. Further, as per Section 79(4) of the Act, every appeal against the demand for tax or penalty under the Act shall be filed within 30 days of the receipt of the notice of demand but where the appellate authority is satisfied that the appellant has sufficient reason for not preferring appeal within time, it may condone the delay.

Audit noticed that the Company did not deduct TDS-JVAT in payment of the invoices of CCL for the period 2011-12 and 2012-13. The Commercial Taxes Department (CTD) raised (March 2015) a demand for TDS-JVAT of ₹ five crore and a penalty of ₹ 10 crore for the year 2011-12. Another demand for TDS-JVAT of ₹ 7.35 crore and penalty of ₹ 14.69 crore for the year 2012-13 was also raised (March 2016). The Company has not deposited the amount so far (November 2016). On being enquired by audit, the Company stated that CCL had deposited JVAT at the rate of five *per cent* to CTD on the price of coal supplied to the Company and they have requested CCL to provide supporting documents showing deposit of tax for filing appeal against the demand. However, audit noticed that the copy of the challans for JVAT payment were not collected from CCL by the Company and no appeal was filed against the demand in the appellate authority within permitted time period of 30 days of receipt of demand under the Act. Thus, the penalty of

[13] ₹ 275.26 crore in 2011-12, ₹ 314.52 crore in 2012-13, ₹ 319.64 crore in 2013-14, ₹ 364.16 crore in 2014-15 and ₹ 392.41 crore in 2015-16 invested at the end of respective years from 2011-12 to 2015-16.

₹ 24.69 crore (₹ 10 crore and ₹ 14.69 crore) would have to be paid by the Company due to its failure in deducting TDS.

The Company stated (July 2016) that the documentary evidences *i.e.* copy of the challans for JVAT deposited and the returns filed by CCL in 2011-12 and 2012-13 are being collected for filing appeal against the demand. It further stated that the TDS-JVAT on payments made to CCL in 2013-14 and 2014-15 has been deposited to the CTD in June 2016 and the TDS-JVAT is being deducted and deposited from April 2015 as per provision of the Act.

The reply is not acceptable as the company failed to comply with provisions of Act due to which penalty of ₹ 24.69 crore was levied on it. The Company also failed to file appeal against JVAT demand within the permitted period of 30 days of the receipt of demand as required under Section 79(4) of Act and any appeal filed at this stage may not be accepted being time barred.

Failure to follow terms and conditions of Power Purchase Agreement

2.1.8.6 The Company sells its entire power generated to JUVNL as per the tariff decided by JSERC. The Power Purchase Agreement (PPA) entered into in 2005 with erstwhile Jharkhand State Electricity Board (JSEB) did not contain a payment security mechanism and the Company failed to realise full payment for energy supplied. Consequently, ₹ 1820.27 crore remained outstanding against JUVNL towards energy charges and Delayed Payment Surcharge (DPS) as of October 2012.

The Company entered into fresh PPA with JSEB on 31 October 2012 *i.e.* after 27 months of expiry (August 2010) of the earlier PPA. As per the PPA, JSEB was to open an irrevocable and revolving letter of credit (LC) equivalent to 105 *per cent* of estimated amount for energy supplied in a month and the amount of LC was to be enhanced or reduced every six months on the basis of average billing in the previous 12 months. Also, as per the Tariff Policy (January 2006) of Ministry of Power, GoI, the PPA should ensure adequate and bankable payment security arrangement to generating companies.

Provision in the PPA relating to payment security mechanism was not enforced which resulted in accumulation of dues of ₹ 3082.72 crore against JUVNL.

JUVNL opened LCs[14] for ₹ 40 crore which covered only 78 *per cent* of the average monthly energy bill of ₹ 51 crore in 2013-14. Audit noticed that the LC amount was not enhanced even when the average energy bills increased to ₹ 67.92 crore in 2015-16. Further, the LCs were never invoked for realising payment against the monthly energy bills although JUVNL was not paying the bills in full. As a result, the total outstanding dues increased to ₹ 3082.72 crore[15] as of March 2016. Thus, the provision in the PPA relating to payment security mechanism was not enforced resulting in accumulation of dues against JUVNL. Audit also noticed that the Company has not approached the JSERC for realisation of the outstanding dues of JUVNL and did not file any petition in this regard before the Commission.

Further, in the interview taken by audit team (November 2016), the MD of the Company stated that the outstanding dues with JUVNL was serving as a bottleneck in the capacity expansion of the plant. The GM, TTPS also stated that outstanding dues were affecting the planning and execution of operation and maintenance works at TTPS. Thus, it is clear that outstanding dues of the

[14] LC dated 10 May 2012 for ₹ 15 crore and LC dated 28 February 2013 for ₹ 25 crore.

[15] Comprised of energy charges ₹ 1186.85 and Delayed Payment Surcharge ₹ 1895.87 crore (at 1.25 *per cent* per month as decided by JSERC).

Company was adversely affecting the operational performance and expansion plans of the company.

The Company in its reply stated (July 2016) that the issue of recovery of outstanding dues was taken up regularly with the GoJ/JUVNL. It further stated that JUVNL has paid (March 2016) ₹ 563.05 crore directly to CCL against the amount outstanding for coal supply to the Company under Ujwal DISCOM Assurance Yojana (UDAY) Scheme of GoI. Further, in the exit conference, the Additional Chief Secretary stated (November 2016) that the Government will consider the matter and take a view for the realisation of dues of the Company.

The fact, however remains that ₹ 3082.72 crore remained unrealised from JUVNL as the Company failed to exercise the payment security mechanism available in PPA. The GoJ was however yet to take a definite action on this issue.

Sale of power to other licensees not done as per the Power Purchase Agreement

2.1.8.7 The Company decided to sell (November 2011) 50 MW power to NTPC Vidyut Vyapar Nigam Limited (NVVNL) and accordingly 5.23 Million Units (MU) of power was sold in November/December 2011 and it realised ₹ 2.01 crore from this sale. However, due to outage of one unit of TTPS and considering the power crisis of Jharkhand State, an administrative decision was taken by GoJ to suspend the sale of power to other licensees in December 2011.

Audit observed that as per the PPA (31 October 2012) with JSEB, the Company was allowed to sell 50 MW power to other licensees/consumers and if energy dues of erstwhile JSEB went beyond three months of energy charges, it was free to sell power to other licensees/consumers to the extent considered necessary. However, no effort was made by the company to sell power to any other consumers during 2012-13 to 2015-16, despite failure in payment of energy dues by JUVNL which stood at ₹ 3082.72 crore as of 31 March 2016 breaching the condition of PPA. Thus, the Company did not take effective action to augment its revenue even though it was not able to meet its operational expenditure *viz.* purchase of coal, capital overhauling as well as repair and maintenance of the plant. This indicates that it failed to safeguard its financial interests.

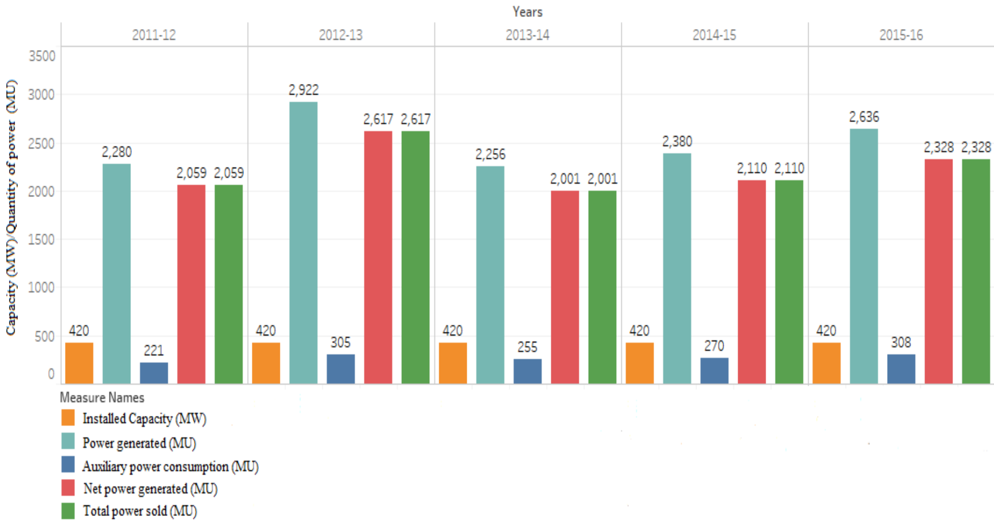
In the exit conference, the Additional Chief Secretary stated (November 2016) that the Company may sell power to CCL and adjust the power supply bills against the cost of coal supplied by CCL. The Company stated (December 2016) that they were in process of finalisation of sale of power to CCL against supply of coal by them.

The fact, however remains that the Company did not sell power to other licensees despite huge outstanding dues against JUVNL which affected the operational performance and profitability of the plant.

2.1.9 Operational Performance and maintenance activities

The operational performance of the Company for the five years ending 2015-16 is given in the **Chart 2.1.2** below:

Chart 2.1.2: Operational Performance during 2011-12 to 2015-16



The operational performance was evaluated on various operational parameters as discussed in the subsequent paragraphs.

PLF approved by JSERC not achieved

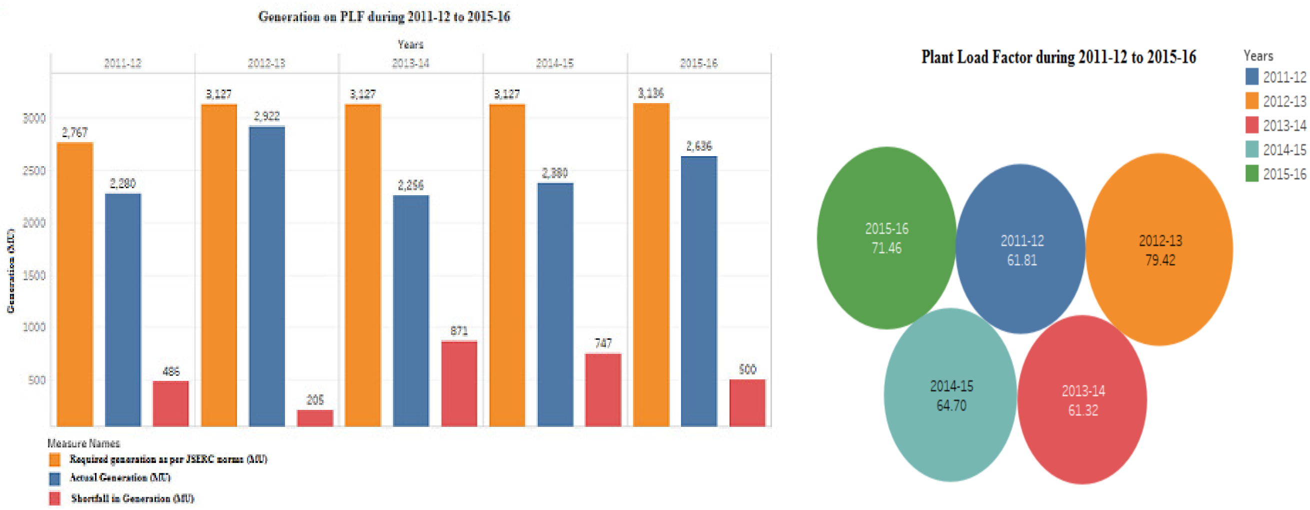
2.1.9.1 Plant Load Factor (PLF) is a measure of the output of a power plant as compared to the maximum possible generation at installed capacity. A higher load factor usually means more output and a lower cost per unit as fixed costs are spread over more units of output. The company in its tariff petition projected a PLF of 75 *per cent*, 76 *per cent*, 77 *per cent*, and 78 *per cent* for the years 2012-13 to 2015-16 respectively. However, JSERC fixed the PLF of 75 *per cent* in 2011-12 though in the Multiple Year Tariff order for the year 2012-13 to 2015-16, JSERC fixed 85 *per cent* PLF for thermal power generation at TTPS. The actual PLF achieved and the loss of revenue due to lower PLF during the years 2011-12 to 2015-16 is shown in the **Table 2.1.1** and **Chart 2.1.3**:

Table 2.1.1: PLF of TTPS during 2011-12 to 2015-16

Sl. No	Particulars	2011-12	2012-13	2013-14	2014-15	2015-16
1	Energy Generation as per design (MU)	3689.28	3679.20	3679.20	3679.20	3689.28
2	Required generation as per JSERC Norms (MU)	2766.96	3127.32	3127.32	3127.32	3135.89
3	Actual Generation (MU)	2280.42	2922.00	2256.14	2380.46	2636.31
4	JSERC Norms for PLF (percentage)	75.00	85.00	85.00	85.00	85.00
5	Actual PLF (percentage)	61.81	79.42	61.32	64.70	71.46
6	Shortfall in PLF (percentage)(4-5)	13.19	5.58	23.68	20.30	13.54
7	Shortfall in Generation(MU) (2-3)	486.54	205.32	871.18	746.86	499.58
8	Contribution (₹/KWH)	0.87	1.35	1.36	1.54	0.99
9	Contribution on shortfall in generation (₹ in crore)	42.33	27.72	118.48	115.02	49.46

(Source: Data compiled from the information furnished by the Company)

Chart 2.1.3: Power Generation and PLF during 2011-12 to 2015-16



It may be seen from the above table and chart that the PLF during the years ranged between 61.32 *per cent* and 79.42 *per cent* which was lower than the JSERC approved PLF of 75 *per cent* for 2011-12 and 85 *per cent* for the years 2012-13 to 2015-16. Also, the Company failed to achieve its projected PLF except in the year 2012-13. The company attributed evacuation system constraints due to which one unit of TTPS remained shut down for 120 days in 2011-12 and for 183 days in 2013-14, outages due to lack of preventive maintenance, obsolete machines and poor grade coal as the reasons for the low PLF.

The Company failed to achieve the Plant Load Factor fixed by JSERC and suffered loss of power generation of 2809.48 MU and revenue loss of ₹ 870.78 crore.

Audit noticed that the plant achieved the highest PLF of 79.42 *per cent* in 2012-13 mainly due to availability of evacuation system, transmission lines and good quality of fuel in adequate quantity throughout the year accompanied by better management of the plant in association with the consultancy team of National Thermal Power Corporation Limited (NTPC) which was deputed upto August 2011. Had the operating parameters of 2012-13 also been maintained in the subsequent years, the Company could have achieved higher PLF in 2013-14 to 2015-16.Thus, due to failure to achieve PLF target fixed by JSERC, the Company suffered loss of power generation of 2809.48 MU valued at ₹ 870.78 crore and was deprived of contribution of ₹ 353 crore. The low PLF also caused financial losses to the Company as tariff had been calculated taking into account the PLF as 85 *per cent* instead of the actual PLF being worked out each year. Thus, during 2015-16, the Company suffered a financial loss of ₹ 0.446 per unit on 2328.28 MU of energy generated as compared to the tariff

A comparison of the PLF achieved by power plants operated by Damodar Valley Corporation (DVC), National Thermal Power Corporation Ltd. (NTPC) and State power generation Companies of Jharkhand and four neighboring States (Bihar, Chhattisgarh, Odisha and West Bengal) revealed that out of total 16 plants (five plants of DVC, six plants of NTPC, five State run plants) only three plants of NTPC (two plants in Odisha and one plant in Chhattisgarh) achieved the PLF of 85 per cent during 2015-16.

which was worked out with 85 *per cent* PLF instead of the actual PLF of 71.46 *per cent*. The actual loss in 2015-16 were even more at ₹ 0.86 per unit. It was also observed that the Company failed to apprise JSERC that 85 *per cent* PLF was on the higher side and it had never been able to achieve this. The failure to finalise accounts since 2011-12 meant that higher cost of debt servicing (higher penal interest on loan) and prior period adjustments etc. could not be considered by JSERC while fixing the tariff.

The Company stated (June 2016) that the target of 85 *per cent* PLF approved by JSERC could not be achieved due to various constraints and lack of maintenance as shut down for capital overhauling was not permitted by GoJ and JUVNL. In the exit conference the Additional Chief Secretary, Department of Energy, GoJ stated (9 November 2016) that a comprehensive proposal for restructuring of the Company, improvement in PLF, capital overhauling and maintenance of the plant will be submitted to the Government for consideration and sanction of funds. However, no action in this regard was taken by the Company/Government as of December 2016.

The reply is not acceptable as the shut down of the units should have been allowed by the GoJ for proper maintenance and sustainable operation of the plant. Further, the Company has not conducted overhauling of boiler and turbine and their auxiliaries. Upgradation of its switchyard to 400 KV was also not completed which affected the PLF adversely.

Plant Availability Factor lower than that approved by JSERC

2.1.9.2 Plant availability means the ratio of actual hours operated to maximum possible hours available during certain period. JSERC has fixed Plant Availability Factor (PAF) of 85 *per cent* for the years 2011-12 to 2015-16. The details of total hours available, actual hours operated, excess outage hours and actual PAF are shown in the **Table 2.1.2**

Table 2.1.2: Outage hour of plant during 2011-12 to 2015-16

Sl. No	Particulars	2011-12	2012-13	2013-14	2014-15	2015-16
1	Total hours available	17568	17520	17520	17520	17568
2	Availability hours as per JSERC norm of 85 *per cent* PAF	14933	14892	14892	14892	14933
3	Actual Operated hours	11199	15397	12464	13959	15345
4	Excess outage hour (2-3)	3734	0	2428	933	0
5	Actual PAF(*per cent*)	63.75	87.88	71.14	79.67	87.35
6	Excess outage (*per cent*)	21.25	0.00	13.86	05.33	0.00

(Source: Data compiled from the information furnished by the Company)

Due to excess forced outages over JSERC norm, the power plant suffered generation loss of 1490 MU valuing ₹ 409.10 crore depriving it of contribution of ₹ 167.73 crore.

It may be seen from the above table that the actual PAF achieved by the plant during 2011-12 to 2015-16 ranged between 63.75 *per cent* to 87.88 *per cent*. The PAF was lower than the JSERC norm by 21.25 *per cent* in 2011-12, 13.86 *per cent* in 2013-14 and 5.33 *per cent* in 2014-15, though it achieved the PAF of 87.88 *per cent* in 2012-13 and 87.35 *per cent* in 2015-16 which were higher than the target of 85 *per cent* fixed by JSERC. Thus, forced outages of 7095 hours during 2011-12 to 2015-16 were suffered by the plant in excess of the JSERC norm. The forced outages were due to frequent tube leakages, low pressure in boiler, sparking from generator rotor slip ring, very high and low drum level *etc*. Due to excess forced outages over JSERC norm, the plant suffered generation loss of 1490 MU valuing ₹ 409.10 crore depriving it of contribution of ₹ 167.73 crore.

The Company stated (July 2016) that running of units at its critical condition led to its frequent breakdown causing excess outages of the plant. But the major problems could not be rectified during such periods of break down as planned programmes, spares and the required fund did not exist.

The reply is not acceptable as the Company should have planned the programme and the schedules for preventive maintenance of the plant and equipment better to reduce the breakdown of the plants. Also, JSERC had approved total expenditure of ₹ 489.99 crore on repair and maintenance for the years 2011-12 to 2015-16 against which the actual expenditure made by the Company was ₹ 270.46 crore during the above period, which indicates that adequate repair and maintenance of the plant was not done by the Company. It was observed that during 2011-16, the Company kept funds ranging from ₹ 275.26 crore to ₹ 392.41 crore under Short Term Deposits which could have perhaps been utilised. The Company earned interest of ₹ 144.98 crore on the Short Term Deposits during 2011-16 whereas the revenue loss suffered on account of excess PAF was ₹ 409.10 crore.

JSERC while truing up the Aggregate Revenue Requirement (ARR) for 2012-13 and 2013-14 stated that the Company has not incurred the repair and maintenance expenses on its generation units in line with approval granted in the Multi Year Tariff (MYT) order.

Excess auxiliary power consumption

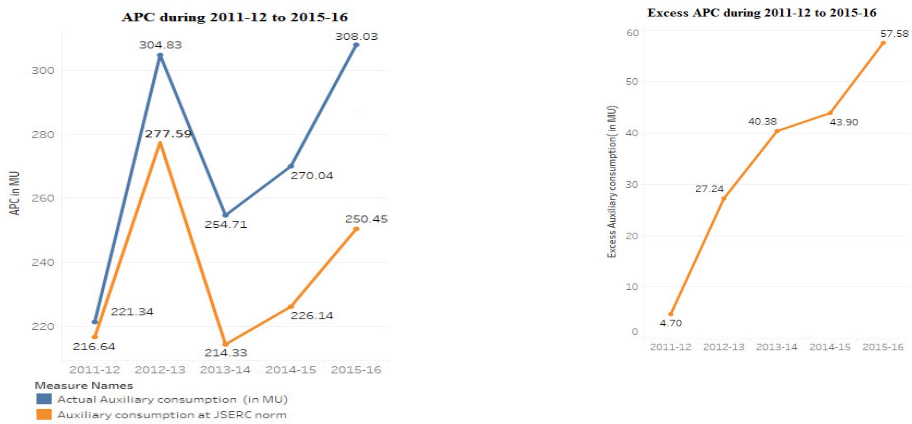
2.1.9.3 Auxiliary power consumption (APC) is the energy consumed by the power station itself for running its equipment and for common services. Higher APC reduces the net power generation of a generating station. JSERC had prescribed the norm for the APC of 9.5 *per cent* for the years 2011-12 to 2015-16. The actual APC in TTPS during 2011-12 to 2015-16 was as shown in the **Table 2.1.3**.

Table 2.1.3: Auxiliary power consumption during 2011-12 to 2015-16

Sl.No	Particulars	2011-12	2012-13	2013-14	2014-15	2015-16
1	Energy Generation (MU)	2280.42	2922.00	2256.14	2380.46	2636.31
2	Actual Auxiliary consumption (in MU)	221.34	304.83	254.71	270.04	308.03
3	Auxiliary consumption at JSERC norm of 9.5 *per cent*	216.64	277.59	214.33	226.14	250.45
4	Actual Auxiliary consumption (in *per cent*)	9.71	10.43	11.29	11.34	11.68
5	Excess Auxiliary consumption above JSERC norm (in *per cent*)	0.21	0.93	1.79	1.84	2.18
6	Excess Auxiliary consumption (in MU)	4.70	27.24	40.38	43.90	57.58
7	Contribution (₹/KWH)	0.87	1.35	1.36	1.54	0.99
8	Contribution on Excess Auxiliary consumption (₹ in Crore)	0.41	3.68	5.49	6.76	5.70

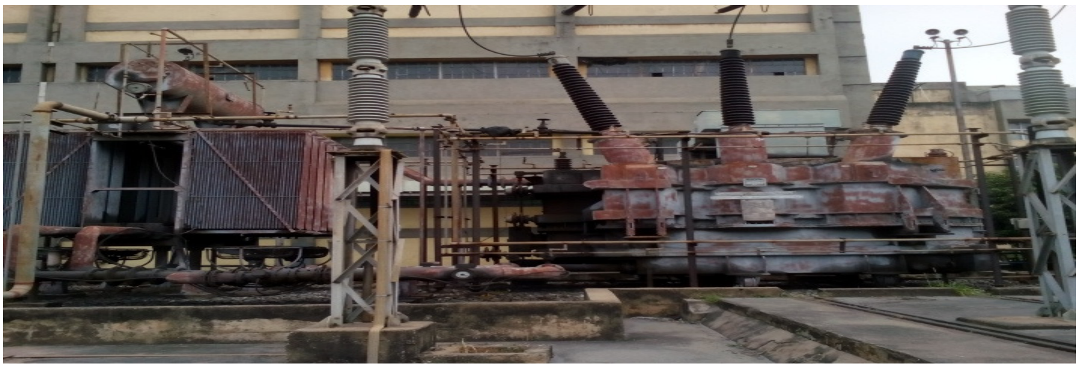
(Source: Data compiled from the information furnished by the Company)

Chart 2.1.4: Showing actual APC, normative APC and excess APC during 2011-12 to 2015-16



It may be seen from the **Table 2.1.3** and **Chart 2.1.4** that against the JSERC norm of 9.5 *per cent*, the actual APC was 9.71 *per cent* in 2011-12 which increased consistently to 11.68 *per cent* in 2015-16. The reasons for high APC were ageing of machines, failure to undertake overhauling of the machines in time, reduced operating load due to backing down of generation unit, frequent tripping of transmission lines and inefficient working of equipment like feed pumps, cooling water pumps, air fans, coal grinding mills, ash handling equipment *etc*. Audit noticed that JSERC has not approved the higher APC of the plant while truing up the ARR for the years 2011-12 to 2013-14, as it was a controllable parameter as per the Generation Tariff Regulations, 2010.

Audit further noticed during joint physical verification with the representatives of the Company that four Unit Auxiliary Transformers[16] (UAT) have not been commissioned since the initial commissioning of the plant which could have reduced the APC. The reason stated for the same was paucity of funds.



Unit Auxiliary Transformers lying unutilised in TTPS

The Company consumed excess auxiliary power of 173.80 MU valuing ₹ 56.79 crore over the JSERC norm and was deprived of a contribution of ₹ 22.04 crore during 2011-12 to 2015-16.

Thus, the Company consumed excess auxiliary power of 173.80 MU valuing ₹ 56.79 crore over the JSERC norm and was deprived of a contribution of ₹ 22.04 crore during 2011-12 to 2015-16.

The Company stated (June 2016) that the JSERC fixed the target of Auxiliary Power Consumption considering 85 *per cent* PLF for both the units, although they operated at reduced load due to various technical reasons like backing

[16] The Power Transformer which provides power to the auxiliary equipment of a power generating station during its normal operation.

down of generation unit, poor quality of coal, ageing of machines, overhauling not done timely, frequent tripping of transmission lines *etc*. which leads to high APC. It also stated that UATs will be commissioned when the fund will be made available.

The reply of the Company does not suffice as a valid reason for high rate of APC as the Company could have controlled most of the factors attributed for high APC through efficient management of the plant, timely repair and maintenance and by commissioning the UATs. Management's contention regarding lack of funds for commissioning of UATs is also not acceptable as the Company should have utilised its available funds kept in short terms deposits for carrying out this essential work.

Delay in carrying out capital overhaul of the plant

2.1.9.4 Efficiency of the plant and equipment and their availability for power generation is dependent on strict adherence to annual maintenance and equipment overhauling schedules. Failure to adhere to these schedules results in higher consumption of coal, fuel oil and higher forced outages and resultant increase in the cost of power generated. As per the manual of the Original Equipment Manufacturer (OEM) Bharat Heavy Electricals Limited (BHEL), capital maintenance of plants should be done within 25000 running hours. TTPS had conducted the last capital overhauling of Unit I in June 2008 and that of Unit II in May 2010 and the same had become due again from May 2012 and July 2014 respectively.

Audit noticed that the Company had planned the capital overhauling of Unit I during July, 2013 which was rescheduled to July 2014 and was again planned in June 2015. However, the capital overhauling was not conducted as per the schedule. Audit further noticed that Unit I had run for 53037 hours and Unit II had run for 40917 hours up to the end of May 2016 against stipulated 25000 running hours for carrying out capital overhaul. The boiler of Unit I suffered several break downs during April and June 2014 due to boiler tube leakages with forced outages for five days. Also, the unit suffered 53 days of forced shut down from 12 July 2014 due to damage of Generator Rotor Slip Ring and for want of replacement of the Rotor. In October 2014, Unit I was again shut down for about 25 days due to boiler tube leakages.

Unit I suffered 102 trippings resulting in forced shut down of 5811 hours during 2013-14 to 2015-16 and Unit II suffered 100 trippings and forced shut down of 4291 hours during the same period.

Despite the fact that the work order for complete overhauling of the Generator was already placed on BHEL and that the unit suffered 78 days of forced shut down, the capital overhauling was not undertaken due to lack of planning and preparedness to carry out the capital overhauling. Again overhauling of both the units planned during subsequent period *i.e.* May 2015 to August 2015 was also not done, the reasons for which were stated to be lack of permission from JUVNL for shut down and funds constraint. In absence of Capital Overhauling, Unit I suffered 102 trippings resulting in forced shut down of 5811 hours during 2013-14 to 2015-16. Similarly, Unit II suffered 100 trippings and forced shut down of 4291 hours during the same period. However, the Company has not approached JSERC explaining the critical conditions of the units and difficulties faced by it in conducting the capital overhauling. The capital overhauling of Unit I was finally taken up only in July 2016. Thus, overdue capital overhauling of Unit I was taken up after a delay of 49 months and that of Unit II was yet to be taken up though overdue for 28 months (November 2016). Besides, the upgraded Control and Instrumentation system for Unit I procured in December 2012 at a cost of

₹ 13.81 crore which was to be commissioned during capital overhauling of the Unit could also not be commissioned (October 2016).

The Company stated (July 2016) that the Capital overhauling scheduled from 17 June 2014 to 31 July 2014 was not taken up as JUVNL did not agree to shutting down the plant and also due to fund constraints.

The reply is not acceptable as capital overhauling of plant was necessary for longer life and efficient operation of the plant and timely execution of the same was the responsibility of the Company. As such the decision for the same should have been taken by the Company itself. Moreover, the schedule for the capital overhauling of the units was fixed and intimation for the same was given well in advance to JUVNL. The contention of funds constraints is also not acceptable as the actual expenditure on repair and maintenance was much less than the expenditure for repair and maintenance approved by JSERC in the tariff order for the years 2011-12 to 2015-16. Further, the Company had kept significant funds in short term deposits during this period.

Here it is pertinent to mention that in the interview taken by Audit Team, the General Manager, TTPS stated that renovation and modernisation of the plant was necessary and that many of the pumps, fans, motors, ducts and pipe lines had deteriorated. Timely overhaul of the equipment and the units should have been done.

Recommendations of the Consultants for Performance Improvement not implemented

2.1.9.5 The company had placed (May 2009) work order for ₹ 6.79 crore on NTPC for consultancy services for Operation and Maintenance management support for the units in the fields of mechanical and electrical maintenance, Control and Instrumentation (C & I), maintenance planning *etc*. for 24 months. Also, another work order for ₹ 20 lakh was placed (May 2009) on NTPC for consultancy services for technical audit, gap analysis and performance improvement plan (PIP). Under this, a report on gap analysis and PIP was to be submitted to the Company after complete study of the power station.

Audit noticed that the NTPC consultancy team *inter alia* suggested measures for reduction of tripping, boiler tube leakage, unburnt carbon in ash, improvement in heat rate *etc*. during May 2009 to August 2010. It however stated (September 2010) that only 25 *per cent* of their recommendations were implemented by the Company which was not satisfactory. Also, the implementation of the road map for PIP and fixation of targeted performance level in short term and long term was not on record which indicated that action for implementation of the suggestions of the consultant in the short term and long term was not taken. Further, the Unit Auxiliary Transformers, Automatic Turbine Testing (ATT) system, Electro Hydraulic Governing (EHG) system, Auto loop and Master Fuel Controller which were not commissioned since inception of the plant were also not commissioned under the supervision of the consultant. Thus, the desired performance improvement of the plant was not achieved despite incurring an expenditure of ₹ 6.06 crore in consultancy services.

The Management stated (July 2016) that remedial action as suggested by NTPC for short term and long term was taken in a piecemeal basis. Action was taken for reduction of unburnt carbon, and heat rate in the TPS has improved.

The reply is not acceptable as coordinated action was not taken for implementation of the PIP; as a result the improvement in performance achieved in 2012-13 could not be sustained. This is also evident from the fact that the percentage of unburnt carbon and APC had increased in the subsequent years. Further, the Company has prepared the action plan only in November 2016 for improvement in PLF, reduction in APC, number of trippings and unburnt carbon in ash, for preventive maintenance of plant and equipment, ash handling, finance management, human resource management, *etc*. on the basis of recommendations of NTPC. However, these are yet to be implemented.

2.1.10 Optimum utilisation of existing plants and equipment

A plan needs to be in place for optimal utilisation of existing plants and equipment besides timely repair/maintenance. The projects undertaken for upgradation of plant by the company are discussed in the following paragraph.

Under-utilisation of capacity due to failure to upgrade 400 KV Switchyard

2.1.10.1 The power generated from the TPS was to be evacuated by two 400 KV transmission lines *viz*. TTPS to Bihar Sharif Grid of Bihar State Electricity Board and TTPS to Patratu Thermal Power Station (PTPS) Grid of JUVNL. However, both the lines were operating at 220 KV as the capacity of the switchyard was 220 KV. In the event of one transmission line going down the energy generated at TTPS could not be evacuated in full causing it to back down its power generation.

The construction of 400 KV switchyard as per the DPR of TTPS was left incomplete by Bharat Heavy Electricals Limited (BHEL) after initial commissioning of TTPS (September 1996) and the equipment valued at ₹ 8.60 crore supplied by it including 250 MVA[17] Inter Connecting Transformer (ICT) was lying unused (October 2016) in the plant premises for last 20 years.

To overcome this power evacuation constraint, the Company awarded (July 2010) the work of construction of five 400 KV bays in the switchyard of TTPS to Power Grid Corporation of India Limited (PGCIL) on cost plus basis at an estimated cost of ₹ 22.70 crore, excluding consultancy fee at 15 *per cent*. The scope of the work included design, engineering, tendering, procurement, erection and project management and testing and commissioning. The work was to be completed within 24 months *i.e.* by July 2012. However, PGCIL took 20 months in awarding (March 2012) the work to contractor, M/s Sterling & Wilson Ltd. in March 2012 at a contract price of ₹ 16.49 crore. Audit noticed that there was no penal provision in the contract with PGCIL for delay in completion of the work and thus no safeguard was available to the company against delay in completion of the work.

The contractor started the work in May 2013 *i.e*. after 13 months of award of the work. As per the work order, five bays of 400 KV were to be constructed and one ICT of 250 MVA was to be installed. The ICT was to be procured by the Company for which the Company placed purchase order (September 2011) for ₹ 8.60 crore on BHEL and supply of the equipment was completed in December 2013. However, the provision of five bays with one ICT was found (June 2013) inadequate to evacuate the entire power generated from TTPS and the Company decided (June 2013) to install one more ICT of 250 MVA and to

[17] Megavolt Amperes (MVA) is a unit used for measuring apparent power *i.e* total current and voltage in an electrical circuit.

construct one additional bay for it. As such the scope of work was revised to include construction of one additional bay and commissioning of the old ICT and one 50 MVAR Shunt Reactor[18]. Accordingly, the contract price was revised (December 2015) to ₹ 20.18 crore. Thus, the scope of work was revised after 64 months of award of the work to PGCIL.

Audit noticed that the progress of the work was not satisfactory due to delay in completion of foundation work, delay in erection of the new ICT as the supplier BHEL has not deputed its engineers for commissioning of the ICT, and delay in payment to PGCIL by the Company. Also, on inspection (June 2016) of the old ICT and the shunt reactor internal problems were reported which were yet to be rectified.

Due to defective planning and change in the scope of work, upgradation of the switchyard was delayed by 52 months.

Thus, due to defective planning and change in the scope of work upgradation of the switchyard was delayed by 52 months and has not been completed so far (November 2016). As a result, Company suffered loss of power generation of 971 MU due to backing down of generation units and was deprived of revenue of ₹ 267.51 crore on which loss of contribution (sale price less variable cost) of ₹ 107.15 crore was suffered during 2011-12 to 2015-2016.

Incomplete bays of Switchyard at TTPS

The Management stated (July 2016) that the upgradation of switchyard was not completed due to technical changes and modification in the scope of work from five bays to six bays and the delay in payment was due to financial constraints. Management further stated that the work would be completed by March 2017.

The fact however remains that the work was not executed in a planned and time bound manner as scope of work was revised after 64 months of award of the work. Further, the Company should have provided funds for the works as allocation of ₹ 20 crore and ₹ 14.61 crore was already made in the budget for 2014-15 and 2015-16 and Company had kept substantial funds in short term deposits in the banks. JSERC also directed (September 2016) the Company to complete the upgradation of the switchyard to operate the transmission line at 400 KV as against the existing operating voltage of 220 KV.

2.1.11 Consumption of fuel

Excess consumption of coal due to high unburnt carbon in ash

2.1.11.1 TTPS was designed for two *per cent* unburnt carbon in bottom ash and 0.5 *per cent* unburnt carbon in fly ash. Audit noticed that actual unburnt carbon in bottom ash during the period 2011-12 to 2015-16 ranged from 9.96 *per cent* to 12.66 *per cent* and unburnt carbon in fly ash ranged between 4.87

[18] 50 MVAR Shunt Reactor which was disconnected in March 2014 was to be commissioned in 400 KV switchyard.

per cent to 5.53 *per cent* resulting in 1,68,545 MT excess unburnt carbon during the above years.

Excess unburnt carbon in bottom ash and fly ash than the design norm of the power plant resulted in excess consumption of 1,68,545 MT coal valued at ₹ 35.10 crore.

It was noticed that the consultancy team of NTPC engaged for performance improvement of the plant had recommended (August 2010) actions to be taken for reduction of unburnt carbon in ash *i.e* removal of foreign materials from coal ensuring reliable operation of milling plant, identification of new or replacement of defective instruments, inspection and testing of ash sample daily, calibration of instruments and replacement of eroded coal burners and other parts in boilers *etc*. However, action on the suggestions taken by TTPS was not on record and no improvement was achieved in the percentage of unburnt carbon in ash. Thus, unburnt carbon in ash in excess of the designed parameter resulted in excess consumption of 1,68,545 MT of coal valued at ₹ 35.10 crore.

The Company stated (July 2016) that action was taken as per suggestion of NTPC team and improvement in heat rate has been achieved.

The heat rate is a factor of the calorific value of the coal supplied and could be attributed to availability of better coal. However, the percentage of unburnt carbon in bottom ash is a function of other factors as delineated by the NTPC consultant. Thus, unburnt carbon in Unit I has increased from 10.68 *per cent* in 2012-13 to 15.23 *per cent* in 2015-16 and in Unit II, the same has increased from 9.24 *per cent* to 10.09 *per cent* during the same year which meant that the Company has not taken adequate measures for removal of foreign matter from the coal, improvement in burners and better instrument quality. In the interview taken by the audit team the General Manager, TTPS also mentioned that high unburnt carbon in fly ash and bottom ash affected the operational performance of TTPS.

Excess consumption of Fuel Oil

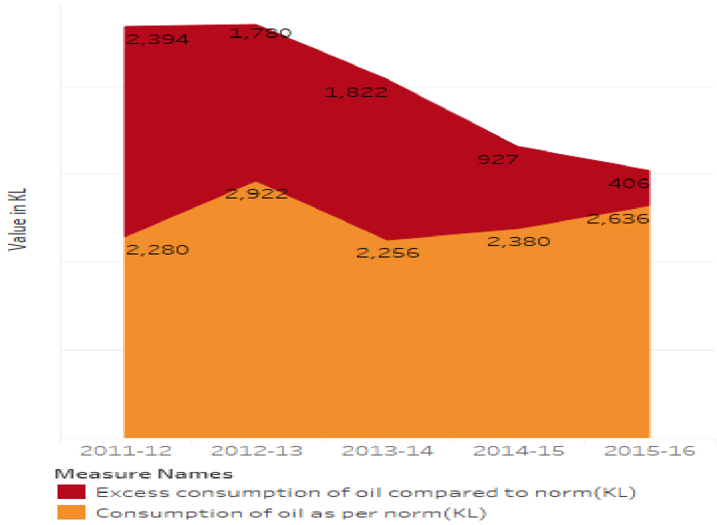
2.1.11.2 Light diesel oil (LDO) is required for lighting up of the boiler and controlling instability of flame as a supplement to coal. As per the norm fixed by JSERC for the year 2011-12 to 2015-16, consumption of LDO should not exceed one millilitre (ml) per KWH. However, consumption of LDO was not within the prescribed limit during the period 2011-12 to 2015-16 as indicated in the **Table 2.1.4** and **Chart 2.1.5.**

Table 2.1.4: Consumption of LDO during 2011-12 to 2015-16

Sl.No	Particulars	2011-12	2012-13	2013-14	2014-15	2015-16
1	Unit generated(MU)	2280.42	2922.00	2256.14	2380.46	2636.31
2	Actual fuel oil consumption(KL)	4674.00	4702.21	4138.30	3307.80	3042.10
3	Consumption of oil as per norm(KL)	2280.42	2922.00	2256.14	2380.46	2636.31
4	Actual Oil Consumption (ml per KWH)	2.05	1.61	1.83	1.39	1.15
5	Excess consumption of oil compared to norm (KL)	2393.58	1780.21	1822.16	927.34	405.79
6	Average procurement cost per KL (in ₹)	55195.82	62447.96	64933.24	58350.44	42506.15
7	Total value of excess consumed oil (₹in crore)	13.21	11.12	11.83	5.41	1.72

(Source: Data compiled from the information furnished by the Company)

Chart 2.1.5: Excess Consumption of LDO against norm



It may be seen from the table and chart that the company could not achieve JSERC norm of one ml per KWH during 2011-12 to 2015-16 and the actual LDO consumption ranged between 1.15 to 2.05 ml per KWH. As a result there was excess consumption of 7329.08 KL oil over the norm valued at ₹ 43.29 crore.

The reasons for the oil consumption in excess of JSERC norm were frequent tripping of the units due to poor quality of coal, tripping of transmission lines and backing down of generation unit due to maintenance problems in transmission lines. It was noticed that JSERC, in the true-up order of the Tariff of the Company for 2011-12 has disallowed the expenditure of ₹ 8.49 crore due to excess consumption of LDO. Thus, the Company had already suffered a loss of ₹ 8.49 crore in 2011-12 and further stands to suffer a loss of ₹ 30.08 crore due to excess consumption of LDO during 2012-13 to 2015-16, if JSERC were to yet again disallow the expenditure over and above the norm.

The Company stated (July 2016) that tripping of units due to failure of transmission lines and lack of timely preventive maintenance resulted in excess oil consumption.

The reply confirms the audit observation.

2.1.12 Input efficiency

Operating efficiency of a generating company is dependent on input efficiency which consists of material and manpower, issues relating to which are discussed in the succeeding paragraphs.

Loss of power generation due to shortage/poor quality of coal

2.1.12.1 The units of the Company had tripped 15 times during the years 2011-12 to 2015-16 owing to shortage of coal and poor quality of coal supplied by CCL. As a result, 1554 plant working hours were lost and the company suffered generation loss of 326.39 MU valued at ₹ 50.24 crore and a loss of contribution of ₹ 21.68 crore.

The Company stated (July 2016) that main reasons for procurement of lesser quantity of coal was its inability to pay for purchase of coal and that requirement of coal was less during that period. Also, supply of coal was stopped in 2011-12 as the required grade of coal was unavailable and transportation of coal from West Bokaro collieries was interrupted in 2014-15 due to local problems.

The reply is not acceptable as coal being the prime requirement for power generation, procurement and storage of adequate quantity of coal should have been ensured by the Company.

Failure in realisation of claim for poor quality of Coal

2.1.12.2 Each thermal power station is designed for usage of particular grade of coal. Usage of envisaged grade of coal ensures optimisation of power generation and economy in cost.

As per the Fuel Supply Agreement (FSA), CCL was to make arrangement to assess the quality of coal supplied and to monitor the same. For assessment of quality of Coal, sample was to be collected at the loading point by the seller and purchaser and analysed for determination of Moisture, Ash and Gross Calorific Value (GCV). Accordingly, the quality of coal received by the Company was to be adjusted for the excess moisture[19] and the grade of coal. The amount of claims on settlement of the disputed bills was to be paid in each month.

Audit noticed that the average GCV of Coal received was 4041 Kcal/kg in 2012-13, 3878 Kcal/kg in 2013-14, 3589 Kcal/kg in 2014-15 and 3614 Kcal/kg in 2015-16 as per test reports of laboratory of TTPS. This was lower than the design requirement of 4200 Kcal/kg of GCV of TTPS.

The Company in its tariff petition for MYT 2012-13 to 2015-16 intimated JSERC that quality of coal supplied by CCL was very poor. JSERC in the MYT order (May 2012) had directed the Company to negotiate with CCL for procurement of good quality of coal and report the outcome. The Company in its compliance had intimated JSERC that the FSA has been signed with CCL in May 2012. Audit noticed that quality of coal supplied by CCL remained poor during 2012-13 to 2015-16 even after signing FSA which *inter alia* included provision specifying the required quality of coal. However, Company had not taken up the matter before JSERC again and as such no remedial action could be taken by JSERC.

Audit noticed cases when joint sampling was not being done by CCL as per the FSA clause. CCL had engaged a third party at some collieries for sampling at the loading ends. However, the sampling work was not conducted properly and the Company accepted that TTPS representatives though required were not present when sampling was being done. On being enquired, CCL also confirmed in its reply that in many cases TTPS did not participate in joint sampling at loading points.

Further, analysis of coal samples from TTPS coal yard was being done in TTPS laboratory. However, the test results of TTPS laboratory did not match with the grade of coal billed by CCL with regard to ash content, GCV and moisture content in the coal sample. As the coal received at TTPS was of lower grade than the grade for which CCL billed in most cases, the Company had lodged claims of ₹ 27.46 crore towards grade slippage and ₹ 22.16 crore for high percentage of moisture during May 2012 to September 2015. However, CCL did not accept the claims lodged by the Company on the basis

[19] If the monthly weighted average of surface moisture in coal exceeded 7 *per cent* during October to May and 9 *per cent* during June to September.

of analysis of coal at laboratory and admitted only ₹ 1.29 crore for grade slippage and only ₹ 2.17 crore on higher percentage of moisture.

The Company had also lodged a claim of ₹ 6.40 crore towards oversized stones/boulders in the coal received by road during 2012-13 to 2015-16. However, CCL did not agree (March 2015) to the claim citing lack of provision in the FSA for payment of claim for oversized stones in case of supply of coal by road. Audit noticed that the work orders for transportation of coal by Road provided that loading of coal was to be made by the transporters after segregating stones and if stone is supplied along with the coal, the price of the same was to be recovered from the bills of transporters. However, the Company did not recover the price of coal for stone supplied against coal from the transporters. As such the claim was not realised either from CCL or from the transporters.

The Company failed to realise the claim for ₹ 56.02 crore for grade slippage, higher percentage of moisture and supply of oversized stones in coal.

Thus, the Company failed to realise the claim for ₹ 56.02 crore for grade slippage, higher percentage of moisture, and supply of oversized stones in coal all of which resulted in increase in the cost of generation.

The Company in reply stated (July 2016) that sampler was not appointed by CCL for analysis of coal in most of the collieries and Company was lodging the claims on the basis of test reports in its laboratory at TTPS. As per the Ministry of Coal (MoC), Government of India (GoI) guidelines (November 2015), the Company has appointed (October 2016) the Central Institute of Mining and Fuel Research to conduct sampling at loading point. It further stated that the claim for oversized stone was not emphasised by the Company as the amount of the claim if realised was to be transferred to the transporters.

The fact remains that the Company failed to appoint its sampler at the loading point as per the provision in the FSA. Further, the Company has not recovered the price of coal against stone either from the transporters or from CCL so far. The Company also failed to report the matter of poor quality of coal supplied by CCL to JSERC for remedial action.

Failure in lifting coal as per Annual Contracted Quantity

2.1.12.3 As per FSA, if for a year, the level of delivery of coal by the seller, or the level of lifting by the purchaser falls below 90 *per cent* of the Annual Contracted Quantity (ACQ), the defaulting party was liable to pay compensation to the other party for such shortfall in level of delivery or level of lifting as the case may be. Similarly, if the seller delivered coal to the purchaser in excess of 90 *per cent* of the ACQ, the purchaser was to pay the seller a performance incentive as per prescribed formula.

The position of coal linkages fixed and coal received during the period from 2011-12 to 2015-16 is given in **Table 2.1.5.**

Table 2.1.5: lifting coal as per Annual Contracted Quantity

Sl. No	Particulars	2012-13	2013-14	2014-15	2015-16
1	Coal Linkage/FSA quantity (lakh MT)	20.00	20.00	20.00	20.00
2	Quantity of coal received (lakh MT)	20.69	17.50	16.75	21.47
3	Shortfall(-)/excess (+) in quantity of coal received (lakh MT)	(+)0.69	(-)2.50	(-)3.25	(+)1.47
4	Percentage of shortfall (-) /Excess (+)	(+)3.45	(-)12.50	(-)16.25	(+)7.35
5	Quantity of coal consumed (lakh MT)	21.17	16.02	18.70	19.95

(Source: Data compiled from the information furnished by the Company)

It would be seen from the above table that in the years 2013-14 and 2014-15, there was shortfall of 12.5 *per cent* and 16.25 *per cent* in lifting quantity of coal as compared to the ACQ whereas the coal quantity procured was in excess of the ACQ by 3.45 *per cent* in 2012-13 and 7.35 *per cent* in 2015-16. Audit noticed that TTPS failed to lift 5.75 lakh MT of coal allocated to it in 2013-14 and 2014-15 and the Company had to pay (March 2016) a compensation of ₹ 2.45[20] crore for lifting less than 90 *per cent* of the ACQ as per the FSA. Thus, the avoidable loss of ₹ 2.45 crore was incurred because of the failure to lift the quantity of coal as agreed to in the FSA.

The Company stated (October 2016) that main reason for less off take of coal was lesser requirement of coal during that period.

The reply is not acceptable as coal consumption (18.70 Lakh MT) was more than the quantity of the coal received (16.75 Lakh MT) in 2014-15. Also, the full ACQ quantity of coal, if lifted, could have been utilised in 2015-16 in which quantity of coal received (21.47 Lakh MT) was more than the ACQ on which performance incentive would have to be paid as per the FSA.

Transportation of Coal by Rail less than the target

2.1.12.4 Coal allocated by CCL from the mines of East & West Bokaro area at a distance of 23 to 50 km is being transported by road. On commissioning of the MGR system, Board of Directors of the Company decided (October 2015) to procure 1.20[21] lakh MT coal per month (72 *per cent* out of FSA quantity of 1.67 lakh MT) from mines in Piparwar[22] area and transport it through rail. However, TTPS transported only 3.61 lakh MT of coal by rail against a target of 6 lakh MT during November 2015 to March 2016 whereas 6.87 lakh MT was transported by road during the same period. Thus, only 34 *per cent* of entire quantity of coal transportation was made by rail against the target of 72 *per cent***.**

Failure to transport the targeted quantity of coal by rail resulted in avoidable expenditure of ₹ 8.32 crore.

The average landed cost[23] of the coal by Road was between ₹ 2494 per MT to ₹ 2951 per MT whereas the average landed cost by Rail ranged between ₹ 2001 per MT to ₹ 2453 per MT which implies that landed cost of coal by Rail from Piparwar Mines was lower than those transported by road from East and West Bokaro mines ranging between ₹ 132 to ₹ 610 per MT. Thus, failure to transport the targeted quantity of coal by rail resulted in avoidable expenditure of ₹ 8.32 crore.

The Company stated (October 2016) that though the landed cost of coal from Piparwar mines transported by rail was lower than the landed cost of coal from East and West Bokaro mines, but heat value of the coal from Piparwar mines was less than that from East and West Bokaro mines. It also stated that CCL did not permit dispatch of full quantity of Piparwar coal as desired by the Company.

The reply is not acceptable as the target for quantity of coal to be transported by the MGR system from Piparwar Mines was fixed by the Board of the Company taking above factors into consideration.

---

[20] ₹ 0.76 crore in 2013-14 + ₹ 1.69 crore in 2014-15.
[21] Out of FSA quantity of 1.67 Lakh MT *i.e.* about 72 *per cent* of FSA quantity.
[22] Piparwar is situated at a distance of about 100 km from TTPS.
[23] During November 2015 to March 2016.

Failure to claim for shortage of coal in Tariff Petition

2.1.12.5 As per recommendation of a committee constituted by TTPS in July 2005, the Coal Handling Plant (CHP) provides for loss of coal at 0.4 *per cent* on the monthly closing stock of coal due to wind, rain and evaporation of moisture *etc*. Accordingly, the CHP worked out a loss of 43,857 MT on the stock of coal for 2011-12 to 2015-16. Audit noticed that the Company had not claimed for the above loss in the stock of the coal in the Tariff petitions filed to JSERC which has resulted in increase in the cost of generation by ₹ 8.14 crore.

The Company accepted (July 2016) that the loss in coal stock was not taken into account in ARR stating that the same was taken into account as consumption of coal.

The reply is not acceptable as the consumption of coal worked out by the CHP did not include the quantity of loss in coal stock.

Failure to install device for measuring the consumption of water

2.1.12.6 TTPS draws water from Tenughat Dam reservoir of Water Resources Department, GoJ through four Clarified Water (CW) Pumps of 16000 m^3 /hour capacity for use in the TPS and its colony. A major portion of water after getting utilised in cooling the condensers gets discharged into the reservoir through open channel. However, no devices were installed by TTPS to measure water intake and exit from the TPS and there was no agreement with the department regarding drawal of water and payment of water charges.

The Energy Department, GoJ constituted (March 2011) a committee to assess the consumption of water by TTPS. The committee after visiting Super Thermal Power Plant of NTPC at Farakka recommended (June 2015) the payment of water charges for 15.50 Million Cubic Meter (MCM) of water *per annum* by TTPS on the basis of design parameters of the plant and 0.74 MCM *per annum* for consumption in its colony. As per the recommendation of the committee, total water charges of ₹ 31.40[24] crore was payable (March 2016) by the Company since the inception of the plant.

Due to failure to install device for measuring the actual quantity of water consumed, the Company incurred a liability of ₹ 30.42 crore.

Audit noticed that Tenughat Dam Division, Tenughat raised a claim (March 2015) of ₹ 1961.81 crore for the period August 1996 to February 2015 on the basis of capacity of CW pumps. The Company had paid ₹ 97.85 lakh as water charges for the period October 2009 to February 2015 on the basis of its own assessment. The company placed a work order (October 2015) to M/s Central Water and Power Research Station (CWPRS), Pune to identify the requirement of flowmeter for measuring the actual consumption of water and to supervise the installation of the flowmeters in six months. However, the flow meters has not been installed so far (November 2016). Thus, due to failure to install the device for measuring the actual quantity of water consumed by TTPS the Company would have to pay at least ₹ 30.42 crore towards water charges even though a major portion of water was not actually consumed considering the high plant outages and low PLF of the plant during the above years.

The Management stated (July 2016) that it has engaged CWPRS to suggest the specification of flowmeters on receipt of which the meters will be installed. It further stated that water charges for 16.24 MCM *per annum* calculated on the

[24] ₹ 1.61crore *per annum* (16.24 MCM x 1000000 x 219.97 gallons x ₹ 4.50/1000) x 19.5 years.

basis of design parameters will be payable from 1 April 2016 till installation of flow meters as suggested by the Committee.

The reply is not acceptable as the Company failed to enter into an agreement with the Water Resources Department specifying the terms and conditions for consumption of water. Further, the devices for water consumption to measure the actual water consumed were also not installed by the Company.

Human Resource Management

2.1.12.7 Management of Human Resources (HR) is important for achieving the objectives of an organisation. For ensuring better management of human resources, a proper HR policy should be put in place.

Audit noticed that the Company followed the Service Rules of the erstwhile Jharkhand State Electricity Board (JSEB) upto January 2014. However, after unbundling of JSEB in January 2014 into four companies, the Company has not formulated its HR policy. No HR manual has been prescribed and the Company had no codified rules and regulations for its personnel management. The status of sanctioned manpower vis-à-vis actual manpower of the Company is indicated in the **Table 2.1.6**

Table 2.1.6: Sanctioned strength vis-à-vis actual manpower

Sl.No	Category of staff	Sanctioned Strength	Actual Manpower
1	Technical staff	510	258
2	Other than technical staff	162	338
	Total	**672**	**596**

(Source: Data furnished by the Company)

It can be observed from the above table that the sanctioned strength of employees as of 31 March 2016 was 672 against which the actual manpower deployed was 596. Against the sanctioned strength of 510 technical manpower, the actual manpower deployed was 258. Thus, there was shortage of 252 employees in technical category.

Audit noticed that seven posts of Electrical Executive Engineer, 32 posts of Junior Engineer and all the 44 sanctioned posts of Operators were vacant as of 31 March 2016. Also, all the three posts of Director Accounts and Deputy Director Accounts and seven posts of Accountant/Accounts Assistant remained vacant as of 31 March 2016. Thus, adequate technical manpower was not in place for crucial operations of the plant and for managing the finance and accounting function of the Company. Also, against the sanctioned strength of 162 for other than technical cadres, the actual manpower was 338 *i.e.* surplus manpower of 176 employees deployed.

Thus, the Human Resource management of the Company was deficient. The vacant positions in the Technical cadre could have adverse impact on the operational performance of the Company.

The Company stated (November 2016) that appointment of 462 persons from whom land was acquired by the Company was done as per the order of SC. It further stated that the vacant posts in Finance Department will be filled up soon.

Reply was however silent on filling up of the vacant posts of technical staff which was necessary for the effective functioning of the company.

2.1.13 Capacity expansion and other projects

Planned Capacity Expansion of the power plant not achieved

2.1.13.1 The Detailed Project Report (DPR) of TTPS envisaged its capacity expansion by setting up additional three units of 210 MW each in stage II and one unit of 500 MW in stage III of the project. The company had made initial investment of ₹ 359 crore towards building, plant & machinery, Merry-Go-Round (MGR) railway line, railway siding, switchyard, removal of hillock *etc*. at the time of construction of the plant considering the future expansion plans.

Accordingly, the Company had floated (August 2003) a global tender for setting up three units of 210 MW each at an estimated cost of ₹ 2365 crore and finalised the lowest tender. Power Finance Corporation (PFC) sanctioned (November 2005) a loan of ₹ 1892 crore for the project. However, GoJ did not furnish the Government guarantee for the loan as demanded by PFC as the ownership issue of the Company was subjudice and the tender was cancelled in May 2009.

Audit noticed that the Company planned to expand its capacity through Joint Venture (JV) route in November 2011. However, in view of Hon'ble SC order (August 2008) in the ownership issue to maintain status quo, the Company and the Energy Department, GoJ both filed interim applications (IAs) in November 2011 before the SC to permit it to enter into a JV to undertake the expansion of the Company. The IA of the Company was disposed of in November 2012 and the IA of Energy Department in August 2014 without modification of the interim order.

In the meantime, the Company obtained (May 2012) a legal opinion which held that the Company can take up expansion project on its own without inducting a Joint Venture partner. However, this was not acted upon by the Board of Directors which delayed according administrative approval (December 2015) for setting up 660 MW x 2 units Coal fired Supercritical units at TTPS. The estimated project cost of ₹ 6500 crore was to be financed by 70 *per cent* loan from financial institutions and 30 *per cent* equity by the Company. However, proposed financing has not been tied up so far (November 2016). The GoJ has accorded in principle approval for the project in March 2016. This delay in taking decision by the Government and the Company led to the delay of six years during 2009 to 2015 in taking up the capacity expansion. The estimated cost in the meanwhile has risen from ₹ 2365 crore in 2004 to ₹ 6500 crore in 2016.

The Company did not undertake the envisaged capacity expansion project even after 19 years of commissioning of TTPS.

Thus, due to failure of the GoJ and the Company in taking appropriate decision in time the envisaged capacity expansion of the Company could not be undertaken even after 19 years of commissioning of TTPS.

The Company accepted (November 2016) the audit observation. During exit conference (November 2016) Government stated that the transaction adviser for the proposed expansion of TTPS has been appointed and the tendering for appointment of consultant is under finalisation.

The fact remains that due to deficient planning and indecision by the GoJ/Company the expansion project was not undertaken even after 19 years of commissioning of TTPS. Failure of the Company in augmenting the power generation contributed to poor condition of power supply in the state which could adversely affect the availability of cheap power and have a negative impact on overall business environment in the state. Consequently the state may find it difficult to hold its seventh rank in 'Ease of Doing Business' obtained in the World Bank's assessment report as of June 2016.

Development of Coal blocks

2.1.13.2 The Ministry of Coal, GoI had allocated three coal blocks[25] to the Company during the years 2003 to 2006 to meet the fuel requirement for its capacity expansion. The Company formed (January 2004) a Joint Venture (JV) company *viz.* Tenughat-EMTA Coal Mines Ltd. with EMTA (a private company) for development of Badam coal block; subsequently the Gondulpara coal block also was entrusted to it for development. As per the agreement entire expenditure for development of the coal blocks was to be met by the JV Company. Rajbar E&D Coal block was to be developed by the Company itself for which exploration and preparation of geological report was completed in May 2012 through Department of Mines & Geology, GoJ at an expenditure of ₹ 9.28 Crore.

Audit noticed that development of all the coal blocks was not complete (August 2014) as per schedule and mining was not started even after eight to eleven years of their allocation as of August 2014. Meanwhile, all the coal blocks of the Company were de-allocated by MoC, GoI as per order of the SC dated 24 September 2014.

Subsequently, the MoC, GoI has re-allocated (June 2015) the Rajbar E&D coal block to the Company under the Coal Mines (Special Provisions) Second Ordinance, 2014 to meet the requirement of fuel for the proposed expansion project of 660 MW x 2 units thermal power plant.

Audit noticed that approval of mining lease and mining plan of the coal block from GoJ and MOC, GoI has not been obtained so far. Application for forest clearance and environmental clearance which were due for submission in May 2016 was not submitted by the Company (November 2016). The time limit for grant of mine opening permission was 44 months from allotment (June 2016). However, the completion of the activities as per the approved schedule was already delayed by six months.

Delay in Commissioning of Merry-Go-Round Rail System

2.1.13.3 The project for setting up a Merry-Go-Round (MGR) rail system for transportation of construction materials and of components during construction stage and of coal, fuel oil and heavy stores materials during generation stage of the plant was taken up in 1986. The estimated cost of the project was ₹ 49.41 crore. M/s Rail India Technical and Economic Service (RITES) was entrusted (September 1988) the project management at a cost of ₹ 27.06 crore. The project was to be completed in 30 months. However, the project was much behind the schedule due to delay in acquisition of land for the railway line, law and order problems, fund constraints *etc*.

Audit noticed that the major works for the MGR system were complete in 2011. However, work order for the residual works and rectification of defects in the railway track of the MGR System was issued (July 2012) for ₹ 14.25 lakh. However, the work order was not accepted by the contractor and value of the work order was revised (January 2013) to ₹ 24.27 lakh. The work was

[25] Badam coal block was allocated in January 2003 for 210 MW x 3 units thermal power plant, Gondulpara Coal block was allocated jointly with DVC in January 2006 for 3rd phase expansion with one unit of 500 MW and Rajbar (E&D) Coal blolck was allocated in August 2006 for 660 MW x 2 units thermal power plant.

completed in June 2014. Further, some other works like additional quantity of ballast, providing fish plates and bolts *etc*. were done as advised during site inspection (December 2012) by Railways and RITES.

Audit observed that delay in completing the residual works for the MGR system led to a delay of two years and it was ready for use only in June 2014, after trial run. However, a time of further 16 months was taken in signing a siding agreement (September 2015) with the East Central Railway to operationalise the MGR system (28 October 2015). The total expenditure incurred on the MGR system was ₹ 127.81 crore.

The Company commissioned the MGR System after delay of 24 years from the original completion schedule with an additional cost of ₹ 51.34 crore.

Thus, the MGR rail system was commissioned after a delay of 24 years from the scheduled date of completion at an additional cost of ₹ 51.34 crore over the original estimated cost. During this period the fuel requirement for TTPS had to be met by transportation by road at higher cost.

The Company stated (November 2016) that completion of the MGR system was delayed mainly due to administrative reasons and fund constraints.

The fact remains that the execution of the project was not planned and executed properly as four years were taken in commissioning the MGR system after completion of major works leading to an increase in the cost.

Failure in taking delivery of wagons for the MGR system

2.1.13.4 The Company had placed (March 1989) a purchase order on CIMMCO Ltd for 34 rail wagons for transportation of coal through the MGR rail system at a price of ₹ 3.38 crore. As construction of MGR was delayed, delivery of the wagons was not taken by the Company although payment of ₹ 2.88[26] crore was made to M/s CIMMCO Ltd upto May 1998 by TVNL, Patna. Audit noticed that a settlement was reached (June 2012) with CIMMCO Ltd. according to which an amount of ₹ 4.13 crore (including storage charges of the wagons upto June 2012) was to be paid to CIMMCO Ltd. to get the delivery of wagons. Thus, the cost of wagons had increased to ₹ 7.01 crore (₹ 2.88 crore and ₹ 4.13 crore).

Audit noticed that preliminary inspection of the wagons at the works site of CIMMCO was conducted (May 2013) by M/s RITES on behalf of the Company which found 26 wagons in satisfactory condition except some minor defects and in remaining eight wagons operating mechanisms were inoperative due to some missing components. CIMMCO demanded release of ₹ one crore to carry out the works and requested to open letter of credit towards payment of the balance amount. However, payment and opening of letter of credit as demanded by CIMMCO was yet to be submitted to Board of the Company for approval and delivery of the wagons was not taken so far (November 2016) even though the MGR system has been commissioned in October 2015. Thus, despite the commissioning of the MGR system, the Company was unable to obtain the 34 wagons for coal transportation through MGR and resultant saving in transportation cost. It was also observed that though MGR rail system was commissioned in October 2015, transportation of coal is still being done partially by road due to shortage of wagons. However, the Company did not take delivery of 34 wagons despite payment of advance of ₹ 2.88 crore in 1998.

[26] Comprising of 30 *per cent* advance - ₹ 0.99 crore; cost of 14 wagons - ₹ 1.31 crore; escalation & exchange rate variation - ₹ 0.54 crore and storage charges upto February 1998 - ₹ 0.04 crore.

The Company stated (October 2016) that delivery of wagons was not taken earlier as the MGR system was not commissioned and also due to financial constraints. It further stated that delivery of the wagons will be taken by December 2016 after making the outstanding payment.

The fact, however, remains that delivery of not even a single wagon was taken even after one year of commissioning of the MGR system and the Company was deprived of savings it would have had by deploying the wagons for transportation of fuel by MGR. Further, the present value of ₹ 2.88 crore would now work out to ₹ 26.59[27] crore. As such, the cost of 34 wagons at present has in effect become ₹ 30.72[28] crore against the original purchase price of ₹ 3.38 crore.

2.1.14 Environment Management

Jharkhand State Pollution Control Board (JSPCB) is the main regulating agency to ensure compliance with the provisions of environmental acts, rules and regulations. Audit scrutiny of compliance by the Company with various environmental acts and rules revealed the following:

Ash disposal

2.1.14.1 Ministry of Environment and Forest issued (September 1999) direction for utilisation of dry ash in brick and other construction activities by the thermal power stations. The Central Electricity Authority also directed (February 2006) every thermal power station to construct a SILO system for collection of dry fly ash. The Central Pollution Control Board (CPCB) directed (April 2012) the Company to submit a time bound action plan for compliance of environmental norms including dry ash disposal.

The Company had sanctioned[29] (September 2009) a DPR for the construction of SILO system at an estimated project cost of ₹ 30.50 crore. Although Administrative approval for floating NIT was accorded by the Board in September 2012, the NIT was issued in March 2015 due to delay in finalising the qualifying requirements. Two offers were received in the tender and the lowest offer was accepted at a price of ₹ 37.80 crore. However, the Company cancelled the tender citing poor participation of bidders and that the lowest price was higher by 25.57 *per cent* than the DPR cost.

Dry fly ash collection system was not installed even after eight years of approval of the Board of Directors.

Audit observed that cancellation of tender after evaluation was not justified as the lowest price was less than the updated DPR cost. As a result the dry fly ash collection system has not been installed so far. Thus, the Company failed to comply with the above mentioned environmental norms.

The Company stated (June 2016) that the fresh tender on the basis of the DPR for SILO system was under finalisation.

The fact remains that the construction of the SILO system for collection of dry fly ash was yet to be taken up despite a lapse of more than eight years since in principle approval of the Board was obtained in February 2008.

Here it is pertinent to mention that in the interview taken by the Audit team, the Finance Controller, the Company stated (November 2016) that the SILO system need to be installed for removal of dry ash to reduce the expenditure on the present system of ash disposal.

[27] Worked out at Prime Lending Rate of SBI for the respective year by compounding interest annually.
[28] ₹ 26.59 crore (present value of ₹ 2.88 crore paid in advance) + ₹ 4.13 crore payable.
[29] DPR was prepared by the consultant, MECON in July 2009.

Failure to instal online Continuous Stack Emission Monitoring Systems and online effluent quality monitoring system

2.1.14.2 Thermal Power Plants are highly polluting industries which discharge environmental pollutants directly or indirectly into the ambient air and water, having potential threat to cause adverse effect on the water and air quality. JSPCB directed (March 2014) the Company to install online Continuous Stack Emission Monitoring Systems, online effluent quality monitoring system and to connect and upload the data in a time bound manner to JSPCB/CPCB server. Chairman, CPCB issued a show cause notice (July 2015) to General Manager (GM),TTPS for not installing online emission and effluent monitoring system failing which the plant would be closed down. However, compliance of the directives was not done so far (November 2016).

The Company stated (October 2016) that the procurement of Continuous Stack Emission Monitoring System and online effluent quality monitoring system was in process; meanwhile Central Institute of Mining and Fuel Research is taking the measurement and helping in monitoring and controlling the data.

The fact, however remains that compliance of the directives of CPCB has not been done so far (October 2016).

Failure to comply Water Pollution norms

2.1.14.3 As per the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Thermal Power Stations (TPSs) are required to obtain the consent of JSPCB which *inter-alia* contains the conditions and stipulations for water pollution to be complied with by the TPSs. Total suspended solids (TSS) in effluents from the TPSs should not exceed 100 mg per litre as per norm.

Audit noticed that TSS in effluent discharges from TTPS was higher than standard in 29 months out of the 60 months during 2011-12 to 2015-16 and TTPS was served several show cause notices by CPCB/JSPCB for failure in compliance of the norm. The main reasons for exceeding the TSS standards were inadequate ash handling infrastructure, filled up ash pond, leakage in pipes carrying ash slurry and failure to maintain of the Ash Pond area as per the guidelines.

The Company stated (July 2016) that measures have been taken to keep the value of TSS within the prescribed limit and the same has come down below the normative level.

The reply is not acceptable as effluent discharges exceeded in 29 months during the audit period.

2.1.15 Monitoring and Internal Control

Internal Control is a process designed to provide reasonable assurance about the efficiency of operations, reliability of financial reporting and compliance with applicable rules and regulations. The following deficiencies were noticed in the Internal Control and monitoring system of the Company.

Physical verification of Plant and Stores and spares

2.1.15.1 Physical verification of Plant and Stores and spares is required to be conducted periodically. Audit observed the followings:

- The physical verification of stores was not carried out by the Company during 2011-12 to 2014-15. Further in the physical verification of stores and spares conducted during January 2016 to March 2016 by a outsourced Chartered Accountants firm unusable spares valuing ₹ 4.62 crore were identified.

Also, during joint physical verification[30] of the stores, Audit noticed that 74 items of spares[31] valued at ₹ 5.31 crore were lying unutilised for more than 15 to 18 years. Most of these spares had now become obsolete as the equipment in which these spares were to be used had been upgraded and replaced with newer models.

The Company accepted the above audit observation and stated (October 2016) that some of the initial spares supplied by BHEL during commissioning of TTPS had become obsolete but these may be utilised after modification. The reply is not acceptable as no effort had been made to utilise the spares in the past.

- The Company conducted a physical verification (May 2015) of its coal stock. According to the report the coal stock was 74,378 MT as of 19 May 2015 whereas the stock of coal as per the records of Coal Handling Plant (CHP) was 95,571 MT *i.e.* a difference of 21,193 MT. In monetary terms this difference in actual coal stock and the stock carried in the books was ₹ 33.23 crore, the reconciliation of which was still to be done.
- Audit noticed that the Company has not prepared its Fixed Asset Register containing the details regarding procurement and cost of the assets, date of commissioning and location of the assets *etc*. Also, physical verification of the fixed assets has not been conducted by the Company so far (November 2016).
- Audit, during joint physical verification of the Plant found that one Inter Connecting Transformer and four Unit Auxiliary Transformers were not commissioned since inception of the Plant. This has been commented in the present report *vide* paragraphs 2.1.9.3. and 2.1.10.1.

Audit further observed that the Chlorination Plant for treatment of the water remained utilised since its installation. One Stacker Reclaimer installed in CHP for handling of bulk quantity of coal for feeding in bunkers of expansion projects has not been operated as the capacity expansion of TTPS had not been done. Also, the complete Heavy Fuel Oil (HFO) firing system including two HFO tanks of 3500 KL capacity installed since the commissioning (September 1997) of TTPS were not utilised and Light Diesel Oil (LDO) was being used in the plant in place of HFO.

The Company stated (December 2016) that the Chlorination plant was not being utilised as bleaching powder is being used for treating water in its place and it had no adverse impact on the plant operation and performance. Regarding not using the HFO system, it was stated that complete system was not commissioned and its reliability is poor than LDO system. Keeping in view its high maintenance cost, high transportation cost HFO was not used by TTPS.

The fact remains that the Company spent huge funds on procurement of these idle equipment without doing proper need analysis and planning for their use.

[30] Audit Team along with Company officials.
[31] With value of spares of rate more than one lakh per unit for each item.

Failure to fill up the post of the Chairman, TVNL and ad-hoc appointment of Managing Director

2.1.15.2 Audit noticed that the post of Chairman of the Company was vacant for last 20 months as of 30 November 2016.

Audit further noticed that the post of Managing Director of the Company fell vacant on 17 September 2012 and the Chairman, JSEB was given additional charge of the post on part time basis. A Search-cum-Selection Committee constituted (11 September 2012) by the GoJ for appointment of Managing Director appointed (9 May 2014) the Additional General Manager, NTPC as Managing Director of the Company. Thus, the Search-cum-Selection Committee took 19 months in selection of MD of the Company during which period the post was held by the Chairman, JSEB, as additional charge on part time basis. Long vacancy and additional charge on part time basis on top management posts may adversely impact the decision making process and functioning of the Company.

Ineffective functioning of Board of Directors

Only one meeting of Board of Directors was held in 2014-15 and three meetings were held in 2015-16 as against required minimum four meetings to be held every year.

2.1.15.3 As per Section 285 of the Companies Act, 1956 and Section 173 (1) of the Companies Act, 2013 (applicable from April 2014), at least four meetings of the Board of Directors (BoD) of the Company is required to be held every year. However, Audit noticed that only one meeting of the BoD was held in 2014-15 and three meetings were held in 2015-16. Further, no meeting was held during the period 11 July 2014 to 27 July 2015. Audit observed that extension of work orders for transportation of coal valued at ₹ 34.46 crore was issued by the Chairman/MD for which post facto approval of the BoD was obtained. Thus, due to delay in holding the BoD meetings, important decisions relating to operations of the Plant/Company were taken by the Chairman/MD without exercise of supervisory control by the BoD.

Audit further observed that, the Company has decided (December 2015) to induct two additional functional Directors *viz*. Director (Technical) and Director (Finance) in the BoD in view of the proposed capacity expansion of the Company and requested (January 2016) the GoJ for appointment of the Directors.

The BoD had also decided (November 2013) to increase the members of the Board by appointing independent directors and to appoint them as members of the Audit committee. However, appointment of the additional Directors and the independent directors has not been made so far (November 2016).

Had the functional directors and the independent directors been appointed, appropriate and timely decision making on the critical issues faced by the Company *viz*. enforcing the PPA provisions regarding payment security mechanism, sale of power to other licensees, recovery of outstanding dues from JUVNL, conducting overdue capital overhauling of the units, capacity addition *etc*. might have been possible.

Audit Committee

2.1.15.4 Section 292A of the Companies Act, 1956 requires that every Public Limited Company having paid-up capital of not less than rupees five crore shall constitute an Audit Committee at the Board level. The main functions of the Audit Committee are to assess and review the financial reporting system, adequacy of the internal control system and evaluates the findings of internal investigation in case of suspected fraud, irregularities and failures of the internal control system and reports on the same to the Board.

Audit noticed that the Company constituted an Audit Committee in August 2012 comprising three Directors *viz*. Principal Secretary, Energy Department; Principal Secretary, Finance Department and Chairman, JSEB. However, no meeting of the Audit Committee was held since its formation in August 2012. Further, the post of the Chairman, JSEB had ceased to exist due to unbundling of JSEB on 7 January 2014. As no Director in place of Chairman JSEB was nominated for the Audit Committee it has become defunct since then.

The Company stated (December 2016) that as per the Articles of Association, the Company is a private company and formation of Audit Committee is not mandatory for the Company. However, to adopt good corporate governance, the Audit Committee has been constituted.

The reply is not acceptable as the Company had constituted the Audit Committee in August 2012 considering the need of Audit Committee which was not made functional fulfilling the criteria since then. Having constituted the Audit Committee, its regular meetings and effective functioning should have been ensured by the Company.

Deficient and ineffective Internal Audit System

2.1.15.5 The Company have no internal audit wing of its own and it had also not prepared an internal audit manual (November 2016). The internal audit function was outsourced[32] to the Chartered Accountants (CA) whose scope of work included preparation of accounts, verification of cash book, stores transaction and other accounting works. However, core activities of the company relating to operation and maintenance of Plant, Sale of Power, purchase of fuels, equipment and materials *etc*. were not covered in the scope of work for Internal Audit.

Audit also noticed that the internal auditors did not submit any report during 2011-12 to 2015-16 which implied that no internal audit of the company was conducted**.**

The Company accepted (October 2016) the observation of audit.

In the interview conducted by the audit team, the Finance Controller stated that internal Audit wing will be setup after more posts in Finance and Accounts cadre are sanctioned.

Conclusion

Audit concluded that:

- **The Company is unable to carry out its operations in an economical and effective manner owing to poor governance and apathy of the stakeholders. Consequently, the accumulated losses of Company are mounting year after year and stood at ₹ 824.53 crore as of 31 March 2016 mainly due to poor operational performance.**
- **The Company failed to finalise its accounts for several years now and has lost the opportunity for exercising better control over its resources and the lack of finalised accounts contributes to an incorrect projection in matters such as penal interest imposed *etc.* before the JSERC leading to unfavourable award of tariff.**

[32] At a cost of ₹ 5.99 lakh.

- **The strict PAF and PLF norms of JSERC were difficult to achieve by the Company owing to its failure to carry out essential and periodical capital/operational maintenance as recommended by the original equipment manufacturers (BHEL) and Consultants (NTPC). However, the Company has not made any further representation before the JSERC in this regard.**
- **Failure to carry out repair and maintenance led to several tripping of the networks, leakage and unscheduled shutdown of the operations for long periods. This in turn has led to substantial fall in the PLF (2809.48 MU valued at ₹ 870.78 crore), PAF (1490 MU valued at ₹ 409.10 crore) and excess auxiliary consumption (173.80 MU valued at ₹ 56.79 crore) resulting in loss of generation and revenue realisation.**
- **The State Government had not taken any proactive steps to create a common platform to bring together the Generator and the Distributor (JUVNL) and resolve the payment disputes arising out of outstanding dues of ₹ 3082.72 crore that had resulted in default in repayment of loans and accumulation of avoidable penal interests and losses on the Company. The State Government also failed to adopt the model MoU with the Company for monitoring the operational and financial targets set for the Company.**
- **Unnecessary restraint to use the existing agreement clauses has resulted in inordinate delay in realisation of sales revenue leading to poor debt servicing on Government loans (₹ 665.89 crore) and accrual of interest amounting to ₹ 2181.79 crore. Further, the penal interest and other interest on high cost borrowings from Government (at 13 *per cent*) have contributed to the poor performance of the Company.**
- **The Company had not been effectively pursuing essential requirements for power generation like quality coal, transportation and fulfilling the wagon requirements for its MGR network. The Company also did not take adequate measures for removal of foreign matter from the coal, improvement in burners and better instrument quality.**
- **The Company has neglected the opportunity to expand its sales to others (50 MW) despite available opportunities.**
- **The Company did not have sufficient technical manpower which affected its operational performance.**
- **Effective monitoring of the activities of the Company was not done by the Board of Directors as its meetings were not held regularly. Further, the proposed appointment of the two functional directors and induction of independent directors was not done to strengthen the functioning of the Board.**
- **The Company and the GoJ failed to take appropriate decision in time for envisaged capacity expansion and no capacity addition could be made even after 19 years of initial commissioning of the power plant. This failure in augmenting the power generation in the power deficit state adversely affected the availability of cheap power.**

Recommendations

Audit recommends that:

- **The Company should finalise the pending accounts for the financial year 2011-12 to 2015-16 and get those certified to improve financial accountability at the earliest.**
- **The Company should carry out all mandatory operational and maintenance requirements immediately. To safeguard future energy requirements, expansion works should be taken up on top priority as the existing facility is already 20 years old.**
- **The Company, in close co-ordination with the Government should strive for a solution to realise the outstanding dues of ₹ 3082.72 crore from JUVNL within a realistic period. Adjusting the dues with entities like CCL through supply of power through JUVNL can also be explored as a solution.**
- **The Government may adopt the model MoU suggested by GoI so that the operational and financial targets set for the Company could be monitored and adequate remedial measures could be introduced timely.**
- **The Government seriously needs to examine the restructuring proposal of the Company at an early date for conversion of loan and interest to equity or devise alternate methods to alleviate this financial burden on the Company.**
- **The Company should ensure procurement of the required number of wagons (34) for the MGR network within a stipulated time frame and reduce reliance on other modes of coal transportation.**
- **The Company should appoint necessary coal samplers and coal procured may be tested at mutually acceptable laboratories to reduce losses and disputes.**
- **Government may consider strengthening the operations of the Board, impose additional norms for its effective functioning and ensure better governance and control.**
- **Both the Company and the State Government should strive to convince the Regulatory Commission to take into consideration the vital facts that it will take time and enormous resources for the Company to make a turnaround while seeking approval for its annual operational resources.**
- **Government/management should make all out efforts to safeguard the interest of the Company and enable it to provide economical and quality power supply in the state and thereby contribute to improve Jharkhand's "Ease of doing business" ranking in the World Bank's assessment report of June 2016.**

Accepting the conclusions and recommendations made in audit, the Additional Chief Secretary, Energy Department assured (January 2017) that the Government would appropriately address the issues raised in the report and try to resolve those within a realistic time frame.

Jharkhand Bijli Vitran Nigam Limited

2.2 Audit on Billing and Revenue collection in respect of High Tension Services Consumers

2.2.1 Introduction

The Jharkhand State Electricity Board (JSEB) was responsible for generation, transmission and distribution of electricity within the State as per Section 18 of the Electricity (Supply) Act, 1948. JSEB was unbundled on a functional basis with effect from 06 January 2014, into four successor companies[33]. Distribution of electricity was undertaken by the erstwhile JSEB and after its unbundling by the Jharkhand Bijli Vitran Nigam Limited (JBVNL), which is hereinafter referred as Company.

Jharkhand State Electricity Regulatory Commission (JSERC) framed the tariff with effect from January, 2004, for the High Tension Service (HTS) consumers having contract demand (CD) of 100 Kilo Volt Ampere (KVA) and above and separately for the High Tension Special Service (HTSS) consumers having electric induction furnace with a contract demand of 300 KVA or more.

The details of electricity sold to High Tension consumers and revenue realisation for the period 2011-12 to 2015-16 are given in the **Table 2.2.1** and depicted in **Chart 2.2.1:**

Table 2.2.1:
Details of Electricity sold, Revenue realised and Arrears during 2011-12 to 2015-16

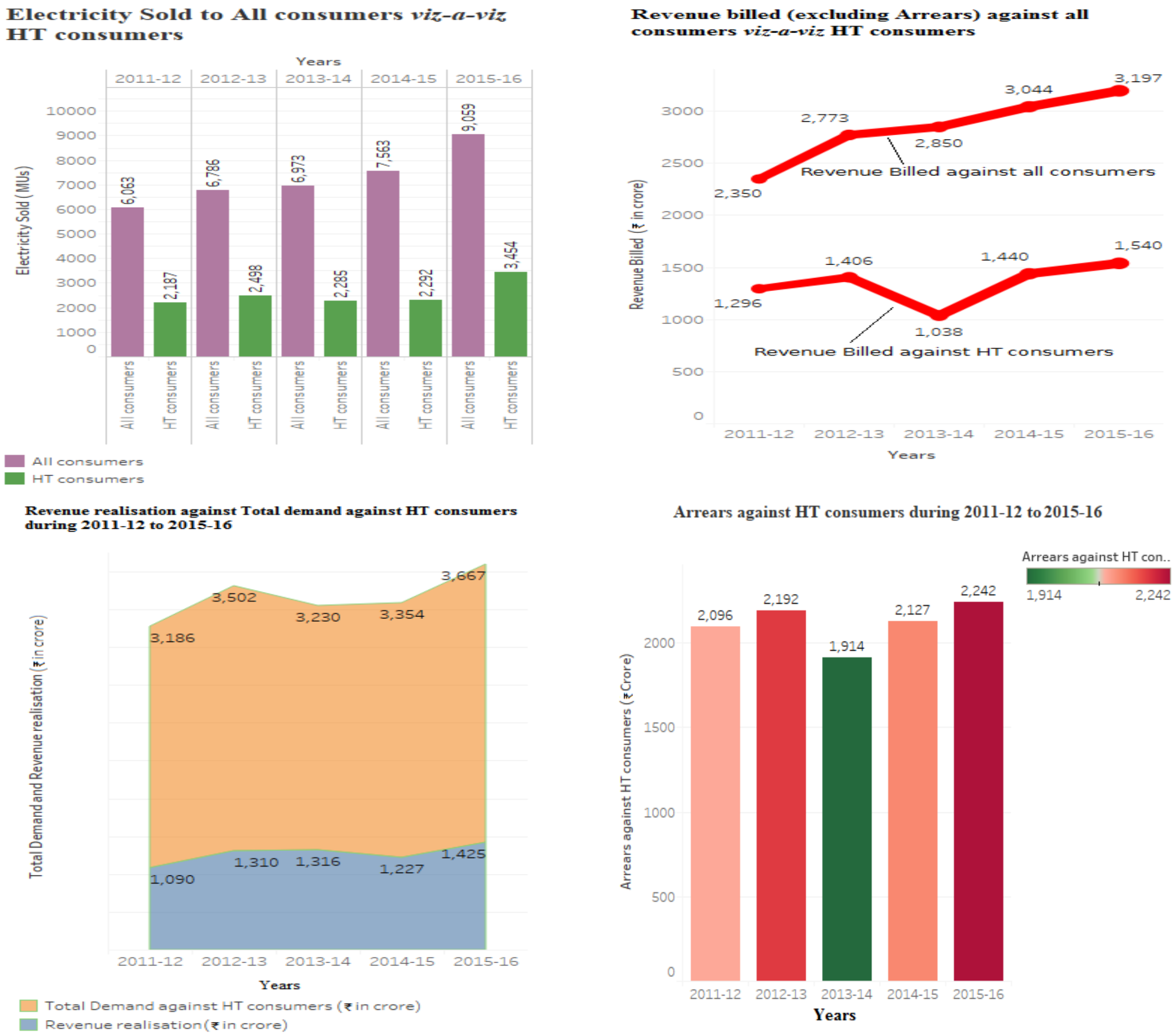
Sl No	Particulars	2011-12	2012-13	2013-14	2014-15	2015-16
1.	Total electricity sold (MUs)	6063	6786	6973	7563	9059
2	Revenue billed against all consumers (₹ in Crore)	2350	2773	2850	3044	3197
3	Number of HT consumers	1358	1420	1429	1472	1526
4	Electricity sold to HT consumers (MUs)	2187	2498	2285	2292	3454
5	Percentage of electricity sold to HT consumers	36	37	33	30	38
6	Revenue billed against HT consumers (₹ in Crore)	1296	1406	1038[34]	1440	1540
7	Arrear against HT consumers (₹ in crore)	1890	2096	2192	1914	2127
8	Total Demand against HT consumers (₹ in crore)=(6+7)	3186	3502	3230	3354	3667
9	Revenue realisation (₹ Crore)/(*per cent*)	1090 (34)	1310 (37)	1316 (41)	1227 (37)	1425 (39)
10	Balance at the end of the year (₹ Crore)= (8-9)	2096	2192	1914	2127	2242

(Source: Data furnished by the Company)

33 Jharkhand Urja Vikas Nigam Limited (Holding Company), Jharkhand Urja Utpadan Nigam Limited, Jharkhand Urja Sancharan Nigam Limited and Jharkhand Bijli Vitran Nigam Limited (Company).

34 Due to unbundling of JSEB some consumers have been transferred to transmission utility in 2013-14, again in 2014-15 transmission utility transferred all consumers to distribution utility.

Chart 2.2.1:
Status of Electricity sold, Revenue realised and Arrears during 2011-12 to 2015-16



It can be seen from above table and chart that electricity sold to HT consumer ranged between 30 *per cent* and 38 *per cent* of total energy sold and revenue billed against HT consumers ranged between 36 *per cent* and 55 *per cent* of total energy billed during 2011-12 to 2015-16.

The audit was conducted to assess whether due compliance/adherence with the provisions of tariff orders issued by JSERC, JSERC (Electric Supply Code) Regulations 2005 (JSERC Supply Code) as amended time to time was made. Audit verified billing and revenue collection in respect of HTS and HTSS consumers during the period 2011-12 to 2015-16 in selected seven[35] Electric Supply Circles (ESCs) out of 15 ESCs and the office of Chief Engineer (Commercial and Revenue) at corporate office of the Company.

The audit findings were issued to the Management of the Company and the Government on 27 August 2016. Reply of the management has been received (November 2016) and reply of the Government is awaited. Reply of the

[35] ESCs Ranchi, Jamshedpur, Dhanbad, Chaibasa, Deoghar, Chas and Ramgarh.

Company and views expressed by the Government in exit conference (09 November 2016) have been suitably incorporated in the report.

Audit Findings

2.2.2 Categorisation of contract demand as per tariff orders

Failure to segregate the load as per service category (Tariff)

2.2.2.1 As per clause 3.3.2 of JSERC supply code, unless otherwise specified, all service category wise tariffs (HT and LT rates) refer to one point of supply and each separate establishment and service category (tariff) would be given separate point of supply. Further, as per JSERC tariff, HTSS tariff shall apply to all consumers who have a contract demand of 300 KVA or more for an induction/arc furnace and HTS tariff shall apply to consumers having contract demand above 100 KVA. The tariff of HTS[36] consumers is higher than that for HTSS[37] consumers.

During scrutiny of records in three[38] test checked ESCs, audit observed that in following cases consumers were sanctioned load more than the load of induction furnace and the Company had not segregated the load into HTSS and HTS tariff category leading to loss of revenue to the Company:

- M/s Balajee Industrial Product Ltd. (consumer no. HN24) under ESC, Chaibasa had two furnaces of capacity 5.5 tonne and six tonne respectively with connected load of 6900 KVA. The load was reduced to 4000 KVA with effect from 6 February 2010 as one furnace of 5.5 tonne was dismantled. As per the test report of a government contractor, the load of other furnace was only 2222.22 KVA. Thus, the consumer was utilising 1777.78 KVA load for other purposes at lower rates than permitted by the tariff order. However, ESE Chaibasa had not segregated the load into HTSS and HTS tariff and thereby suffered a revenue loss of ₹ 6.72 crore[39] during March 2010 to April 2016.

The management accepted (November 2016) the audit observation and directed the field office to inspect the furnace to check if the consumer was utilising 1777.78 KVA load for other purpose. If that was the case, the load be segregated.

- *Vidyut Upvokta Shikayat Nivaran Forum* (VUSNF) had ordered (January 2011) the reduction of load of a HTSS consumer M/s Ridhi Sidhi Iron Pvt Ltd. (consumer no. NR 540), under ESC Dhanbad to 6471 KVA from 8800 KVA with effect from June 2010 as per manufacturers technical specification of furnace. However, as per request (November 2011) of the consumer that it was utilising 500 KVA other load, the load was reduced to 7000 KVA. The consumer again applied (May 2012) for enhancement of load as he had installed another furnace having load of 2742 KVA.

---

[36] Unit charges ₹ 4.35, ₹ 4.90, ₹ 5.40 and ₹ 5.85, fixed charges ₹ 165, ₹ 205, ₹ 235 and ₹ 255 for 2010-11, 2011-12, 2012-13 to 2014-15 and 2015-16 with effect from May 2010, July 2011, August 2012 and January 2016 respectively.

[37] Unit charges ₹ 2.50, ₹ 2.85, ₹ 3.25 and ₹ 3.50, fixed charges ₹ 330, ₹ 370, ₹ 410 and ₹ 440 for 2010-11, 2011-12, 2012-13 to 2014-15 and 2015-16 with effect from May 2010, July 2011, August 2012 and January 2016 respectively

[38] ESC Chaibasa, Dhanbad and Ranchi.

[39] Calculated taking proportionate consumption under HTSS and HTS tariff.

As per report (February 2014) of Division office the consumer was utilising 1000 KVA load, other than the furnace load. Therefore, the load of the consumer was 10242 KVA (9242 KVA[40] + 1000 KVA). But, without considering the report of the Division office, the Electric Superintending Engineer (ESE) Dhanbad energised (March 2014) the load of 9742 KVA instead of 10242 KVA. It was further observed that though the consumer was utilising 1000 KVA load other than the furnace load, the ESE had not segregated the load of furnace under HTSS tariff and 1000 KVA load under HTS tariff resulting in loss of ₹ 2.75 crore[41] during January 2011 to February 2016.

The management accepted (November 2016) the audit observation and directed the ESC Dhanbad to take necessary action for segregation of load.

- M/s T&T Metal (consumer no. AH5180) under ESC, Ranchi had applied (October 2011) for reduction of load from 3600 KVA to 2900 KVA. As per test report for reduction of load, load of one furnace was 2940 KVA and other load was 106 KVA. Accordingly the load should have been charged under HTSS tariff to 2940 KVA whereas 106 KVA qualified for HTS tariff. However, ESE Ranchi reduced (January 2012) the load to 2940 KVA without taking into consideration 106 KVA load being utilised by the consumer for other than furnace purposes. Thus due to not levying charges on 106 KVA under HTS tariff the Company lost revenue of ₹ 37.49 lakh.

The management stated (November 2016) that average demand of the consumer during May 2010 to July 2011 was only 2848 KVA, therefore, load was reduced to 2940 KVA.

The reply of the management is not acceptable as the load of furnace was 2940 KVA and the consumer was utilising 106 KVA load for other purpose which was not considered while reducing the load of the consumer.

- M/s Siyaram Engineering and casting works (consumer no. BRD 597) under ESC Dhanbad was energised (March 2013) at 110 KVA under HTS category. Load of the consumer was enhanced (December 2013) to 310 KVA under HTSS category as the consumer installed a furnace which had, as per manufacturer's specification, a load of only 250 KVA. As per tariff order, the minimum load of a consumer under HTSS tariff should be 300 KVA. Since the furnace load was less than 300 KVA, therefore, the consumer was not entitled to the beneficial tariff under HTSS tariff. However, ESE Dhanbad provided the connection under HTSS tariff instead of HTS tariff resulting in revenue loss of ₹ 5.53 lakh.

The management accepted (November 2016) the audit observation and directed the ESC Dhanbad to change the tariff of the said consumer.

The Company had not segregated the load of four HTSS consumers into HTSS and HTS tariff which resulted in loss of ₹ 9.90 crore.

Thus, four HTSS consumers were given undue benefit by not segregating the load into HTSS and HTS tariff and the Company suffered a loss of ₹ 9.90 crore.

The Government in exit conference (November 2016) assured that in future separation of connection as per tariff order will be done and the Company will

[40] After VUSNF order the load was 7000 KVA – 500 KVA other load + 2742 KVA load of new furnace = 9242 KVA.

[41] Calculated taking proportionate consumption under HTSS and HTS tariff.

explore the possibility to recover losses due to not segregating the load as per service category (tariff).

Irregularity in sanction of load to HTSS consumers

2.2.2.2 As per JSERC tariff order 2010-11, effective from May 2010, all consumers who have a contracted demand of 300 KVA and more for induction/arc furnace were to be categorised under HTSS tariff. The contract demand was to be ascertained based on manufacturer's technical specification of the total capacity of induction/arc furnace and equipment and not on the basis of measurement. This tariff schedule will not apply to casting units having induction furnace of melting capacity of 500 Kg or below.

Audit observed that ESEs Chas and Ramgarh provided connection to eight[42] HTSS consumers without obtaining manufacturer's technical specification of induction/arc furnace and equipment of induction furnace in violation of above tariff order (***Annexure 2.2.1)***.

Cases where tariff had been changed without obtaining manufacturers technical specification are discussed below:

- M/s Amit Steel Industries Pvt Ltd. (consumer no. BIA9) was availing (November 2004) power under HTS tariff at 300 KVA. Subsequently, the consumer requested (October 2010) the Company to change the tariff from HTS to HTSS as the consumer was going to install 750 Kg induction furnace in place of 500 Kg and accordingly an agreement was executed (November 2010) under HTSS tariff.

Audit observed that neither the consumer had submitted the dismantling report of old furnace, the installation report of new furnace and manufacturer's technical specification, nor ESE Chas demanded the same at the time of changing the tariff. The same was demanded after delay of two years in October 2012 and in May 2013, however, consumer did not furnish the same. Thus, changing of tariff without ascertaining load as per manufacturer's technical specification, ESE Chas might have extended undue benefit to consumer as well as incurred a revenue loss of ₹ 28.25 lakh during the period November 2010 to March 2016.

- M/s Regal Ingot Pvt. Ltd. (cons. no. CH14) and M/s Nanak Ferro Alloy Pvt. Ltd. (consumer no.RRH-10541) under ESC, Chas and Ramgarh were availing power since October 2004 and October 2006 under HTS tariff for 1400 KVA and 3000 KVA respectively. The consumers requested (June 2010) to change its tariff from HTS to HTSS as the arc furnace installed in their units attracted HTSS tariff after implementation of tariff order 2010-11 effective from May 2010. Accordingly, the Company started charging the energy bill under HTSS tariff from May 2010. However**,** the Company had not charged the requisite security deposit under new tariff**.**

Further, the contract demand of M/s Nanak Ferro Alloy Pvt. Ltd. was enhanced to 3823 KVA as the consumer exceeded the contract demand for continuous three months and Company executed (March 2012) an agreement under HTSS tariff by charging security deposit for only 823 KVA on HTSS

[42] One of ESC Chas and seven of ESC Ramgarh.

rate. The load was again enhanced (June 2012) to 6200 KVA under HTSS tariff as the consumer had installed additional plant.

Audit observed that neither the consumers submitted manufacturer's specification in support of load and type of furnace, nor the concerned ESEs had demanded the same. Further, there was neither any order from any competent authority of the Company to change the tariff from HTS to HTSS, nor any agreement to this effect was on record. The concerned ESEs had also not charged enhanced security deposit from the consumer for HTSS tariff. In the absence of any order, agreement and security deposit, the tariff of the consumer should not have been changed.

Irregular change of tariff of three HTS consumers into HTSS tariff resulted in loss of ₹ 10.27 crore.

Thus, by irregularly changing the tariff, the Company had lost revenue of ₹ 2.77 crore and ₹ 6.27 crore during May 2010 to September 2015 and during May 2010 to February 2012 respectively in the case of above two consumers. Further, a theft case was detected in case of M/s Regal Ingot Pvt. Ltd. on 23 September 2015 and the Company levied penal charges amounting to ₹ 1.44 crore. This was done on the basis of HTSS tariff instead of HTS tariff and the amount chargeable should have been ₹ 2.39 crore instead of ₹ 1.44 crore. Thus, the Company short levied penal charges by ₹ 95.23 lakh.

The management accepted (November 2016) the audit observations and directed the ESEs Chas and Ramgarh to submit a comprehensive report mentioning reasons for providing connection without manufacturer technical specification.

2.2.3 Adherence to JSERC Supply Code

Irregular reduction of load

2.2.3.1 As per clause 9.2.2 of JSERC Supply Code, the application for reduction of load shall be accompanied by details of modification, alteration and removal of electrical installation with completion certificate and test report of a licensed electrical contractor, any other reason for reduction of load and details of generator if any installed by the consumer with safety clearance certificate from competent authority as applicable.

M/s Sai Chem Transmeta Pvt. Ltd. (consumer no. HJAP 190) having a contract demand (CD) of 4320 KVA applied (December 2012) for reduction of load to 2400 KVA. The application was submitted without test report of a licensed electrical contractor. Audit observed that consumer had dismantled only two tonne[43] of furnace which would have reduced the load only by 1200 KVA. However, ESE Jamshedpur reduced (February 2013) the load to 2400 KVA.

Thus, the Company had irregularly reduced the load by 720 KVA and benefitted the consumer by ₹ 43.05 lakh[44] during February 2013 to March 2016.

The management stated (November 2016) that concerned officials have been directed to verify the documents of respective consumer. They further stated that there is a provision for penalty for exceeding contract demand by 110 *per cent.*

[43] One tonne = 600 KVA.

[44] Calculated taking demand charge of 75 *per cent* of contract demand 720 KVA x 0.75= 540 KVA x ₹ 235 x 23 months + 540 KVA x ₹ 250 x 3 months = ₹ 4304700.

Reply of the management regarding levy of penalty for exceeding the contract demand is not acceptable as the Company had not adhered to the provisions of JSERC Supply Code.

Delay in giving connection/enhancement of load

2.2.3.2 As per Section 43 (3) of the Electricity Act, 2003, every distribution licensee, shall on an application by the owner or occupier of any premises, provide supply of electricity to such premises. According to clause 6.2.11.1 of JSERC Supply Code, a maximum period of 153 days is allowed for giving new electric connection to an HTS consumer from the date of application. Further, as per clause 9.1.2 the application for enhancement of load shall be disposed of within the time frame as prescribed for new service connection.

Audit observed that the Company had delayed providing new service connection/enhancement of load in following cases:

- M/s Gajanan Ferro Pvt. Ltd., a HTSS consumer (consumer no. DVN 9) under ESC, Jamshedpur, had applied (June 2010) for a new electric connection with a load of 5000 KVA. The connection should have been energised upto November 2010 as per time period allowed under JSERC Supply Code. Audit observed that the load was sanctioned in June 2010. However, ESE Jamshedpur delayed the construction of a dedicated feeder at 33 KV level at GSS Dhalbhumgarh required for energising the connection as its administrative approval was accorded only in August 2011 and work order was issued only in September 2011. Thus due to delay in construction of dedicated feeder, the connection could be energised (October 2011) after a delay of 10 months resulting in loss of revenue of ₹ 1.27 crore[45].

Further, the consumer applied (January 2012) for enhancement of load from 5000 KVA to 10500 KVA. The connection should have been energised upto June 2012 as per time period allowed under JSERC Supply Code. The Company took seven and half months to sanction (September 2012) the load. However, the consumer requested (September 2012) for permission to pay security deposit in instalments which was granted (December 2012) after three months of request. Further, due to unavailability of proper metering unit the connection was further delayed and could be energised only in March 2013. Had the Company completed he formalities within the stipulated time, it could have earned additional revenue amounting to ₹ 1.34 crore[46] as demand charges during July 2012 to February 2013.

The management stated (November 2016) that construction of dedicated feeder was delayed due to public hindrance and enhancement of load and grant of instalments might have been delayed due to improper documentation. They further, stated that there was no revenue loss as the consumer was billed as per meter reading.

Reply is not acceptable as the administrative approval for construction of dedicated feeder was granted after 14 months of sanction of load. Further, management contention regarding improper documentation is also not acceptable as no further documents were requisitioned from the consumer for enhancement of load. Also, if the Company had sanctioned/enhanced the load

---

45 Calculated taking demand charge of 75 *per cent* of contract demand 5000 KVA x 0.75 = 3750 KVA x ₹ 330 x 8 months +3750 KVA x ₹ 370 x 2 months = ₹ 12675000.

46 Calculated taking demand charge of 75 *per cent* of contract demand 5500 KVA x 0.75 = 4125 KVA x ₹ 370 x 1 month + 4125 KVA x ₹ 410 x 7 months = ₹ 13365000.

in due time, it would have earned minimum demand charges of 75 *per cent* of contract demand.

- A HTSS consumer, M/s Ridhi Sidhi Iron Pvt Ltd. (consumer no. NR 540), under ESC, Dhanbad, had applied (May 2012) for enhancement of load from 7000 KVA to 9500 KVA. The connection should have been energised upto October 2012 as per time period allowed under JSERC Supply Code. The Company sanctioned (March 2013) the load of 9742 KVA after 10 months of application due to incomplete feasibility report submitted by the Division/Circle office. As per sanction order (March 2013), the consumer had to deposit security deposit of ₹ 68.08 lakh. The consumer requested (March 2013) for permission of payment of security deposit in instalments which was granted (August 2013) after five months of request. Thus, the Company took 15 months to sanction the load and grant instalments for payment of security deposit. Had the Company completed the formalities within the stipulated time of 153 days, it would have earned minimum additional revenue of ₹ 84.34 lakh [47] as demand charges.

The management accepted (November 2016) that enhancement of load was delayed due to incomplete feasibility report and stated that grant of instalments might have been delayed due to improper documentation. It was also stated that there was no revenue loss as the Company had not supplied power to the consumer.

Reply regarding improper documentation is not acceptable as the application was forwarded to Chief Engineer (Commercial and Revenue) who granted the same without any requisition of further document. Further, the contention of no revenue loss is also not acceptable as had the Company sanctioned/enhanced the load in due time, it would have earned demand charges of 75 *per cent* of contract demand.

Here it is pertinent to mention that the Government directed (November 2016) the management in the Exit Conference to bring the matter into the Board meeting for not granting instalments for payment of security deposit.

- M/s Uranium Corporation of India Ltd (consumer no. HT 76) under ESC, Chaibasa, had applied (April 2012) for enhancement of load from 1000 KVA to 2000 KVA. The connection should have been energised upto September 2012 as per time period allowed under JSERC Supply Code. Feasibility report for the same was submitted in May 2012. However, due to delay in obtaining no objection certificate from concerned Grid Sub-Station the load could be sanctioned and energised (March 2016) only after a delay of 41 months. Had the Company enhanced the load within 153 days as specified in JSERC Supply Code, the Company could have earned ₹ 72.56 lakh[48] as minimum demand charges during October 2012 to February 2016.

The management stated (November 2016) that there was delay in enhancement of load due to transmission constraints.

---

[47] Calculated taking demand charge of 75 *per cent* of contract demand 2742 KVA x 0.75 = 2057 KVA x ₹ 410 x 10 months = ₹ 8433700

[48] Calculated taking demand charge of 75 *per cent* of contract demand 1000 KVA x 0.75 = 750 KVA x ₹ 235 x 39 months +750 KVA x ₹ 255 x 2 months = ₹ 7256250

Reply is not acceptable as the feasibility report submitted by the Division office reflected only 28 MVA[49] load against the capacity of 40 MVA power of Grid Sub-Station.

- The Assistant Mechanical Engineer, DW&S, Mechanical Sub-division (consumer no. BIA79) under ESC Chas, had applied (January 2013) for new connection with a load of 3200 KVA. The connection should have been energised upto June 2013 as per time period allowed under JSERC Supply Code. The load and estimate for deposit work for electrical infrastructure required was sanctioned (July 2013) after six month. The consumer deposited (August 2013) ₹ 1.65 crore for deposit work to be carried out by the Company. However, ESE Chas provided connection only in March 2015 due to delayed execution of infrastructural work by the Company. Had the connection been enegised by ESE Chas within the stipulated time of 153 days, it would have earned revenue of ₹ 1.13 crore[50] from July 2013 to February 2015.

The management accepted (November 2016) the audit observation stating that energisation was delayed due to delay in completion of infrastructural work.

- M/s Indian Oil Corporation Ltd. under ESC, Deoghar, had applied (February 2013) for a new connection at a load of 990 KVA. The connection should have been energised upto July 2013 as per time period allowed under JSERC Supply Code. The load was sanctioned in August 2013. However, the connection was energised (March 2014) after a delay of nine months from the due date for providing the electric connection due to delay in completion of infrastructure works. This resulted in a revenue loss of ₹ 12.22 lakh[51] during the period August 2013 to February 2014.

The management stated (November 2016) that the consumer delayed in getting certificate of Electrical Inspector.

The Company delayed in providing new connections/enhancement of load to five consumers resulting in revenue loss of ₹ 5.43 crore.

Reply is not acceptable as the Company took six months to sanction the load and prepare the estimate for deposit work to be carried out. The consumer deposited the required amount for infrastructural work within the stipulated 15 days and Electrical Inspector's certificate was required only after completion of work.

The Management should fix the responsibility for delay in providing connection/enhancement of load in above cases.

Delay in conversion of Low Tension Industrial Services connection into HTS connection

2.2.3.3 In the following two cases, ESCs Dhanbad and Ranchi delayed the conversion of Low Tension Industrial Services (LTIS) into HTS tariff :

- M/s Jagdhatri Coke Manufacturer (consumer No. GRI 95) under ESC Dhanbad had applied (March 2013) for conversion of 105 HP existing Low Tension Industrial Services (LTIS) connection into 130 KVA connection under HTS tariff. The load was sanctioned (November 2013) after a delay of eight months for want of required documents *viz* Memorandum and Articles of

[49] One MVA = 1000 KVA.
[50] Calculated taking demand charge of 75 *per cent* of contract demand 3200 KVA x 0.75 = 2400 KVA x ₹ 235 x 20 months = ₹ 11280000
[51] Calculated taking demand charge of 75 *per cent* of contract demand 990 KVA x 0.75 = 743 KVA x ₹ 235 x 7 months = ₹ 1222235

Association, partnership deed, land deed of premises, license of the factory *etc* though, these documents were already submitted by the consumer at the time of taking the LTIS connection. The connection was energised in March 2014 after delay of seven months from the stipulated time which was upto August 2013 as per JSERC Supply Code. Had the Company energised the service connection under HTS Tariff at 130 KVA within the stipulated time the Company could have earned additional revenue of ₹ 0.94 lakh[52].

The Management accepted (November 2016) the audit observation and directed the ESC Dhanbad to submit a detailed report pertaining to delay in conversion of connection.

- As per clause 8 of the HT agreement with the consumer, the consumer shall not be at liberty to terminate the agreement before the expiry of three years from the date of commencement of the supply of energy.

M/s Shiva Prints Pvt Ltd, a LTIS consumer had applied (December 2012) for enhancement of load from 81 Horse Power (HP) to 300 KVA under HTS tariff. The load was sanctioned (January 2013) and the ESE Ranchi executed the agreement (May 2013) with the consumer. Electrical Executive Engineer (EEE) Doranda was directed (May 2013) to energise the connection, but the service connection with enhanced load was not released by EEE. In December 2013 the consumer requested to reduce the load to 200 KVA. Finally the service connection was energised (March 2015) at reduced load of 200 KVA after signing a fresh agreement. Had the Company energised the connection under HTS tariff within the stipulated time *i.e.* up to May 2013, the Company would have earned the additional revenue of ₹ 8.90 lakh.

Thus due to delay in conversion of two LTIS connections into HTS tariff, the Company suffered a loss of ₹ 9.84 lakh.

The management stated (November 2016) that the ESE Ranchi has been directed to look into the matter and submit a detailed report.

Irregularity in grant of new connection

2.2.3.4 As per clause 5.5 of JSERC Supply Code, 2005, if the applicant in respect of an earlier agreement executed in his name or in the name of a firm/Company with which he was associated either as a partner, director or managing director, has any arrear of electricity dues or other dues for the premises where the new connection is applied for and such dues are payable to the licensee, the requisition for supply of energy on the premises may not be entertained by the licensee until the dues are paid in full.

Shri Santosh Kumar Khetan was the promoter and his brother Krishna Kumar Khetan was the Chief executive of M/s Vaishanvi Steels Pvt Ltd. Electric supply to M/s Vaishanvi Steels Pvt Ltd (consumer no. 7347 HT) under ESC Deogarh was disconnected (December 2010) for not paying outstanding dues of ₹ 36.27 lakh. Subsequently, a new company M/s Vaishanavi Multigrains Pvt Ltd. was incorporated (January 2011) in which Shri Santosh Kumar Khetan, Shri Krishna Kumar Khetan and their brother Pradeep Kumar Khetan were whole time directors. Sri Pradeep Kumar Khetan applied (March 2013) on behalf of M/s Vaishanavi Multigrains Pvt Ltd. for a new connection on

[52] Demand charges and energy charges as per HTS tariff less amount already charged under LTIS tariff.

premises on which dues were outstanding in the name of Vaishanvi Steels Pvt Ltd.

As Company had not taken any action on the application, Vaishanavi Multigrains Pvt Ltd (new consumer) through its director Sri Pradeep Kumar Khetan filed a writ petition in the Hon'ble High Court, Jharkhand for release of new electric connection. The Hon'ble High Court directed (May 2015) the Company to examine the documents and take a decision in this matter within two weeks. The Company constituted (November 2015) a committee to examine the premises of the two companies and business relation among brothers. The committee recommended (December 2015) that premises are different and both the brothers have separate business interest. Accordingly, ESC Deoghar granted (March 2016) the new electric connection to M/s Vaishanavi Multigrains Pvt Ltd.

Audit observed that the committee's recommendation was not appropriate as Shri Santosh Kumar Khetan had taken electric connection for M/s Vaishanvi Steels Pvt. Ltd on plot numbers 484, 485 and 486 and electric connection for M/s Vaishanavi Multigrains Pvt. Ltd. was sought by Shri Pardeep Kumar Khetan on plot numbers 485 (Part) and 486 *i.e.* part of same premises. Further, both the brothers were also related in business as Shri Santosh Kumar Khetan promoter of M/s Vaishanavi Steels Pvt. Ltd and they were also a whole time Director in M/s Vaishnavi Multigrain Pvt. Ltd. Thus, electric connection was irregularly granted ignoring above facts.

The management stated (November 2016) that the connection was released after proper verification that two premises were in different plots and in line of opinion rendered by Additional Advocate General, GoJ.

Reply of the management is not acceptable as Additional Advocate General, GoJ had opined that connection may only be released if the petitioner is in no collusion with his defaulter brother and his ownership and possession over the land in question is found to be separate of his defaulter brother. Audit scrutiny revealed that while taking connection for Vaishanavi Steels Pvt. Ltd, Shri Santosh Kumar Khetan had sought connection on whole premises. Further, promoters and chief executive of M/s Vaishanavi Steels Pvt Ltd were also whole time Directors in M/s Vaishnavi Multigrain Pvt. Ltd.

Acceptance of payment in cheque in contravention of JSERC Supply Code

2.2.3.5 As per JSERC Supply Code, in case a cheque given by the consumer is dishonoured/bounced, action may be initiated by the licensee for disconnection treating it as a case of payment not made. The licensee may not accept payment through cheque from such consumer for a period of one year from the billing month for which the cheque given by the consumer has bounced. For that particular year, the consumer may be required to pay his bill in cash/ by demand draft only.

Audit observed that 56 cheques deposited against energy bills of 11[53] consumers amounting to ₹ 23.73 crore, were dishonored repeatedly. However,

[53] M/s Maa Tara Ispat (P) Ltd (DVM 6), M/s Sukh Sagar metal Pvt Ltd (CKU02),M/s S.S Agro biotech flour Mill (BRD596), M/s Om Shakti Tech (NR 543), M/s Ornet Ispat Pvt Ltd. (BRD 604), M/s Siyaram Engineering (BRD 597), M/s Kumardhubi Metal Processing Ind. (NR 552), M/s Vinod Coke Ind. (NR 553), M/s Divine Alloys, HT 38), M/s Hariom Casting Company Pvt Ltd. (HT85) and M/s Shri Ram Alloy (HT-38).

Electric Superintending Engineers (ESEs) of concerned ESCs continued to accept payment through cheques in violation of the provisions of JSERC Supply Code.

The management accepted (November 2016) the audit observation and stated that direction have been issued to follow the provisions strictly. Further, the Government stated in exit conference (November 2016) that the Company has been directed to file cases against the concerned consumer and publish the names of the consumers in local news paper. It was also directed that action be taken against the employees responsible for lapses.

2.2.4 Billing and Collection efficiency

Deviation from tariff orders

2.2.4.1 As per JSERC tariff 2011-12 effective from July 2011, the billing demand shall be the maximum demand recorded during the month or 75 *per cent* of the contract demand, whichever higher. In case higher actual demands are recorded for three continuous months, the same shall be treated as the new contract demand for the purpose of billing of future months and the consumer will get into a new agreement for the revised contracted demand with the licensee.

The Company failed to increase Contract Demand in case of 61 HTSS consumers as per JSERC tariff which resulted in loss of ₹ 3.42 crore

Audit observed that actual demand of 61 HTS consumers[54] (***Annexure 2.2.2***) in seven test checked ESCs, exceeded the Contract Demand for three continuous months during the period 2011-12 to 2015-16. However, the concerned ESEs had not taken any step to increase the contract demand which resulted in revenue loss of ₹ 3.42 crore.

The management accepted (November 2016) the audit observation and directed the field offices to ensure revision of contract demand and realisation of revenue short realised.

Failure to recover additional security

2.2.4.2 As per JSERC Supply Code, the distribution licensee shall recalculate the amount of security based on the actual billing of the consumer once in each financial year. In case where amount of security deposited by the consumer is less than 90 *per cent* of the such security calculated for the financial year, the licensee shall be entitled to serve notice to the consumer to deposit the amount of shortfall within 30 days and if the consumer fails to deposit the security amount within due date, his service connection may be disconnected.

Audit observed that in cases of 62 HTS consumers[55] in seven test checked ESCs ***(Annexure 2.2.3)*** for the financial year 2014-15, the concerned ESEs had neither recovered additional security deposit of ₹ 54.03 crore, nor disconnected the connection.

The management accepted (November 2016) the audit observation and directed the field officers to take effective measures to realise the additional/insufficient security amount.

[54] Eight at Jamshedpur, three at Dhanbad, two at Deoghar, five at Chaibasa, 30 at Ranchi, five at Chas and eight at Ramgarh electric Supply Circles.

[55] 14 at Chaibasa, five at Deoghar, 11 at Dhanbad, four at Jamshedpur, five at Ranchi nine at Chas and 14 at Ramgarh Electric Supply Circles.

Average billing due to delay in replacement/rectification of meters

2.2.4.3 As per JSERC Supply Code as amended in September 2015, if meter of a consumer becomes defective, then billing is to be done considering average consumption of past 12 months[56], if past consumption pattern was available. The average billing period can be for a maximum period of three months. Further, as per JSERC tariff no connection should be released without proper energy meter.

31 HTS consumers in four ESCs had been billed on average basis for the period of four to 240 months in violation of JSERC Regulations.

Audit observed that 31 HTS consumers[57] in four test checked ESCs as detailed in ***Annexure 2.2.4*** had been billed on average basis for the period ranging between four to 240 months, contrary to the provisions of JSERC Supply Code. Further, the Company had failed to replace/rectify the defective meters within the stipulated time in these cases. It was also observed that the Company released connection to General Manager, R-APDRP consumer no. HJ79, under ESC Jamshedpur, with a contract demand 316 KVA without meter and agreement.

Audit further observed that in cases of nine HTS consumers[58], in five test checked ESCs the average consumption was wrongly calculated resulting in short charge of revenue amounting to ₹ 1.20 crore as detailed in ***Annexure 2.2.5***.

The management accepted the audit observation and stated (November 2016) that defective meters were not changed due to unavailability of meters and will be changed within two to three months. Management also stated that short charged revenue on average bill will be recovered.

Short billing of energy charges

2.2.4.4 Audit scrutiny of records of energy billing pertaining to HTS and HTSS consumers in two test checked ESCs revealed the following:

- In case of a HTSS consumer M/s Sukh Sagar, (consumer no. CKU 2) under ESC Jamshedpur, it was observed that while carrying forward the arrears during the period September 2015 to December 2015, ESC Jamshedpur had short charged ₹ 61.45 lakh.

- During October 2015, a HTSS consumer M/s Himadri Steel (P) Ltd., (consumer no. CKU3) under ESC Jamshedpur, had consumed 1295640 units of energy. However, the Company had charged only 1155600 units. Thus, ESC Jamshedpur short charged 140040 units of energy resulting in revenue loss of ₹ 4.55 lakh.

- ESC Chaibasa charged 100 *per cent* of its demand charge against a HTSS consumer M/s SSR Sponge, (consumer no. HT55), who had not paid the full energy bill as demanded by ESC but filed a case before *Vidyut Upvokta Shikayat Niwaran Forum* (*VUSNF*). As per order of VUSNF, the bill was revised for the period April 2007 to October 2010. In the revised bill, ESC charged ₹ 62.51 lakh as arrears up to November 2010. However, it was observed that the total arrears from April 2007 to November 2010 was ₹ 1.01 crore. Thus, ESC had short billed revenue of ₹ 38.14 lakh.

[56] Considering average consumption of past three months *w.e.f* September 2015.
[57] Nine in ESC, Jamshedpur six in ESC, Dhanbad. Two at ESC Chaibasa and 14 at ESC Ranchi.
[58] ESC Jamshedpur, Chaibasa, Chas, Ramgarh and Ranchi.

The management accepted (November 2016) the short billing in case of M/s Himadri Steel Pvt Ltd. Further, stated that there was no short charging against M/s Sukh Sagar and M/s S.S.R Sponge.

The reply regarding M/s Sukh Sagar and M/s S.S.R Sponge was not acceptable as the Company has not produced any documentary evidence contrary to findings of audit.

Wrong billing

2.2.4.5 As per JSERC tariff order 2010-11 effective from May 2010, domestic connection in Housing Colonies/ Housing Complexes/ Houses of multi storied buildings purely for residential use, with power supply at 11 KV voltage level and load above 75 KW shall be categorised under Domestic HT connection. Fixed charge of ₹ 40, ₹ 65, ₹ 75 and ₹ 80 per KVA per month was leviable effective from May 2010, July 2011, August 2012 and January 2016, as per tariff orders of respective years. Further, there were no provisions of providing power factor rebate to Domestic HT consumers in the tariff.

Short billing of the fixed charges and irregular power factor rebate allowed to seven Domestic HT consumers resulted in loss of ₹ 40.15 lakh.

Audit observed that in case of seven[59] Domestic HT consumers, the concerned ESEs had short billed the fixed charges and irregularly allowed power factor rebate resulting in revenue loss of ₹ 40.15 lakh during the period 2011-12 to 2015-16.

The management accepted (November 2016) the audit observation and stated that short billed amount against consumers of ESC Chaibasa and Chas has been charged and ESC Dhanbad has been directed to the recover the short billed amount from the consumers immediately.

Undue favour to consumers

2.2.4.6 To liquidate the arrears of energy bills, the Company allows instalment facility to the consumers on request basis. For this an agreement is executed between the Company and the consumers. As per terms of agreement, the consumer has to pay fixed instalment amount per month in addition to current bill *plus* compensation charges at the rate of 0.4 *per cent* per week on the outstanding dues. If consumer breaches the terms of agreement, the entire amount would be recovered by the Company from the consumer in one lump sum and the Company shall further be entitled to disconnect the supply for failure to pay the same.

Audit observed that four HTSS consumers in two test checked ESCs[60], had failed to make payment as per terms of agreement. However, the Company did not take any effective action against the consumers and extended undue benefit to consumers as discussed below:

- On request of M/s Maa Tara Ispat (P) Ltd (consumer no. DVM 6) under ESC Jamshedpur, the Company executed an agreement (July 2013) with the consumer allowing him to pay arrears of ₹ 3.53 crore with interest in 20 monthly instalments along with current bill and took post-dated cheques

---

[59] GM, Jarda (consumer No. MK1557), CMRI (consumer No. DH1731), Mac Nally Bharat Engg. Works (consumer No. KD521) and Chief Engineer Services (consumer No. DHL 1546, 1547) of ESC Dhanbad, Bihar Sponge Iron (P) Ltd. (consumer No. HT 83) and Rungta Mines Ltd (consumer No. HT 88) of ESC Chaibasa and Veena Rani (consumer No. CH20) and Binay Kumar Tiwary (consumer No. BIA56) of ESC Chas.

[60] ESC Jamshedpur and Chaibasa.

towards payment of instalments. The consumer failed to fulfill the stipulated condition of payment of the entire current bill, but neither the instalment facility was withdrawn, nor the power supply was disconnected. As a result outstanding dues piled up to ₹ 10.67 crore in October 2014.

However, on request of the consumer, Company again executed an agreement (November 2014) allowing it to pay arrears with interest in 20 monthly instalments along with current bill and took post-dated cheques towards instalment payment. Again cheque amounting to ₹ 20.56 lakh payable in December 2014 was dishonoured and the consumer also failed to pay the current bill, yet the Company did not disconnect the supply and the arrear increased to ₹ 14.06 crore in April 2015.

Further, a case of theft of power by the consumer was detected and its supply was disconnected (May 2015) and a penal bill of ₹ 11.20 crore was separately raised (June 2015) against the consumer for theft of energy. However, on appeal, the Hon'ble High Court, Jharkhand ordered to create an escrow account of ₹ 50 lakh and deposit of 50 *per cent* of penalty (₹ 5.60 crore) in five monthly instalments in order to restore the electric connection. Accordingly, electric supply to the consumer was restored (November 2015). However, the consumer failed to comply with the condition of restoration of power and deposited two monthly instalments after the due date and failed to pay the third instalment. The consumer had also not paid any portion of the current bill including arrears, which now amounted to ₹ 24.28 crore as of March 2016.

The management accepted (November 2016) the audit observation and stated that action is being taken for realisation of dues.

The fact remains that despite repeated failures in payment of outstanding energy dues, ESE Jamshedpur did not take any action against the consumer as per terms of the agreement to disconnect the power supply to safeguard Company's interest.

- Electricity line of M/s Himadri Steel (P) Ltd. (consumer no. CKU3) under ESC Jamshedpur was disconnected (14 February 2015) for the failure to pay outstanding dues. The consumer requested (February 2015) for grant of 10 monthly instalments to pay the outstanding dues of ₹ 3.12 crore and this was granted. An agreement was executed with the Company for the same in February 2015. Audit observed that the consumer deposited ₹ 40 lakh in February 2015 but subsequently defaulted in payment of instalments which were due on 21 March 2015 and current bill. Despite breach of agreement by the consumer, ESE Jamshedpur did not take any action against the consumers. As a result arrears of ₹ 4.82 crore was pending for recovery against the consumer as on March 2016.

The management accepted (November 2016) the audit observation and stated that action is being taken for realisation of dues.

- M/s Divine Alloys & Power Co. Ltd. (consumer no. HT 38) under ESC Chaibasa, had not paid energy bills of April 2014 and May 2014 and electricity supply was disconnected on 2 June 2014. On request of the consumer the Company executed (September 2014) agreement with the consumer for payment of ₹ 3.30 crore in 20 monthly instalments along with compensation charges of 1.5 *per cent* in addition to current bill. Accordingly, electricity supply was reconnected. However, the consumer defaulted again and the electricity supply was disconnected on 02 May 2015. Consumer requested yet another instalment facility and the Company allowed the payment of ₹ 6.25 crore in 25 monthly instalments. Accordingly an agreement was executed with the consumer and electric supply was reconnected (July 2015). As per agreement, the consumer had to submit post dated cheques towards payment of instalments, but it was observed that consumer again defaulted in payment of these instalments implying that post dated cheques were not taken. However, ESE Chaibasa did not take any action against the consumer and arrears increased to ₹ 11.42 crore as of March 2016.

The management stated (November 2016) that matter of differential demand charge is subjudice before court.

No response have been furnished about the failure of ESE Chaibasa in taking action against the consumer for defying the terms of agreement entered into by him in September 2014 and July 2015. The consumer had not paid the monthly instalments of February 2016 and March 2016 and had either not paid or paid partially the energy dues for the period from June 2015 to March 2016.

- M/s Kohinoor Steel Pvt. Ltd. (consumer no. HT 40) under ESC Chaibasa, was paying energy bill partially and its accumulated arrears upto May 2014 were ₹ 44.49 lakh. The Company executed an agreement (August 2014) with the consumer allowing it to pay arrears with interest in five monthly instalments along with current energy charges through demand drafts. The consumer defaulted in payment of instalments and electric supply was disconnected on 31 October 2014. However, as per instruction of Chairman cum Managing Director, Jharkhand Urja Vikas Nigam Limited, ESE Chaibasa reconnected (November 2014) the electric supply. Further, on request of the consumer, the Company executed (November 2014) an agreement for payment of arrears of ₹ 54.50 lakh in eight monthly instalments through post dated cheques. The consumer did not adhere to the agreement and electric supply was disconnected on 27 January 2015. But for the third time payment of arrears ₹ 1.09 crore in instalments was granted and the Company executed (February 2015) an agreement for 10 monthly instalments through nine post-dated cheques. The electric supply was reconnected on 25 February 2015. However, the consumer paid only three monthly instalment, short-paid two monthly instalments implying that post dated cheques were not taken. As a result the consumer failed to pay delayed payment surcharge (DPS) of ₹ 4.56 lakh and instalment amount of ₹ 55.99 lakh.

The Company did not take any action against consumers who failed to pay their arrears of electricity dues as per terms of agreement.

Despite repeated failure of the consumer to pay energy charges the ESE Chaibasa had allowed payment of arrears of energy charge in instalments to the consumer and thereby had extended undue benefit to him.

The management stated (November 2016) that after reconnection on 25 February 2015, the consumer paid three consecutive instalments and short paid two instalments. The management further stated that as per order of Hon'ble High Court, recovery of further arrears had been stopped and the ESE Chaibasa continued to account for the arrears with DPS in the monthly bill of the consumer.

The reply of the management is not acceptable as the Hon'ble High Court passed the order in July 2015 whereas, consumer had failed to adhere to the condition of the agreement dated 11 August 2014, 28 November 2014 and 25 February 2015. Despite that no effective action was taken against the consumer.

Failure to revalidate the Bank Gaurantee

2.2.4.7 M/s Tata Yodugawa Ltd. (consumer no. HJAP 25) under ESC Jamshedpur was granted electric connection (June 1996) under HTS tariff. The consumer had outstanding dues of ₹ 3.72 crore on account of fuel surcharge for the period during April 1999 to December 2003 including Delayed Payment Surcharge (DPS) up to June 2006. This was kept in abeyance as the consumer had filed a writ against the levy of fuel surcharge in the Hon'ble High Court, Jharkhand. On request of the consumer the service connection was disconnected (March 2013) by depositing bank guarantee (BG) of ₹ 3.72 crore valid up to March 2014.

Subsequently, Hon'ble High Court, Jharkhand dismissed (May 2015) the writ. However, in the mean time the BG of ₹ 3.72 crore given by the consumer expired in March 2014 and ESE Jamshedpur failed to get the same revalidated in time. The consumer paid (July 2015) ₹ 43.61 lakh only though the Company issued a fresh bill of ₹ 12.32 crore, including DPS up to July 2015 which has been challenged by the consumer in the Hon'ble Supreme Court.

Thus, due to failure of ESE Jamshedpur to validate the BG before its expiry, the Company lost the opportunity to recover fuel surcharge of ₹ 3.28 crore.

The management accepted (November 2016) the audit observation and directed the ESE Jamshedpur to act expeditiously.

Loss due to inaction of the Company

2.2.4.8 In two test checked ESCs, following instances of loss due to inaction by the concerned ESEs were observed.

- M/s M.P.Minning & Energy Ltd. was released a new service connection under ESC Deoghar in January 2016 in the premises that earlier belonged to M/s MACLIOD Steel (P) Ltd., whose line was disconnected (August 1990) due to outstanding dues of ₹ 15.31 lakh for which a certificate case[61] was filed (July 1992) by the Company. The defaulting consumer faced winding up orders in September 2003. Audit observed that though advertisement for sale of property was publicly[62] available, ESE Deoghar failed to register its claim before the liquidator to recover its dues. Hence, the Company suffered a loss of ₹ 15.31 lakh.

- M/s Gajpati Food Pvt. Ltd. (consumer no. BRD 609) was released (March 2015) a new service connection under ESC Dhanbad, in the premises that earlier belonged to M/s Saraswati Roller Flour Mills Pvt. Ltd. (SRFM) (consumer no. BRD 534) whose line was disconnected (February 1995) due to outstanding dues of ₹ 18.52 lakh. A certificate case was filed (February 1995) against SRFM by the Company. SRFM had taken loan from Bihar State Financial Corporation (BSFC) for which agreement was signed

[61] Case registered under Bihar and Orissa Public Demand Recovery Act, 1914 for recovery of dues.
[62] Times of India and Prabhat Khabar dated 26 July 2007.

(February 1989). The premises of SRFM were mortgaged with BSFC. Notice of attachment was issued (August 2006) and body warrant[63] against the owner of SRFM had also been issued (November 2008). However, the said amount could not be recovered from the consumer till date. Audit observed that though advertisement for sale of property was published[64], ESE Dhanbad failed to register its claim before BSFC to recover its dues. Hence the Company suffered loss of ₹ 18.52 lakh.

Thus, failure of the management in taking timely action to recover the dues led to loss of ₹ 33.83 lakh in above two cases.

The Management stated (November 2016) that they have directed ESE Deoghar and Dhanbad to submit detailed report on the matter.

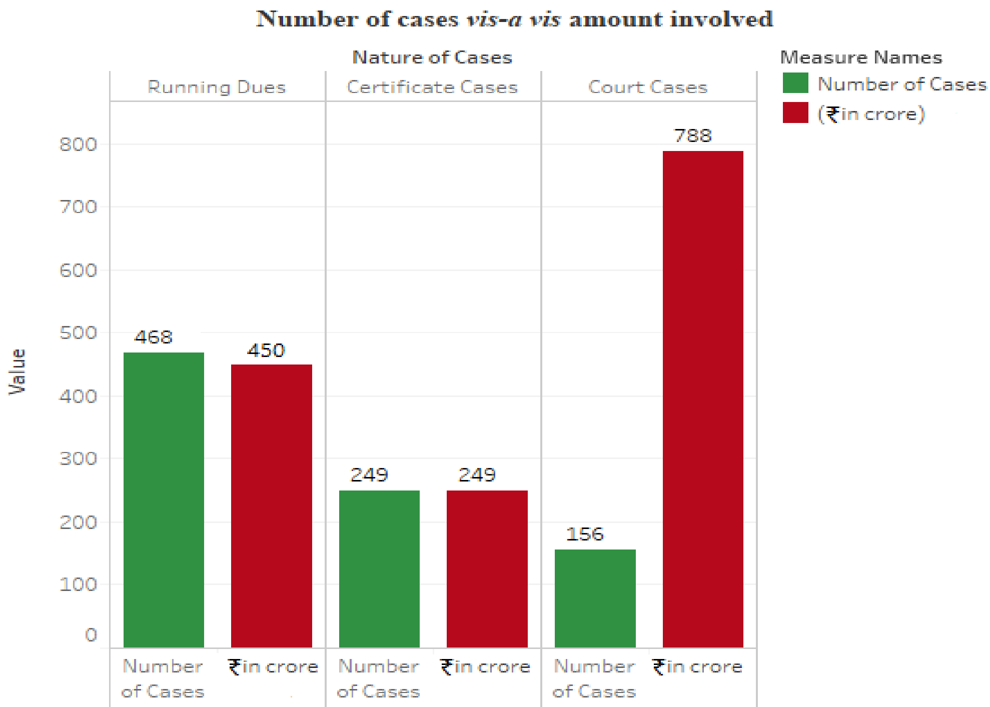
The fact remains that the concerned ESEs failed to take timely action, causing loss to the Company.

Outstanding dues

2.2.4.9 As revenue from sale of energy is the main source of income of the Company, prompt collection of revenue assumes great significance.

We observed that as of 31 March 2016 there were outstanding dues of ₹ 1487.11 crore against 873 HTS consumers in seven[65] test checked ESCs. Out of above ₹ 449.84 crore was outstanding against the 468 running consumers, ₹ 249.22 crore was pending against 249 consumers in certificate case and ₹ 788.05 crore against 156 consumers in Hon'ble Supreme Court/High Court. The amounts were pending for a period ranging from two years to 34 years in different courts. Following **chart 2.2.2** depicts the status of outstanding dues graphically.

Chart 2.2.2: Status of outstanding dues as of 31 March 2016



[63] A body warrant means that the accused is to be held in jail until brought before the judge.
[64] Prabhat khabar dated 28 September 2012.
[65] Jamshedpur, Ranchi, Dhanbad, Chaibasa, Deoghar, Ramgarh and Chas.

The management stated (November 2016) that effective action is being taken to recover the outstanding dues.

Failure of the Company to recover dues

2.2.4.10 Audit further, observed that premises of M/s Spriha Steel Pvt. Ltd. (consumer No. RP 378) under ESC Ranchi, were inspected (October 1999) by a team lead by Deputy Superintendent of Police, Vigilance along with other officers of Bihar State Electricity Board and line was disconnected alleging theft of electricity. The final bill was served (December 2000) for an amount of ₹ 52.88 crore.

The consumer challenged the decision of the Company in the High Court, Jharkhand. The High Court passed an order (July 2003) directing Chairmen, JSEB to take a final decision on the matter and issue fresh bill according to decision within 60 days from date of receipt of representation from the consumer along with all relevant documents and after giving proper opportunity of hearing to the parties. Date of representation by the consumer and reply of the Company was not available. However, final decision has yet not been taken (November 2016).

The management stated (December 2016) that file have been misplaced, therefore, information cannot be furnished. The Government stated in exit conference (November 2016) that the Company has been directed to rebuild the documents and establish the records of the case.

The fact remains that in the absence of decision by the Chairman, JSEB which he was obliged to do within 60 days as directed by the Hon'ble High court an amount of ₹ 52.88 crore remained unrecovered from the consumer.

Conclusion

Audit concluded that:

- **Four HTSS consumers were utilising load for purposes other than induction furnace; however, the Company had not segregated the load into HTSS and HTS tariff as required under JSERC Supply Code and suffered loss of ₹ 9.90 crore;**

- **In five cases the Company failed to provide new connections/enhancement of load within the time limit of 153 days prescribed in JSERC Supply Code resulting in revenue loss of ₹ 5.43 crore;**

- **Actual demand of 61 HTS consumers exceeded the Contract Demand for continuous three months during the period 2011-12 to 2015-16; however, the Company failed to increase the contract demand as per JSERC tariff orders resulting in revenue loss of ₹ 3.42 crore;**

- **The Company failed to collect additional security deposits of ₹ 54.03 crore against 62 HTS/HTSS consumers based on their actual billing as per JSERC Supply Code; and**

- **There were huge outstanding dues of ₹ 1487.11 crore against 873 HTS/HTSS consumers including 450 crore against 468 running consumers in seven test check circles.**

Recommendations

Audit recommends that the Company should:

- **segregate the load in HTSS and HTS tariff in cases mentioned in this Report as per the provisions of JSERC Supply Code and review the load of all HTSS consumers;**
- **provide new connections/enhancement of load within stipulated time as per JSERC Supply Code;**
- **review the contract demand on regular basis and increase the contract demand wherever required in accordance with the JSERC tariff orders;**
- **review the security deposit as per JSERC Supply Code and collect the additional security deposit wherever applicable; and**
- **take effective steps to recover the outstanding dues.**

Chapter - III

CHAPTER - III

3. Transaction Audit Observations

Important audit findings emerging from test check of transactions made by the State Government Companies have been included in this Chapter.

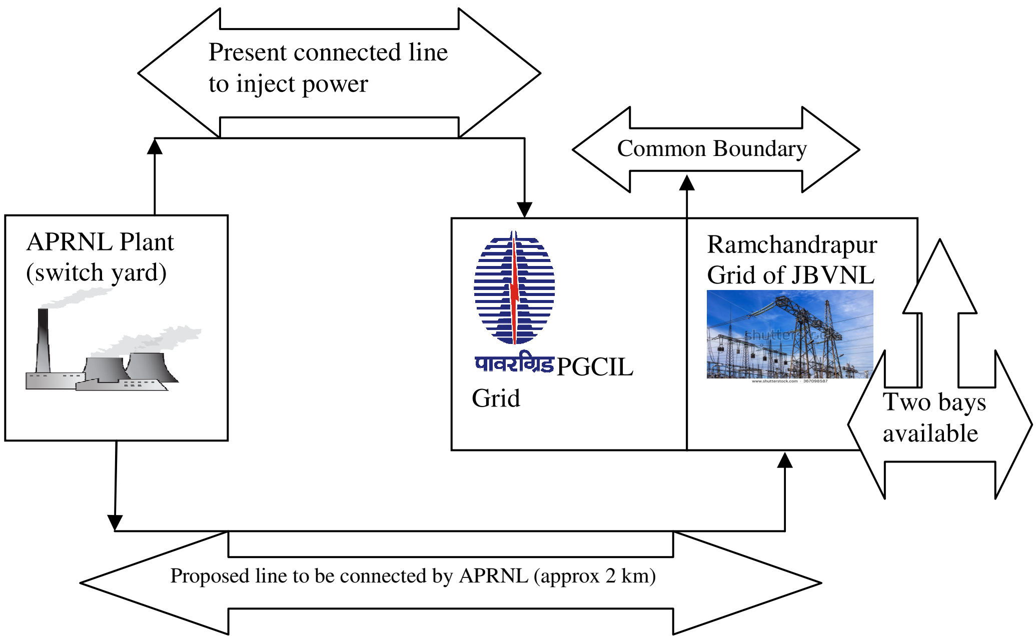
Jharkhand Bijli Vitran Nigam Limited

3.1 Avoidable expenditure on transmission charges

The Company incurred avoidable expenditure of ₹ 31.19 crore towards transmission charges in the absence of dedicated transmission system.

Jharkhand State Electricity Board (JSEB) now Jharkhand Bijli Vitran Nigam Limited (JBVNL) entered into (September 2012) a long term Power Purchase Agreement (PPA) with Adhunik Power and Natural Resources Limited (APNRL) for procurement of power for 25 years. As per terms of the PPA, APNRL was to develop a transmission system which included a 400 KV transmission line from power station bus-bar[66] to JBVNL's Ramchandrapur 220 KV sub-station within two years from the date of commercial operation (CoD) of its power plant. Meanwhile, APNRL would inject power to Power Grid Corporation of India Limited (PGCIL) Grid, which in turn would inject power to the adjacent Ramchandrapur Grid of JBVNL for which transmission charges[67] (injection charges and withdrawal charges) from the interconnection point onwards were to be paid by the JBVNL for an initial period of two years or till the dedicated transmission system was developed, whichever was earlier.

Chart 3.1.1: Pictorial representation for evacuation of power from the APNRL Power Plant to Ramchandrapur Grid



[66] In electrical power distribution, a bus-bar is a metallic strip or bar that conducts electricity within a switchboard.

[67] The charges to be paid by seller and reimbursed by the procurer as transmission tariff for the transmission of power from the Power Station Bus-Bar up to the Delivery Point.

Audit noticed (September 2015) that CoD of Unit 1 and 2 of the power plant was declared on 21 January 2013 and 19 May 2013 respectively. Though two bays were available at Ramchandrapur Grid of JSEB for direct connectivity with APNRL, JBVNL had not demanded 'No objection certificate' (NoC) required for construction of the dedicated transmission line from Jharkhand Urja Sancharan Nigam Limited (JUSNL) under whose jurisdiction the Ramchandrapur Grid lies, after unbundling of the JSEB (January 2014). As such NoC was not issued to APNRL and construction of the dedicated transmission system from the plant to Ramchandrapur Grid could not be started.

Audit further noticed that Jharkhand State Electricity Regulatory Commission (JSERC) in its provisional tariff order[68] directed (May 2014) the JBVNL and APNRL to constitute a joint committee to resolve all the issues regarding construction of the dedicated transmission system for transmission of power from the power station and submit a report within two months. The committee so constituted (July 2014) did not finalise the issues relating to construction of the transmission line. Another committee formed thereafter (17 July 2015) had suggested multiple options for construction of transmission line, however, no conclusive report was submitted to JSERC and construction of the transmission line has not been taken up so far (October 2016).

In absence of the dedicated transmission system JBVNL had to pay the injection charges of ₹ 13.36 crore and withdrawal charges of ₹ 17.83 crore to PGCIL during January 2015 to March 2016 which could have been avoided had the dedicated transmission system been developed as stipulated in the PPA.

The Company, while accepting (November 2016) that the dedicated transmission line has not been constructed so far, stated that JBVNL has now proposed the appointment of a consultant for conducting systematic line study, finalisation of bill of quantity and cost benefit analysis for construction of transmission line.

The reply is not acceptable as the Company has failed to take any decision in four years since entering into PPA for establishing the dedicated transmission line.

Thus, due to failure to adhere to the terms of Power Purchase Agreement, JBVNL had to incur an avoidable expenditure of ₹ 31.19 crore[69] towards injection charges and withdrawal charges.

The matter was referred to the Government (July 2016); their reply is awaited. However, Additional Chief Secretary, Energy Department, during discussion (November 2016) on the audit para, accepted that transmission line had not been constructed.

3.2 Avoidable payment of tax deducted at source and works contract tax

JBVNL failed to deduct income tax and works contract tax from the running bills of the contractors and deposited the same from own funds thereby causing loss of ₹ 15.31 crore.

[68] For the financial years 2012-13 to 2015-16

[69] Injection charges - ₹ 13.36 crore *plus* withdrawal charges - ₹ 17.83 crore.

As per Section 194C of the Income Tax Act, 1961 any person responsible for paying any sum to any contractor for carrying out any work in pursuance of a contract shall, at the time of credit of such sum to the account of the contractor or at the time of payment thereof, deduct an amount equal to two[70] *per cent* of such sum as income tax on income comprised therein. Further, as per Section 44 of the Jharkhand Value Added Tax Act, 2005 any person at the time of making payment to contractors for the execution of works under a contract in the State involving transfer of property in goods shall deduct tax in advance therefrom at two *per cent* (four *per cent* with effect from 29 May 2014).

Erstwhile Jharkhand State Electricity Board (JSEB), presently Jharkhand Bijli Vitran Nigam Ltd (JBVNL), awarded (December 2006) the work for rural electrification under Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) scheme on a turnkey contract basis to different contractors covering seven[71] packages in six districts of Jharkhand. As per terms of the contracts, the contractors shall be responsible to pay income tax or any other corporate tax, if any, that is prescribed under law. Further, the Work Contract Tax (WCT) and other similar taxes as applicable shall be borne by the contractors and JSEB shall deduct such taxes at source and issue certificate accordingly.

Scrutiny of records revealed (September 2015) that during 2007-08 to 2008-09 JSEB did not deduct the amount of income tax at source (TDS) and WCT on supply of materials against the scheme while releasing the payment on running account bills of the contractors stating that TDS and WCT were not applicable on supply of materials. This was incorrect as these were applicable in case of composite/turnkey contract.

The Finance Controller, JSEB thus failed to take correct decision regarding applicability of TDS and Works Contract Tax (WCT). The Income Tax Department as well as the Commercial Tax Department demanded the TDS amount and WCT amount respectively against the payment made to the contractors for supply of materials of the scheme during the above period. JSEB deposited (March 2009) the TDS amount of ₹ 14.95 crore to the Income Tax Department and WCT amount of ₹ 4.72 crore to the Commercial Tax Department for the years 2007-08 and 2008-09 from its own fund.

Audit observed that upon insistence of audit, JBVNL[72] started (July 2015) recovery of the amount from the contractors after a delay of more than seven years and it could realise only a sum of ₹ 4.35 crore (TDS - ₹ 1.24 crore + WCT - ₹ 3.11 crore) by October 2016. Balance amount of ₹ 15.31 crore (TDS - ₹ 13.71 crore + WCT - ₹ 1.60 crore) remained unrecovered and was a loss to JBVNL which also incurred additional interest expenses of ₹17.62 crore[73] on above unrecovered amount up to March 2016.

The matter was referred to the Company (July 2016) and Government (July 2016); their reply is awaited (December 2016) despite reminder dated 23 September 2016 and 18 November 2016.

---

[70] Where the payment is being made or credit is being given to a person other than an individual or a Hindu undivided family.

[71] Package A – M/s NECCON, Package B – M/s ATSL, Package C – M/s NCCL, Package D – M/s ATSL, Package E – M/s IVRCL, Package F – M/s IVRCL and Package G – M/s IVRCL.

[72] The Company was formed in January 2014 after unbundling of Jharkhand State Electricity Board.

[73] Calculated at the rate of 13 *per cent* at which JSEB was borrowing funds from Government of Jharkhand.

However, during discussion (November 2016) on the audit para, the Additional Chief Secretary, Energy Department instructed JBVNL to submit report on the irregularities committed by the contractors and its officers who were responsible for the irregularities so that appropriate action could be taken.

Jharkhand Police Housing Corporation Limited

3.3 Failure to recover ₹ 4.95 crore

The Company failed to recover from the contractor the extra cost of ₹ 4.95 crore incurred on execution of left over incomplete works due to failure to verify the genuineness of the bank guarantees submitted by the contractor.

Jharkhand Police Housing Corporation Limited (Company) entered into (4 May 2013) a contract with M/s Gautam Construction and Developers Pvt. Limited (contractor) for construction of ten police towers at different police lines[74] at a cost of ₹ 48.74 crore. The work was to be completed by August 2014. As per clause 3(C) of the terms and conditions of the contract, in case the work was left incomplete and the residual work was to be executed by engaging another contractor, any expense which may be incurred in excess of the sum which would have been paid to the original contractor shall be borne by the original contractor.

Scrutiny of records revealed (February 2016) that the contractor had submitted (07 February 2013) two Bank Guarantees (BG) – for ₹ 97.58 lakh towards the earnest money valid upto 25 June 2013 and for ₹ 1.46 crore towards security deposit valid upto 10 August 2013. The validity period of the BGs were subsequently extended till 3 September 2014. Both the BGs were issued by ICICI Bank Limited (Bank), Bistupur Branch, Jamshedpur.

It was noticed that the Executive Engineer, Ranchi Division of the Company did not verify the genuineness of the BGs before execution of agreement with the contractor although this was required to be done to safeguard the interests of the Company. As the work was not complete the Company sent (25 August 2014) a copy of the BGs to the Bank for extension. The bank informed (01 September 2014) that the BGs had not been issued by it. Consequently, the Company directed (08 September 2014) the contractor to prove the genuineness of the said BGs and also to provide fresh BGs, but the contractor failed to do so. The Company lodged (21 September 2014) FIR against the contractor for submission of fake BG, and terminated (23 September 2014) the contract. By the time the contract was terminated, the Company had already paid ₹ 12.84 crore to the contractor against the works done by it.

Subsequently, the Company, awarded (January 2015) ten work orders to other contractors for execution of the residual works valuing of ₹ 35.90 crore at a price of ₹ 41.87 crore, thereby incurring additional expenditure of ₹ 5.97 crore for completion of the residual works. The additional expenditure was recoverable from the original contractor as per the terms and conditions of the contract. The Company recovered only ₹ 1.02 crore by forfeiture of security

[74] Ten G+8 Towers comprising of three Lower Subordinate (L/S) Towers and three Upper Subordinate(U/S) Towers at Ranchi; one L/S Tower and one U/S Tower at Jamshedpur and one L/S Tower and one U/S Tower at Bokaro.

deposit (₹ 61.32 lakh) and by withholding payment (₹ 40.79 lakh) against the final running bill of the contractor, leaving ₹ 4.95 crore unrecovered.

The Company stated (July 2016) that a Money suit has been filed for recovery of extra cost from the contractor. The fact, however, remains that the recovery of the amount has not been made so far (December 2016).

Thus, due to negligence in verifying genuineness of Bank Guarantees an additional expenditure of ₹ 4.95 crore was incurred on execution of work which remained unrecovered from the contractor.

The matter was referred to the Government (May 2016); their reply is awaited (December 2016) despite reminders dated 23 September 2016 and 18 November 2016.

Jharkhand Urja Utpadan Nigam Limited

3.4 Infructuous and extra expenditure

JUUNL incurred infructuous expenditure of ₹ 38.24 lakh due to failure to inspect the procured materials before dispatch and to get the defective materials replaced. The Company also incurred extra expenditure of ₹ 17.94 lakh on subsequent procurement of the material on nomination basis.

Erstwhile Jharkhand State Electricity Board (JSEB), presently Jharkhand Urja Utpadan Nigam Limited (JUUNL), placed (10 June 2011) a purchase order on ROTEC Transmission Private Limited (firm) for four sets of worm gear and worm shaft[75] for Bowl Mills of Unit no. 9 and 10 at Patratu Thermal Power Station (PTPS) at a price of ₹ 48.60 lakh (₹ 12.15 lakh each) plus taxes and duties. The purchase order (clause 13) stipulated that:

- Inspection of the material was to be carried out at supplier's works by the authorized representative of PTPS before its dispatch;
- Pre-dispatch inspection was not to be waived off under any circumstances;
- GM, PTPS would ensure the quality of work and pre-dispatch inspection by an experienced officer of PTPS.

Audit observed (April 2016) that the firm requested (19 June 2012) GM, PTPS for final inspection of the materials before dispatch. However, the GM, PTPS requested (20 June 2012) the Chief Engineer(CE), Generation, JSEB to waive off the inspection clause citing engagement of the site engineers in commissioning activities of Unit 10 of PTPS. However, no effort was made by the GM, PTPS to arrange for the manpower from the office of the Chief Engineer, Generation, JSEB or any other sources. The CE, Generation (26 June 2012) waived off the condition of final inspection before dispatch of the materials subject to final inspection at PTPS stores. Audit also noticed that as per the NIT (March 2009) and the letter of Intent (9 February 2011), the terms of payment was for 100 *per cent* payment after delivery and raising of Stores Receipt Voucher (SRV). However, the firm did not agree for the payment terms due to delay in placing the purchase order (June 2011) to them

[75] Worm gears are special gears used in automobile steering mechanisms, hoists and rolling mills. Worm gear drives are typically used for transmission of power between not parallel and not intersecting shafts.

and expiry of validity of their offer. As such, the payment terms in the purchase order was modified to 100 *per cent* payment against dispatch of documents of material through Bank. Thus, no safeguard was available to JSEB against supply of defective material by the supplier.

JSEB paid (4 September 2012) ₹ 49.89 lakh[76] to the firm against dispatch documents of the material. Upon inspection (10 April 2013), the materials were found unsuitable for use due to dimensional mismatch and all the sets of worm gear and worm shaft were rejected. The firm intimated to JSEB (19 November 2013) that the Worm Gear and Worm Shaft to be replaced were under advanced stages of manufacturing which would be supplied by 20 December 2013.The firm replaced (04 January 2014) one set of the material and assured (13 May 2014) to replace two more sets by August 2014 after the rejected materials were received back.

Audit noticed that the Electrical Executive Engineer, Central Stores, PTPS intimated (May 2014) the firm that the rejected materials would be sent to them only after the defective materials were replaced by the firm as payment of the full amount had already been made. However, no effective action was taken to resolve the matter with the firm so as to get the material replaced.

As a result three sets of rejected worm gear and worm shaft valuing ₹ 37.28[77] lakh were not replaced by the firm as on date (September 2016). Additionally, JUUNL could not initiate any action by way of damage compensation owing to the unjustified decision of the GM, PTPS and its approval by CE, Generation to seek waiver of inspection of the materials before their dispatch, which resulted in expenditure of ₹ 37.28 lakh becoming wasteful.

As the replacement materials were not received, the Company procured (April 2014) six sets of worm gear sets from M/s Ranchi Electricals on nomination basis at a price of ₹ 18.13 lakh each, thereby incurring extra expenditure of ₹ 17.94[78] lakh.

Thus, due to failure of GM, PTPS and CE, Generation to get the procured materials inspected before despatch as per terms and conditions of the purchase order and consequent receipt of defective material, wasteful expenditure of ₹ 37.28 lakh and extra expenditure of ₹ 17.94 lakh was incurred.

The Company in reply stated (November 2016) that the site engineers who had expertise on Unit 10 of PTPS particularly in bowl mill was engaged in commissioning activities of the unit. They were in the process of getting the defective materials replaced. The defective materials were being returned to the supplier after obtaining Bank guarantee against the value of the defective materials.

The reply is not acceptable as pre-dispatch inspection may have been done by other engineers also as per the approved technical specification of the materials. Also, effective action for replacement of the material was not taken even after 42 months from receipt of the defective materials.

---

76 ₹ 56.26 lakh – {₹ 2.45 lakh (5% penalty for delay in supply) + ₹ 2.81 lakh (5% performance guarantee + ₹ 1.10 lakh (income tax)}.
77 (₹49.89 lakh + ₹1.10 lakh)x3 sets /4 sets
78 (₹ 18.13 lakh - ₹ 12.15 lakh) x 3 sets

The matter was referred to the Government (July 2016); their reply is awaited (December 2016) despite reminders dated 23 September 2016 and 18 November 2016.

Jharkhand Urja Vikas Nigam Limited

3.5 Wasteful expenditure

The Company incurred wasteful expenditure of ₹ 1.27 crore for failure to adhere to the provisions of Employees' provident fund and Miscellaneous provisions Act, 1952.

In respect of establishments employing 20 or more persons and engaged in industry notified under Section 6 of the Employees' Provident Funds and Miscellaneous Provisions Act, 1952 (Act), an employer is required to deposit employees' monthly contributions at the rate of 12 *per cent* of the wages[79] along with an equal contribution of the employer in the Employees Provident Fund within 15 days of the close of each month. Once the conditions for application of the Act are satisfied, the establishment has to suo-motu approach the Regional Provident Fund Commissioner (RPFC) for registration so as to facilitate allotment of Account numbers to all the eligible employees by the Commissioner. In case of default in payment of contribution to the Fund, the RPFC may recover the dues from the employer along with penalty and damages.

Scrutiny of records revealed (July 2015) that erstwhile Jharkhand State Electricity Board, now Jharkhand Urja Vikas Nigam Limited (Company) was brought within the purview of the Act with effect from 1 July 2007 in relation to temporary employees. However, the Secretary, JSEB, who was in-charge of the Personnel and General Administration of the Company, failed to register the Company with the RPFC until March 2013. The Company did not deduct employees' contribution for the period from July 2007 to February 2013 from the salary of temporary employees and did not make statutory deposits towards the Employees Provident Fund with the RPFC. RPFC issued (September 2013) a notice under Section 7A of the Act to the Company for determination of dues as a defaulter for the above period. It determined (May 2014) a sum of ₹ 1.02 crore as dues to be paid within 15 days, failing which action against the company would commence without any further notice.

Audit observed that the Company defaulted in deposit of dues within the prescribed time and RPFC ordered (August 2014), under Section 8F (3)[80] of the Act, Allahabad bank to remit ₹ 1.02 crore to RPFC from the account of the Company. Accordingly, the bank remitted the amount from account of the company. RPFC also levied penalty of ₹ 1.27 crore (interest ₹ 44.80 lakh plus damages ₹ 81.73 lakh) on account of default, which was also remitted (November 2014) from the account of the company.

---

[79] Wages for the purpose of deducting employees' contribution include basic pay, dearness allowance, cash value of food concession and retaining allowance, if any, subject to a maximum wage ceiling of ₹ 6500 per month. The wage ceiling was increased from ₹ 6500 to ₹ 15000 vide Gazette Notification no. GSR 609 (E) dated 22.08.2014.

[80] As per Section 8F sub-section (3)(i) of the Employees' Provident Funds and Miscellaneous Provisions Act, 1952, the Central Provident Fund Commissioner may at any time require any person from whom money is due to the employer, to pay to the Central Provident Fund Commissioner to pay the amount due from the employer. Sub-section (3)(iv) provides that every person to whom a notice is issued under this sub-section shall be bound to comply with such notice.

The Company stated (November 2016) that the amount of damages was imposed unilaterally without affording an opportunity of being heard to JSEB ignoring the provision of Section 32-B which provided for waiver of damages in appropriate cases, and that they were in the process of filing of appeal before the tribunal at New Delhi.

The reply is not acceptable as no review petition was filed by the Company before the Appellate Tribunal within 60 days of passing of such order by the RPFC.

Thus, due to failure to comply with the provisions of the Act, the Company incurred wasteful expenditure of ₹ 1.27 crore towards damages and interest.

The matter was referred to the Government (May 2016); their reply is awaited (December 2016) despite reminders dated 23 September 2016 and 18 November 2016.

Jharkhand State Beverages Corporation Limited

3.6 Avoidable payment of interest on Income Tax

Failure to pay advance income tax resulted in avoidable payment of interest of ₹ 1.95 crore.

As per Section 208 of the Income Tax Act, 1961, (Act) advance tax is payable during a financial year if the amount of such tax payable during the year is rupees ten thousand or more. Section 234B of the Act stipulates that where in any financial year, an assessee who is liable to pay advance tax under Section 208 fails to pay such tax or where the advance tax paid by such assessee is less than 90 *per cent* of the assessed tax, the assessee shall be liable to pay simple interest at the rate of one *per cent* for every month from the first day of April on the amount by which the advance tax paid fell short of the assessed tax. Also, Section 234C of the Act provides that if an assessee fails to pay advance tax or the advance tax paid is less than 15 *per cent*, 45 *per cent,* 75 *per cent* and 100 *per cent* of the tax due till 15 June, 15 September, 15 December and 15 March respectively, the assessee shall be liable to pay simple interest at the rate of one *per cent* per month on the amount of the shortfall.

Audit observed (September 2015) that Jharkhand State Beverages Corporation Limited (Company) did not remit the advance tax on the due dates as required under Sections 234B and 234C of the Act during the financial year 2013-14. The Company computed its taxable income of ₹ 42.65 crore for the financial year 2013-14 and filed the income tax return in November 2014. It paid ₹ 15.65 crore to the Income Tax Department between September 2013 and November 2014 towards its tax liability which included interest of ₹ 1.15 crore under Sections 234B and 234C of the Act due to failure to pay advance income tax in time. In 2012-13 also, the company had paid ₹ 1.03 lakh towards interest under section 234B and 234C due to shortfall in payment of advance tax.

Audit further noticed that the Company has filed (30 September 2016) the income tax return for the financial year 2014-15 according to which interest of ₹ 0.79 crore under Section 234 C has been paid by it due to failure to pay advance income tax in time. As such it is evident that the Company has not taken corrective measures to properly assess its income tax liability and to deposit the advance tax in time during the financial year 2014-15 also, despite having paid penal interest in 2012-13 and 2013-14 on this account. Thus, the Company had paid interest of ₹ 1.95 crore due to failure to pay advance income tax in time.

The Company stated (May 2016) that it could not estimate the advance tax liability in time as the turnover and the profit of the Company had increased significantly during 2013-14. Moreover, Government of India had amended the Act to disallow deduction of royalty, privilege fee etc. paid/payable to the State Government and all income was made liable to be taxed.

The reply is not acceptable as the amendment in the Income-tax Act was made in March 2013 and was effective only from 1 April 2014. Moreover, the company should have assessed and paid the instalments of advance tax payable during 2013-14 on the basis of its turnover in each quarter. It should have paid the advance tax as assessed in the annual budget.

Thus, the failure of the Company to assess the taxable income and comply with provisions of the Income Tax Act resulted in avoidable payment of interest of ₹ 1.95 crore.

The matter was referred to the Government (May 2016); their reply is awaited (December 2016), despite reminders dated 23 September 2016 and 18 November 2016.

Ranchi **(C. NEDUNCHEZHIAN)**

The **Accountant General (Audit), Jharkhand**

Countersigned

New Delhi **(SHASHI KANT SHARMA)**

The **Comptroller and Auditor General of India**

Annexures

Annexure – 1.1

Statement showing investments made by State Government in PSUs whose accounts are in arrears

(Referred to in paragraph 1.11)

(₹ in crore)

Sl. No	Name of Public Sector Undertakings	Year upto which accounts finalised	Paid up capital as per latest finalised accounts	Period of accounts pending finalisation	Investment made by State Government during the years of which accounts are in arrears		
					Equity	Loan	Grant
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Working Government Companies						
1.	Jharkhand Hill Area Lift Irrigation Corporation Limited	2012-13	5.00	2013-14	-	-	5.71
				2014-15	-	3.50	5.37
				2015-16	-	(-) 3.50	8.14
2.	Jharkhand Tourism Development Corporation Limited	2005-06	0.50	2006-07	-	-	-
				2007-08	-	-	-
				2008-09	-	-	-
				2009-10	0.25	-	-
				2010-11	0.50	-	-
				2011-12	1.00	-	-
				2012-13	0.50	-	-
				2013-14	0.25	-	-
				2014-15	0.50	-	-
				2015-16	4.00	-	-
3.	Greater Ranchi Development Agency Limited	2014-15	45.00	2015-16	4.74	-	-
4.	Tenughat Vidyut Nigam Limited	2010-11	105.00	2011-12 to 2015-16	-	-	-
5.	Jharkhand State Food and Civil Supplies Corporation Limited	Pending since inception from 2010-11	**-**	2010-11	5.00	-	94.00
				2011-12	-	43.96	-
				2012-13	-	-	-
				2013-14	-	-	-
				2014-15	-	-	-
				2015-16	-	-	-
6.	Jharkhand Industrial Infrastructure Development Corporation Limited	2012-13	11.00	2013-14	2.00	-	-
				2014-15	1.00	-	-
				2015-16	-	-	-
7.	Jharkhand Urja Vikas Nigam Limited	Pending since inception from 2013-14	-	2013-14	8.40	-	-
				2014-15	-	-	-
				2015-16	-	-	-

Sl. No	Name of Public Sector Undertakings	Year upto which accounts finalised	Paid up capital as per latest finalised accounts	Period of accounts pending finalisation	Investment made by State Government during the years of which accounts are in arrears		
					Equity	Loan	Grant
8.	Jharkhand Urja Utpadan Nigam Limited	Pending since inception from 2013-14	-	2013-14	-	-	-
				2014-15	-	8.57	-
				2015-16	-	50.48	-
9.	Jharkhand Bijli Vitran Nigam Limited	2013-14	-	2014-15	-	19.23	2106.63
				2015-16	-	-	-
10.	Jharkhand Urja Sancharan Nigam Limited	2013-14	-	2014-15	-	696.45	-
				2015-16	-	707.53	-
11.	Jharkhand Urban Infrastructure Development Company Limited	2013-14	0.50	2014-15	0.50	-	-
				2015-16	-	-	-
12.	Jharkhand Medical & Health Infrastructure Development & Procurement Corporation Limited.	Pending since inception from 2013-14		2013-14	5.00	-	-
				2014-15	-	-	-
				2015-16	-	-	-
13.	Jharkhand State Forest Development Corporation Limited	2013-14	0.05	2014-15	-	-	-
				2015-16	-	-	-
14.	Jharkhand Police Housing Corporation Limited	2014-15	2.00	2015-16	-	-	-
15.	Jharkhand State Mineral Development Corporation Limited	2009-10	2.00	2010-11	-	-	-
				2011-12	-	-	-
				2012-13	-	-	-
				2013-14	-	-	-
				2014-15	-	-	-
				2015-16	-	-	-
16.	Karanpura Energy Limited	Pending since inception from 2008-09		2008-09	0.05		
				2009-10	-	-	-
				2010-11	-	-	-
				2011-12	-	-	-
				2012-13	-	-	-
				2013-14	-	-	-
				2014-15	-	-	-
				2015-16	-	-	-

Sl. No	Name of Public Sector Undertakings	Year upto which accounts finalised	Paid up capital as per latest finalised accounts	Period of accounts pending finalisation	Investment made by State Government during the years of which accounts are in arrears		
					Equity	Loan	Grant
17.	Jharkhand Silk Textile and Handicraft Development Corporation Limited	2014-15	10.00	2015-16	-	-	-
18.	Jharkhand State Beverages Corporation Limited	2013-14	2.00	2014-15	-	-	-
				2015-16	-	-	-
19.	Jharkhand State Minorities Finance and Development Corporation	2012-13	0.00	2013-14	-	-	-
				2014-15	-	0.09	-
				2015-16	-	-	-
	Total	**-**	**183.05**	**-**	**33.69**	**1526.31**	**2219.85**

(Source: Data furnished by Government companies)

Annexure – 1.2

Summarised financial position and working results of Government companies as per their latest finalised financial statements/accounts

(Referred to in paragraph 1.13)

(Figures in column 5 to12 are ₹ in crore)

Sl. No.	Sector & Name of the Company	Period of Accounts	Year in which finalised	Paid up Capital*	Loans outstanding at the end of year	Accumulated profit (+)/loss(-)	Turnover	Net Profit (+)/ Loss (-)	Net impact of Audit comments#	Capital employed@	Return on capital employed$	Percentage return on capital employed	Manpower+
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Working Government Companies													
AGRICULTURE AND ALLIED													
1.	Jharkhand State Forest Development Corporation Limited	2013-14	2016-17	0.05	-	34.88	63.70	10.43	1.25	34.9	10.43	29.89	194
2.	Jharkhand Hill Area Lift Irrigation Corporation Limited	2012-13	2016-17	5.00	5.25	(-) 15.15	1.29	(-) 1.50	0.46	(-) 4.90	(-)1.50	-	151
Sector wise total		**-**	**-**	**5.05**	**5.25**	**19.73**	**64.99**	**8.93**	**1.71**	**30.00**	**8.93**	**29.77**	**345**
INFRASTRUCTURE													
3.	Jharkhand Industrial Infrastructure Development Corporation Limited	2012-13	2014-15	11.00	-	3.24	0.16	1.19	0.09	13.24	1.19	8.99	11
4.	Jharkhand Police Housing Corporation Limited	2014-15	2015-16	2.00	-	28.67	8.08	5.95	1.91	30.67	5.95	19.40	92
5.	Greater Ranchi Development Agency Limited	2014-15	2015-16	45.00	-	16.60	-	4.33	0.28	61.60	4.33	7.03	25
6.	Jharkhand Urban Infrastructure Development Corporation Limited	2013-14	2016-17	0.50	-	(-) 0.17	0	(-) 0.17	0	0.33	(-) 0.17	-	43
Sector wise total		**-**	**-**	**58.50**	-	**48.34**	**8.24**	**11.30**	**2.28**	**105.84**	**11.30**	**10.68**	**171**
MANUFACTURING													
7.	Jharkhand Silk Textile and Handicraft Development Corporation Limited	2014-15	2015-16	10	3.61	(-) 22.42	20.21	(-) 12.62	0	(-)8.81	(-) 8.51	-	232

Sl. No.	Sector & Name of the Company	Period of Accounts	Year in which finalised	Paid up Capital*	Loans outstanding at the end of year	Accumulated profit (+)/loss(-)	Turnover	Net Profit (+)/ Loss (-)	Net impact of Audit comments#	Capital employed@	Return on capital employed$	Percentage return on capital employed	Manpower+
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
8.	Jharkhand State Mineral Development Corporation Limited	2009-10	2014-15	2.00	-	133.61	91.34	13.09	2.33	135.61	13.09	9.65	234
Sector wise total		**-**	**-**	**12.00**	**3.61**	**111.19**	**111.55**	**0.47**	**2.33**	**126.80**	**4.58**	**3.61**	**466**
POWER													
9.	Tenughat Vidyut Nigam Limited	2010-11	2016-17	105	2499.35	(-) 1326.27	458.04	(-) 110.22	3.30	1278.08	(-) 7.72	-	596
10.	Karanpura Energy Limited	$$	-	-	-	-	-	-	-	-	-	-	*
11.	Jharkhand Urja Vikas Nigam Limited Limited	$$	-	-	-	-	-	-	-	-	-	-	279
12.	Jharkhand Urja Utpadan Nigam	$$	-	-	-	-	-	-	-	-	-	-	101
13.	Jharkhand Urja Sancharan Nigam Limited	2013-14	2016-17	2.10	-	(-)6.98	31.40	(-)6.98	Under finalisatio n	128.55	(-)6.70	-	492
14.	Jharkhand Bijli Vitran Nigam Limited	2013-14	2016-17	2.10	-	(-)70.98	652.21	(-)70.98	Under finalisatio n	56.05	(-)49.96	-	2812
Sector wise total		**-**	**-**	**109.20**	**2499.35**	**(-)1404.23**	**1141.65**	**(-)188.18**	**3.30**	**1462.68**	**(-)64.38**	**-**	**4280**
SERVICES													
15.	Jharkhand Tourism Development Corporation Limited	2005-06	2013-14	0.50	-	0.44	1.29	-	-	0.94	-	-	103
16.	Jharkhand State Beverages Corporation Limited	2013-14	2015-16	2.00	-	3.03	537.97	2.70	1.15	8.03	2.70	33.62	49
17.	Jharkhand State Food and Civil Supplies Corporation Limited	$$	-	-	-	-	-	-	-	-	-	-	122

Sl. No.	Sector & Name of the Company	Period of Accounts	Year in which finalised	Paid up Capital*	Loans outstanding at the end of year	Accumulated profit (+)/loss(-)	Turnover	Net Profit (+)/ Loss (-)	Net impact of Audit comments#	Capital employed@	Return on capital employed$	Percentage return on capital employed	Manpower+
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
18.	Jharkhand Medical & Health Infrastructure Development & Procurement Corporation Limited.	$$	-	-	-	-	-	-	-	-	-	-	2
Sector wise total		-	-	**2.50**	**-**	**3.47**	**539.26**	**2.70**	**1.15**	**8.97**	**2.70**	**30.10**	**276**
	FINANCE												
19.	Jharkhand State Minorities Finance Development Corporation Limited	2012-13	2015-16	-	-	(-) 0.14	-	(-) 0.14	0	0	(-) 0.14	-	6
Sector wise total		-	-	**-**	**-**	**(-) 0.14**	**-**	**(-) 0.14**	**0**	**0**	**(-) 0.14**	**0.00**	**6**
Total (All sector wise working Government companies)		-	-	187.25	**2508.21**	**(-)1221.64**	**1865.69**	**(-)164.92**	**10.77**	**1734.29**	**(-)37.01**	**-**	**5544**

(Source: Data compiled from the audited annual accounts of the PSUs)

Note: There is no non-working Government Company/Statutory Corporation in the State of Jharkhand.

#Impact of accounts comments include the net impact of CAG only and is denoted by (+) increase in profit/ decrease in losses and (-) decrease in profit/ increase in losses.

@Capital employed represents Shareholders Fund plus Long Term Borrowings as per requirement of schedule VI of the Companies Act, 1956.

$ Return on capital employed has been worked out by adding profit and interest charged to profit and loss account.

$$ The company has not submitted first accounts as of September 2016.

^ Loans taken from other sources.

+ Manpower as on 31 March 2016.

* paid up capital includes share application money pending allotment.

Annexure – 2.1.1

Statements Showing Financial position of Tenughat Vidhut Nigam Limited as per the provisional accounts

(Referred to in paragraph 2.1.8.2)

(₹ in crore)

Particulars	2011-12	2012-13	2013-14	2014-15	2015-16
A. Liabilities					
Paid up Capital	105.00	105.00	105.00	105.00	105.00
Borrowings (Loan Funds)					
Secured	Nil	Nil	Nil	Nil	Nil
Unsecured	2,398.34	2,485.05	2,809.91	2,912.96	3,016.09
Current Liabilities & Provisions	2,664.26	1,786.36	2,039.71	2,346.42	2,159.80
Total	**5,167.60**	**4,376.41**	**4,954.62**	**5,364.38**	**5,280.89**
B. Assets					
Gross Block	1,387.31	1,388.30	1,389.14	1,392.11	1,588.50
Less: Depreciation	659.53	706.02	752.58	799.29	1,276.89
Net Fixed Assets	727.78	682.28	636.56	592.82	311.61
Capital works-in-progress	127.60	139.01	144.32	145.20	55.25
Current Assets, Loans and Advances	3,748.30	3,077.26	3,564.35	4,002.19	4,089.50
Accumulated losses	563.92	477.86	609.39	624.17	824.53
Total	**5,167.60**	**4,376.41**	**4,954.62**	**5,364.38**	**5,280.89**

(Source: Provisional Accounts of the Company)

Annexure – 2.1.2
Statements Showing Working results of Tenughat Vidhut Nigam Limited as per the provisional accounts

(Referred to in paragraph 2.1.8.3)

(₹ in crore)

Sl No	Particulars	2011-12	2012-13	2013-14	2014-15	2015-16
1	**Income**					
	Generation Revenue	490.38	810.86	612.60	741.38	815.03
	Other income including interest/subsidy	16.11	28.25	32.38	36.58	34.29
	Total Income	**506.49**	**839.11**	**644.98**	**777.96**	**849.32**
2	**Generation**					
	Total generation (In MUs)	2,280.42	2,922.00	2,256.14	2,380.46	2,636.31
	Less: Auxiliary consumption (In MUs)	221.34	304.83	254.71	270.04	308.03
	Total generation available for Transmission and Distribution (In MUs)	**2,059.08**	**2,617.17**	**2,001.43**	**2,110.42**	**2,328.28**
3	**Expenditure**					
(a)	**Fixed cost**					
(i)	Employees cost	28.86	122.15	18.00	50.59	62.34
(ii)	Administrative and General expenses	15.98	12.56	15.24	16.44	15.53
(iii)	Depreciation	46.19	46.50	46.55	46.72	46.66
(iv)	Interest and finance charges	83.14	86.71	324.87	103.06	103.13
(V)	Exceptional Item(Prior period)	0	0	0	123.26	204.28
	Total fixed cost	174.17	267.92	404.66	340.07	431.94
(b)	**Variable cost**					
(i)	Fuel consumption					
	a. Coal	258.14	406.23	280.45	374.84	520.62
	b. Oil	28.41	30.09	30.53	23.10	16.78
	c. Other fuel related cost including shortages/surplus	1.25	8.57	3.66	1.34	0.48
(ii)	Cost of water (hydel/ thermal/ gas/ others)	0	0	0	0	0
(iii)	Lubricants and consumables	0	0	0	0	0
(iv)	Repairs and maintenance	39.78	40.23	57.21	53.39	79.85
	Total variable cost	327.58	485.12	371.85	452.67	617.73
C.	**Total cost 3(a) + (b)**	501.75	753.04	776.51	792.74	1,049.67
4	Realisation (₹ per unit)	2.46	3.21	3.22	3.69	3.65
5	Fixed cost (₹ per unit)	0.85	1.02	2.02	1.61	1.86
6	Variable cost (₹ per unit)	1.59	1.85	1.86	2.14	2.65
7	Total cost per unit (5+6)	2.44	2.88	3.88	3.76	4.51
8	Contribution (4-6) (₹ per unit)	0.87	1.35	1.36	1.54	0.99
9	**Profit (+)/Loss(-) (4-7)**	0.02	0.33	-0.66	-0.07	-0.86

(Source: Provisional Accounts of the Company)

Annexure 2.2.1

Statement showing details of HTSS consumers who were provided connection without manufacturers technical specification

(Referred to in paragraph 2.2.2.2)

Sl. No.	Name of consumer	Consumer No.	Contract demand (CD) in KVA	Date of energisation	Enhancement of CD in KVA	Date of energisation on enhanced CD
1	Sri Ram alloys and Ingot (P) Ltd,	BIA 67	3500	April 2012	-	-
2	Kameshawar Alloys (Pvt) Ltd.	GLL24688	3000	March 2011	-	-
3	M/s Chintpurni Steel Pvt. Ltd.	IDL 640	3000	July 2011	5500	December 2014
4	M/s Bihar Foundry and casting Ltd.	NSL 1793	3600	July 2010	5100 9000	October 2015 January 2016
5	M/s Gautam Ferro Alloys	NNSL2267	4000	June 2014	5500	July 2014
6	M/s Radha Casting & Metals Pvt Ltd.	RRH12172	3500	February 2012	5000	December 2014
7	M/s Vaisanavi Ferro Tech. (Pvt) Ltd	RRH11878	3600	February 2011	-	-
8	M/s Gautam Ferro Alloys	NNSL2266	12500	November 2013	-	-

(Source: Information furnished by the Company)

Annexure 2.2.2
Statement Showing Short Charge of Demand Charge (KVA)
(Referred to in paragraph 2.2.4.1)

ESC	Sl. No	Consumer No	Consumer Name	Contract Demand (CD)	Exceeded CD during	New CD	Short Charged during	Short KVA Charges (₹)
Electrical Supply Circle, Ranchi	1	KDC1438	M/s Kashish Developers ltd.	125	Feb 2011 to April 2011	159	July 2011 to March 2016	349475
	2	N3451	M/s Bazar Retail Ltd	150	June 2015 to Aug 2015	172	Jan 2016 to March 2016	10310
	3	DR4921	The Registrar General	135	Aug 2015 to Oct 2015	163	Dec 2015 to March 2016	21000
	4	DR7873	M/s Mecon Limited	335	May 2012 to July 2012	438	Dec 2012 to March 2016	473686
	5	KUS2320	The General Manager, Elctric	101	June 2014 to Aug 2014	133	Dec 2014 to Aug 2015	49813
	6	DWNEW3	Sec,Energy Dept.of Jharkhand	630	July 2015 to Sept 2015	828	Dec 2015 to March 2016	148500
	7	DWNEW4	The Sec. Incharge, Jharkhand	150	June 2015 to Aug 2015	182	Oct 2015 to March 2016	198525
	8	HOK8191	The Sub-Divisional Engn, EWSD	170	April 2012 to June 2012	207	Dec 2012 to March 2016	80003
	9	HK4059	M/s Ajanta Bottlers & Blenders	175	July 2012 to Sept 2012	205	Jan 2013 to March 2016	170545
	10	HK5427	M/s Mangalam Lubricant Pvt.Ltd	145	Sept 2012 to Nov 2012	166	Sept 2014 to Oct 2015	5819
	11	HTBD1	Ma Diware Rice Mills (P) Ltd	267	June 2011 to Aug 2011	448	Oct 2011 to Oct 2014	136047
	12	KDL2586	M/s Ganesh Poly Films (P) Ltd.	210	Sept 2014 to Nov 2014	280	Jan 2015 to March 2016	180810
	13	ORM2829	M/s Abdul Razzaque Ansari	500	June 2013 to Aug 2013	638	Jan 2014 to March 2014	50231
	14	R2095	M/s Usha Martin Industries	10000	Dec 2011 to Feb 2012	12960	March 2012 to May 2014	8858880
	15	TT1091	M/s Central Roller Flour Mills	300	Sept 2012 to Nov 2012	412	Feb 2013 to March 2016	26679
	16	TT368	M/s Chhotanagpur Rope Works	272	Dec 2011 to Feb 2012	299	June 2013 to March 2016	42527

	17	TT460	M/s Samrat Steels	185	Feb 2015 to April 2015	238	Oct 2015 to March 2016	7115
	18	TT5240	M/s S.S.H.Agrotech (P) Ltd.	1000	June 2011 to Aug 2011 Oct 2012 to Dec 2012	1373 1570	Dec 2011 to March 2016	707609
	19	TT8118	M/s Abhishek Distributors p	350	May 2014 to July 2014	428	Dec 2014 to Feb 2016	33951
	20	KRK6081	M/s Kailash Paper Conversion	230	May 2014 to July 2014	260	Feb 2015 to March 2016	36917
	21	R7841	M/s Bihar Rubber Co.Ltd.	167	Aug 2011 to Oct 2011	205	Dec 2011 to March 2016	84545
	22	BA405	The Chief Administrator	135	June 2013 to Aug 2013	164	Dec 2013 to March 2016	50589
	23	GK1912	The Gen.Manager (Admn.)	200	Jan 2011 to March 2011	222	April 2011 to Nov 2012	25324
	24	GK2797	The H.o.T.(t.e.),Cmpdi H.qtrs.	335	Jan 2013 to March 2013	468	April 2013 to March 2016	136320
	25	GK4658	The General Manager (E & M),	600	Jan 2012 to March 2012	850	April 2012 to March 2016	202873
	26	GK877	The Gen.Manager (P & A)	400	Jan 2011 to March 2011	1088	May 2011 to March 2016	5926171
	27	KY02	The Gen.Manager (Admn.)	600	May 2012 to July 2012	746	Nov 2012 to Jan 2013	57035
	28	UB209	The Regional Officer (Off.Adm)	101	June 2011 to Aug 2011	167.48	Dec 2012 to April 2013	77194
	29	MND14	M/s Biharijee Rice Mill Pvt.	170	Jan 2011 to March 2011	197	Feb 2013 to June 2013	23794
	30	R02	The Executive Engineer	250	Jan 2011 to March 2011	275	July 2011 to Dec 2015	167029
							Total	**18339315**
Electrical Supply Circle, Jamshedpur	31	HJ74	M/s Metal Ohm Techno (P) Ltd	975	Dec 2011 to Feb 2012	1193	June 2012 to Feb 2016	1079000
	32	HJAP 139	M/s Ami Enterprises	250	July 2012 to Sept 2012	374	Dec 2012 to Jan 2015	446665
	33	HJAP 176	M/s Chaudhary Briquettel Fuel Industries	170	March 2012 to May 2012	244	Aug 2012 to Feb 2016	494336
	34	HTM13	SRG Iron & Steel	600	Aug 2012 to Oct 2012	804	Dec 2012 to Oct 2014	191000
	35	HJAP82	M/s Bharat Engg & Body building Co.	100	Feb 2013 to April 2013	140	May 2013 to March 2016	140197

	36	JAD04	M/s Shah Sponge Pvt Ltd	1400	May 2013 to July 2013	2338	Aug 2013 to Nov 2015	794159
	37	HJAP105	M/s Auto Profile Pvt Ltd	135	Dec 2011 to Feb 2012	223	March 2012 to Sept 2015	322943
	38	HJAP257	M/s Shushila Food Products Pvt Ltd	200	Oct 13 to Dec 13	299	May 2014 to March 2016	279577
							Total	**3747877**
Electrical Supply Circle, Dhanbad	39	NR543	M/s Om Shakti Techno Trade Pvt Ltd.	289	May 2013 to July 2013	372	Aug 2013 to Jan 2016	336095
	40	NR482	The Agent Rajpura Colliery	414	Dec 2011 to Feb 2012	574	March 2012 to Dec 2015	1227585
	41	DH1231	Director CMRI Dhanbad	400	May 2011 to July 2011	576	Aug 2011 March 2014	303810
							Total	**1867490**
Electrical Supply Circle, Deoghar	42	6615/HT	M/s Choudhary Rice Mills	300	Feb 2012 to April 2012	422	Sept 2013 to Jan 2016	203000
	43	8806/HT	M/s B. Cold Storage	125	April 2012 to May 2012	169	Oct 2013 to Feb 2016	39000
							Total	**242000**
Electrical Supply Circle, Chaibasa	44	HT62	M/s Adhunik Power & Natural Resources	2200	Aug 2012 to Oct 2012	5112	Nov 2015 to Feb 2016	3450810
	45	HT60	M/s Narsingh Ispat Pvt Ltd	2200	April 2014 to June 2014	2774	Aug 2014 to Aug 2015	160740
	46	HT40	M/s Kohinnor Steels Pvt Ltd	1500	June 2012 to Aug 2012 April 13 to June 2012	1950 2560	Sept 2012 to March 2013 July 2013 to Aug 2015	3873035
	47	HT35	M/s Anvil Cables Pvt Ltd	150	Jan 2012 to March 2012 Dec 2012 to Feb 2013	232 274	April 2012 to July 2013	30550
	48	HCB15	M/s Sri Banwari Lal Newatia	200	Aug 2011 to Oct 2011	265	Nov 2011 to Feb 2016	232905
							Total	**7748040**
Electrical Supply Circle, Chas	49	KT-1722	M/s. Modern Fuel (P) Ltd., Katras	180	Sept 2012 to Dec 2012	294	Aug 2013 to March 2016	549880
	50	CH – 13	K.M. Memorial Hospital, Chas	150	April 2015 to June 2015	199	July 2015 to Feb 2016	32090
	51	BIA 2	M/s Eastern Neptha (P) Ltd., Balidih	440	Jan 2014 to March 2014	510	April 2014 to March 2016	132305

	52	CH – 17	M/s. Jyoti Minerals, Balidih	125	Nov 2014 to Jan 2015	153	Feb 2015 to March 2016	68287
	53	MP 12	Sr. D.E.E. (G) S.E. Rly. , Adra	934	August to Oct 2013	1124	Nov 2013 to March 2016	197970
							Total	**980532**
Electrical Supply Circle, Ramgarh	54	RRH11959	M/s. Bhagwati Vintrate (P) Ltd.	600	Sept 2014 to Nov 2014	1104	Dec 2014 to Feb 2016	627895
	55	RG238	Divisional Electrical Engineer	570	April 2013 to Feb 2014	852	March 2014 to March 2016	76620
	56	RRH11431	M/s Salsar Wire Mfg. Pvt. Ltd.	450	Dec 2014 to Feb 2015	584	May 2015 to July 20150	11750
	57	RG4602	Supretendent CCL Hospital	500	Jan 2013 to March 2013	819	April 2013 to March 2016)	368680
	58	RRH 10172	M/s Mona Gas (P) Ltd	180	Sept 2011 to Nov 2011	344	Dec 2011 to May 2012	99876
	59	KJL 7141	M/s R K Cold Storage	125	Jan 2012 to March 2012	140	April 2012 to March 2015	53080
	60	RRL 8477	M/s Krishna Cement Co. Ltd	120	Feb 2012 to April 2012	147	Aug 2012 to July 2014	10340
	61	CHI 562	M/s Chintpurni Steel (P) Ltd	500	Jan 2012 to March 2012	709	Aug 2012 to Jan 2016	46815
							Total	1295056
							Grand Total	**34220310**

Annexure 2.2.3
Statement Showing Details of Short Charged Additional Security
(Referred to in paragraph 2.2.4.2)

ESC	Sl. No	Name of consumer	Consumer no.	Contract demand	Security to be charged (₹)	Security charged(₹)	Short Security(₹)
ESC, Chaibasa	1	M/s Indian Iron Ore Mines, Gua	HN-1	2000	15339796	450325	14889471
	2	Asstt. Supdt.(elect), Kiriburu Iron Ore Mines, Noamundi	HN-5	5000	36130554	8454535	27676019
	3	The Manager, Iron Ore Mines, Meghatuburu	HN-13	5700	27572159	17204932	10367227
	4	M/s ACC Ltd, Jhinkpani, Chaibasa	HCB -5	3500	15738774	13786090	1952684
	5	M/s Balajee Industrial (P) Ltd, Barajamda	HN -20	1100	7554952	900000	6654952
	6	M/s Balajee Industrial (P) Ltd, Barajamda	HN -24	4000	17529443	6000000	11529443
	7	M/s Gulmohar Dealers (P) Ltd, Chandil	HT -11	710	3388775	2236500	1152275
	8	Shivarama Sponge iron Pvt Ltd.	HT-24	925	2280278	600000	1680278
	9	Divine Alloy & Power Co.	HT-38	9020	20445435	10824000	9621435
	10	M/s Kohinoor Steel Pvt Ltd.	HT-40	1500	5522138	4500000	1022138
	11	M/s JMT Auto Ltd.	HT-43	3000	10354813	2100000	8254813
	12	M/s Bina Metal Way	HT -49	1500	2627556	1125000	1502556
	13	Narsingh Ispat Pvt. Ltd.	HT-60	1200	18171195	3900000	14271195
	14	Pasari Casting and Rolling Mill	HT -71	3600	20017275	8830000	11187275
						Total	**121761761**
ESC, Jamshed pur	15	M/s Gajanan Ferro	DVN 09	10500	58535813	33075000	25260813
	16	M/s Sukh Sagar	CKU02	3000	8808707	18000	7008707
	17.	M/s Shah Sponge	JABU4	1400	4079849	900000	3179849
	18	M/s Himadri Steels	CKU 03	3000	10459763	2100000	8359763
						Total	**43809132**
ESC, Dhanbad	19	M/s Bihar Ispat Udyog	GR508	652	1766907	1297117	469790
	20	M/s Mars Mercantile Pvt Ltd	GR547	1000	3620842	2458385	1162457

	21	M/s V Refrectories Ltd.	NR556	474	1004728	675000	329728
	22	Kumardhubi Metal Prod. Industries	NR552	400	870218	700000	170218
	23	M/s Dolphin Engineering works	NR551	620	2339022	1297710	1041312
	24	Ridhi Sidhi Iron steel Ltd.	NR540	9742	43400813	17367555	26033258
	25	Kumar Dhubi Steel Ltd.	NR537	4800	32352390	10530720	21821670
	26	M/s Shri Khatu Shyamgee cement mfg. Pvt ltd.	BRD576	458	2056288	203000	1853288
	27	M/s Shiv Shambhu Agrotech Pvt Ltd.	BRD589	500	2001212	1137430	863782
	28	M/s Jai Maa Jagdamba Flour Pvt Ltd.	BRD555	642	2993464	2393792	599672
	29	M/s Balajee Roller Flour Mill (P) Ltd.	BRD517	500	3465808	2373190	1092618
						Total	**55437793**
ESC, Deoghar	30	M/s Shroff Enterprises, Deoghar	HT/BB/7248	670	1685693	1137783	547910
	31	M/s Deoghar Food (P) Ltd,	MP/1923/HT	600	3208964	1620000	1588964
	32	M/s PDCR Rice Mills	HT 10729	1000	3772031	3187500	84531
	33	M/s Bhawani Ferros (P) Ltd, Deoghar	HT/8190	3800	23066768	6238570	16828198
	34	M/s La opala RG Ltd	GRA/2687/HT	1000	13246896	7375263	5871633
						Total	**24921236**
Electric Supply Circle, Ranchi	35	M/s T & T Metals Pvt Ltd	AH5180	2940	70905852	4320000	66585852
	36	Principal, BIT Mesra	R1B	2000	31680144	5243514	26436630
	37	M/s Lemos Cements Ltd	TP1	2000	18279094	2250000	16029094
	38	M/s Monnet Daniel Coal Washery	K25	2000	18278899	1958512	16280387
	39	M/s Sri Krishna Metcom Ltd	HK6978	1550	40470124	4650000	35820124
						Total	**161152087**
Electric Supply Circle, Chas	40	M/s Sri Ram Alloys Ingots (P) ltd.	BIA67	3500	15503660	13417590	2086070
	41	Kalyaneshwari Ispat Udyog (P) Ltd.	BIA74	2400	9995863	3024000	6971863
	42	M/s Sudram Steel Pvt Ltd	BIA69	600	2225707	1620000	605707

	43	M/s Ameet Steel Pvt Ltd	BIA09	300	1059564	225000	834564
	44	Bihar State Co-operative Milk Products	CH02	255	1335319	955809	379510
	45	M/s Trident Metal Energy(P) Ltd	KRH01	500	0	1045264	1045264
	46	Govindam Food Product Pvt Ltd	KT1725	500	1636993	135000	286993
	47	M/s Renuka Ispat Udyog	KT1719	4200	16256441	4360000	11896441
	48	Eastern Neptha Pvt Ltd	BIA2	490	1256712	929590	327122
						Total	**24433534**
Electric Supply Circle, Ramgarh	49	M/s Pankaj Steel	KJ 7666	1300	4461688	2681556	1780132
	50	M/s Jharkhand Ispat Pvt Lts	NSL 823	1000	3706941	1060000	2646941
	51	M/s Akshay Roll Mill Pvt Ltd	NNS 1168	480	3579016	209324	3369687
	52	M/s Madhura Ingot & Steel (P) Ltd	NNS 1188	2400	11918013	2635200	9282813
	53	M/s Sri Venkatesh Iron	BHL 8415	1001	5219938	4890645	329293
	54	M/s Bihar Foundry & Casting Ltd	NSL 1793	3600	18694868	11340000	7354868
	55	M/s Vashnavi Ferro Tech	RRH 11878	3600	20559129	11340000	9219129
	56	M/s Kameshwar Alloys	GLL 24688	3000	16193839	12999600	3194239
	57	M/s Chintpurni Steel Pvt Ltd	IDL 640	3000	22196801	9550000	12646801
	58	M/s Radha Casting & Alloys	RRH 12172	3500	21280395	11025000	10255395
	59	M/s Gautam Ferro Alloys	NNSL 2266	12500	43691169	13067300	30623869
	60	M/s Chintpurni Steel (P) Ltd	CHI 562	675	4217203	3461565	755638
	61	M/s Maa Chinmastika Cement & Steel (P) Ltd	BKL 8320	950	5419277	2950899	2468378
	62	M/s Glob Steel & Alloys	RRH 10683	3700	19976768	5137075	14839693
						Total	**108766876**
						Grand Total	**540282419**

Annexure 2.2.4
Statement showing details of consumers billed on Average basis
(Referred to in paragraph 2.2.4.3)

Circle	Sl. No.	Name of consumer	Consumer no.	Period of average billing
ESC, Jamshedpur	1	Asstt Engg (DW&S)	CHH1G	March 2015 to December 2015
	2	Asstt Engg (DW&S)	JU3G	November 2013 to December 2015
	3	Asstt Engg (DW&S)	HTM2G	December 2013 to November 2015
	4	Asstt Engg (DW&S)	HTM4G	April 2014 to November 2015
	5	Asstt Engg (DW&S)	HJAP03G	Before January 2012 to December 2015
	6	Asstt Engg (DW&S)	HJAP04G	Before January 2012 to December 2015
	7	GM RAPDRP	HJ79	August 2013 to December 2015
	8	M/s Metal Crown Ind	HJAP179	February 2013 to April 2015
	9	M/s Sukh Sagar	CKU 2	September 2015 to March 2016
ESC, Dhanbad	10	The GM Gopalpur ECL	NR459	From June 2014 to March 2016
	11	Sr. Divisional Engineer DRM EC Railway	DH1688	February 2014 to March 2016
	12	The Assistant Mechanical Engineer	NR555	October 2013 to March 2016
	13	The Agent Shyampur Colliary ECL Mugma	NR478	June 2009 to March 2016
	14	The Agent Shyampur A Colliary ECL Mugma	NR545	Before April 2006 to March 2016
	15	The Manager Rajpura colliery	NR487	June 2013 to December 2015
ESC, Chaibasa	16	M/s Kohinoor Steel (P) Ltd	HT40	November 2014 to April 2015
	17	M/s Balajee Ind	HN24	November 2013 to February 2014
ESC, Ranchi	18	Registrar General, High Court	DR4490	August 2015 to March 2016

	19	Exe. Engineer, DW&SD	DRNEW3	December 2011 to March 2016
	20	Joint Registrar, High Court	R9818	August 2015 to January 2016
	21	Registrar General, High Court	HT 9256	August 2015 to January 2016
	22	GM, ESA Ranchi	KUS2320	August 2015 to March 2016
	23	J.S.25 JSEB Engg. Buildi26ng	HT4973	April 2011 to Jan 2015
	24	Garrison27 Engg.	MKU118	January 2015 to January 2016
	25	DG Sports 28&Arts	BA4011	October 2013 to March2016
	26	HOD(TE) CMPDI H.Q.	GK2797	September 2015 to March 2016
	27	Garrisson Engg.	HT19	November 2010 to March 2016
	28	CMPDI Kanke	HT20	January 2015 to March 2016
	29	Exe. Engg. DW&SD	KY3705	August 2011 to March 2106
	30	Manager, Karpun	K17A	March 2013 to March 2016
	31	Sr.Divisional Electrical DRM	K24A	January 2013 to March 2016

Annexure 2.2.5
Statement Showing wrong average Billing
(Referred to in paragraph 2.2.4.3)

Name of consumer	Consumer No.	Period of average billing	Average units charged	Average unit to be charged	Short fall of unit	Revenue short charged (₹ in lakh)	Remark
M/s Sukh Sagar	CKU 2	September 2015 to March 2016	533730	610344	76614	16.23	12 months from September 14 to August 2015 was considered for calculating average consumption, whereas the line of the consumer remains disconnected in October 2014 and November 2014. The Board should have taken average consumption of July 2014 and August 2014 instead of disconnected period.
M/s Metal Crown Industries	HJAP179	February 2013 to April 2015	20300	24430	4130	6.02	Average consumption for 12 months from February 2012 to January 2013 was 24430 units, however, the Board had charged only 20300 units.
M/s Himadri Steel (P) Ltd.	CKU3	December 2015 to January 2016	869418	1114200	244782	44.09	Instead of average consumption of three months the Company took average consumption of 12 months. Further, though the consumption of November 2015 was only 210600 and meter may be defective the company had not charged the average bill.
M/s Kohinoor Steel (P) Ltd.	HT 40	November 2014 to April 2015	1125 KVA	1524.5 KVA	399.5 KVA	5.07	Average of demand charge was not taken in arriving average consumption.

M/s Balajee Industries Pvt Ltd.	HN20	November 2013 to February 2014	825 KVA	1020 KVA	195 KVA	1.83	Average of demand charge was not taken in arriving average consumption.
M/s Kalyaneshwari Ispat Udyog Pvt. Ltd.	BIA74	July 2015 and August 2015	1980	2100.5	120.5	0.99	Average of demand charge was not taken in arriving average consumption.
The Divisional Electrical Engineer	RG238	December 2010 to January 2013	285880	297309	11429	13.28	Average consumption for 12 months from December 2009 to November 2010 was 297308 units, however, the Company had charged only 285880 units.
Cantonment Executive Officer	RG8689	October 2009 to March 2015	32512	39051	6539	21.24	Average consumption for 12 months from October 2008 to September 2009 was 39051 units, however, the Company had charged only 32512 units.
The Executive Engineer, Public Health Mechanical	OMNEW2	November 2015 to May 2016	1355907	1383744	27837	11.15	Instead of average consumption of three months the Company took average consumption of 12 months.
Total						**119.90**	