Report of the
Comptroller and Auditor General of India
on
Public Sector Undertakings
for the year ended March 2016

Government of Andhra Pradesh

Report No. 6 of 2016

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Preface

This report deals with results of audit of Government Companies and Statutory Corporations for the year ended March 2016.

The accounts of the Government Companies (including Companies deemed to be Government Companies as per the provision 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 Section 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 Statutory Corporation are submitted to the Government of Andhra Pradesh by CAG for laying before State Legislature of Andhra Pradesh under the provisions of Section 19-A of the Comptroller and Auditor General's (Duties, Powers and Conditions of Service) Act, 1971.

CAG is sole auditor for one Statutory Corporation i.e., Andhra Pradesh State Road Transport Corporation.

The instances mentioned in this Report are those, which came to notice in course of test audit for the period 2015-16 as well as those which came to notice in earlier years, but could not be reported in 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

1. Functioning of State Public Sector Undertakings

As on 31 March 2016, there were 79 PSUs, falling under audit purview. Out of these, 52 Working PSUs pertain exclusively to Andhra Pradesh (15 of previous year; 9 newly incorporated and 28 formed due to bifurcation of the State), 5 PSUs are under demerger and remaining 22 are Non-working PSUs (yet to be bifurcated). As on 31 March 2016, the investment (capital & long term loans) in 79 PSUs was ₹ 42,123.11 crore.

- During 2015-16, total outgo from the budget of the State of Andhra Pradesh was ₹ 7,290.67 crore for working PSUs exclusive to Andhra Pradesh and those formed due to bifurcation of the State and ₹ 3.93 crore for five PSUs under demerger.

(Chapter I)

2. Performance Audit relating to Government company

In the State of Andhra Pradesh, generation of power was carried out by Andhra Pradesh Power Generation Corporation Limited (APGENCO). After the formation of Telangana State (as per the AP Reorganization Act, 2014), APGENCO (the Company) has a capacity of 2,810 MW at two thermal power plants viz., Dr. Narla Tata Rao Thermal Power Station (Dr.NTTPS, 1,760 MW), Vijayawada, Krishna district and Rayalaseema Thermal Power Station, Muddanur, Kadapa district (RTPP, 1,050 MW).

Performance Audit on **Fuel Management in Thermal Power Stations of Andhra Pradesh Power Generation Corporation Limited** was conducted. Important audit findings are given below:

- The power generation decreased from 22,235 MU (Million Units) in 2011-12 to 19,359 MU in 2015-16, mainly due to outages of power plants. Further, the total cost per unit increased from ₹ 2.94 in 2011-12 to ₹ 4.34 in 2015-16.
- In absence of suitable clauses in coal procurement order, the Company had to make avoidable payment of ₹ 918.61 crore towards value of ungraded and differential grades of coal during the years 2014 to 2016.
- Improper monitoring of coal requirements at power plants resulted in avoidable expenditure of ₹ 186.77 crore on freight charges towards diversion of coal during the years 2011 to 2015.
- Failure of the Company to utilize the washery to its full capacity resulted in additional expenditure of ₹ 17.47 crore on transportation during the period July 2015 to March 2016.

- Despite higher yield of beneficiated coal, the Company had placed orders for lower yield of beneficiated coal and received less quantity of 3.20 LMT (2011 to 2016) of beneficiated coal valued at ₹ 136.07 crore.
- Inadequate unloading facility in Coal Handling Plant (CHP) and inaction by the Company to augment the CHPs, even after commissioning of new units, resulted in avoidable demurrage charges of ₹ 112.66 crore during 2011 to 2016.
- Though Coal India Limited had notified a panel of agencies for conducting joint sampling of coal at loading end during August 2014, the Company did not finalize appointment of representative for joint sampling at coal loading points.
- The difference in Gross Calorific Value (GCV) as per invoiced/received coal and the bunkered coal resulted in excess consumption of coal of 86.02 Lakh MT valued at ₹ 3,179.32 crore.
- The Company had diverted fund realised on sale of fly ash for renovation of guest house at Power Stations, construction of school compound wall, flooring of badminton court and to meet the day to day working capital requirements, in violation of Ministry of Environment and Forest guidelines.

(Chapter II)

3. Compliance Audit Observations

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

Loss of ₹ 33.67 crore in four cases due to non-compliance with rules, directives, procedures, terms and conditions of contracts.

(Paragraphs 3.3.2.2, 3.3.2.7, 3.5 and 3.6.)

Loss of ₹ 361.56 crore in five cases due to non-safeguarding the financial interest of organization.

(Paragraphs 3.1.2.4, 3.1.2.5, 3.2, 3.3.2.5 and 3.3.2.6)

Loss of ₹ 204.95 crore in three cases due to defective/ deficient planning.

(Paragraph 3.1.2.3, 3.1.2.12 and 3.1.2.13)

Loss of ₹ 761.76 crore in five cases due to inadequate/ deficient planning.

(Paragraphs 3.1.2.7, 3.1.2.8, 3.1.2.11, 3.1.2.17 and 3.4)

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

Andhra Pradesh Power Development Company Limited had taken up the construction of Sri Damodaram Sanjeevaiah Thermal Power Station (800 MW X 2) at Krishnapatnam in Andhra Pradesh.

The Company paid full consultation fee of ₹ 1.17 crore to the Consultant though Detailed Project Report (DPR) was prepared without considering certain important items. Project cost was increased from ₹ 8,432 crore to ₹ 12,630 crore. Non-maintenance of debt-equity ratio led to additional borrowing and interest burden of ₹ 52.64 crore. Enhancement of Execution and Supervision charges from one *per cent* to two *per cent* without any contractual obligations had resulted in avoidable payment of ₹ 84.00 crore to APGENCO. Abnormal delay in augmentation of External Coal Conveying System resulted in avoidable expenditure on transportation of Coal. Non-payment of labour cess of ₹ 44.19 crore by the Contractors resulted in extension of undue benefits to the agencies. The Company procured coal from the Singareni Collieries Company Limited at an additional price due to delay in entering into MoU with MCL. Undue benefit of ₹ 35.34 crore was extended to transporters on beneficiation and transportation of coal from Mahanadi Coalfields Limited. The company incurred potential loss of saleable energy worth ₹ 9,251.43 crore due to poor performance of the Plant. The Company failed to comply with APPCB norms related to hazardous waste and air pollution.

(Paragraph 3.1)

Eastern Power Distribution Company of Andhra Pradesh continued Single Bulb Subsidy without commitment of Government of Andhra Pradesh (GoAP) and approval of APERC which resulted in loss of revenue of ₹ 13.24 crore.

(Paragraph 3.2)

Andhra Pradesh Aviation Corporation Limited paid ₹ 14.33 crore to M/s Saras Aviation Services for hiring of helicopter without proper assessment of the flying hours. Non-collection of rentals from the hiring parties had resulted in foregoing its source of revenue and the Company had to depend on budgetary support from the Government. Keeping the insurance amount of ₹ 59.85 crore in current account had resulted in loss of potential interest revenue of ₹ 7.18 crore. Non-availment of Cenvat credit on Service Tax paid to its service providers resulted in loss of ₹ 17.14 crore.

(Paragraph 3.3)

Andhra Pradesh Mineral Development Corporation Limited failed to adhere to the milestones of Government of India for commencement of production of coal which resulted in avoidable payment of penalty of ₹ 1.57 crore and blocking up of ₹ 285.85 crore.

(Paragraph 3.4)

Indira Gandhi Centre for Advanced Research on Livestock Private Limited granted extension of time to the contractor in violation of the agreement resulting in payment of price escalation of ₹ 9.44 crore.

(Paragraph 3.5)

Failure of the **Andhra Pradesh State Warehousing Corporation** to assess its income tax properly resulted in avoidable payment of penalty and interest of ₹ 7.30 crore.

(Paragraph 3.6)

(Chapter III)

Chapter I

1. Functioning of State Public Sector Undertakings

1.1 Introduction

The State Public Sector Undertakings (PSUs) consist of State Government Companies and Statutory Corporations which are established to carry out activities of a commercial nature keeping in view the welfare of the people.

The AP Reorganization Act, 2014 came into effect from 2 June 2014 which bifurcated the erstwhile composite State of Andhra Pradesh and Andhra Pradesh State was formed on the same day. In Andhra Pradesh, the State PSUs occupy an important place in the state economy. The accounts of these PSUs are subject to supplementary audit conducted by Comptroller & Auditor General of India as per the provisions of Section 143 of the Companies Act, 2013 and audit of Statutory Corporations is governed by their respective legislations.

This is the second Audit Report of the Andhra Pradesh State after bifurcation of the erstwhile composite State of Andhra Pradesh.

As per the above Act, the assets and liabilities relating to the PSUs of the erstwhile composite State of Andhra Pradesh, where such undertakings or parts thereof are exclusively located in, or their operations are confined to a local area, shall pass to the State in which that area is included, irrespective of the location of the Head Quarters[1].

The assets and liabilities of the PSUs which had interstate operations shall have to be apportioned between the two States[2] as under:

(a) The operational units of the undertaking shall be apportioned between the two successor States on location basis; and

(b) The headquarters of the undertaking shall be apportioned between the two successor States on the basis of population ratio.

As per the Reorganisation Act, 2014, 33 PSUs having interstate operations were to be demerged. However, only 25 Government Companies and three Statutory Corporations were functionally bifurcated but the transfer of assets and liabilities is yet to be finalised.

Twenty-two Non-working Companies (except Andhra Pradesh Dairy Development Corporation Limited) were not included in the Schedule nine of the Reorganisation Act, 2014. This aspect requires special attention. Assets and liabilities of these Companies are also yet to be bifurcated between the two States.

In Andhra Pradesh State, there were 79 PSUs as on 31st March 2016 including nine new companies formed during the year*.

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[1] PSUs coming under Andhra Pradesh State are referred in this Report as PSUs.

[2] PSUs having interstate operations are referred in this Report as PSUs under demerger

* Includes two PSUs formed in earlier years but incorporation details received after finalization of 2014-15 Report.

1.1 Of these, none of the PSUs was listed on the stock exchange(s). During the year 2015-16, nine PSUs viz. Bhogapuram International Airport Corporation Limited, Andhra Pradesh State Fibrenet Limited, Kakinada Smart City Corporation Limited, Amaravathi Metro Rail Corporation Limited, Andhra Pradesh State Beverages Corporation Limited**, Vijayawada Urban Transport Company Limited, Rythu Sadhikara Samstha, Swacha Andhra Corporation Limited and Andhra Pradesh Urban Greening & Beautification Corporation Limited were incorporated whereas none of the PSUs was closed down. The details of the State PSUs in Andhra Pradesh State as on 31 March 2016 are given as follows:

Table 1.1: Total number of PSUs as on 31 March 2016

Type of PSUs	Working PSUs	Non-working PSUs	Total
Government Companies	49	0	49
Government Companies under demerger/Non-working	05	22	27
Statutory Corporations	03	0	03
Total	**57**	**22**	**79**

Source: *Information as furnished by State Government and PSUs*

The 49 Government Companies and 3 Statutory Corporations registered a turnover of ₹ 54,936.02 crore as per their latest finalised accounts as on 30 September 2016. This turnover was equal to 9.10 *per cent* of State Gross Domestic Product (GDP)[3] for 2015-16. These PSUs incurred a net loss of ₹ 4,357.61 crore as per their latest finalised accounts as on 30 September 2016. They had employed 0.82 lakh employees as at the end of March 2016.

The Working PSUs under demerger registered a turnover of ₹ 47.60 crore as per their latest finalised accounts as of 30 September 2016. These PSUs incurred a net loss of ₹ 46.89 crore as per their latest finalised accounts as on 30 September 2016. They had employed 256 employees as at the end of March 2016.

The loss making PSUs are on an increasing trend. A review of five years' data showed that some PSUs have been continuously incurring heavy losses and some PSUs are not finalizing their accounts. (Annexure 1.2 (a), 1.2 (b) & 1.2 (c))

As on 31 March 2016, there were 22 Non-working PSUs under demerger, existing for over 20 years and having an investment of ₹ 259.19 crore. This is a critical area as the investments in Non-working PSUs do not contribute to the economic growth of the State.

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 fifty one per cent of the paid-up share capital is held by the Central Government, or by any State Government or Governments, or partly by the Central Government and partly by one or more

**This has been created apart from existing Andhra Pradesh Beverages Corporation Limited.

[3] Gross Domestic Product of Andhra Pradesh State - ₹ 6,03,376.00 crore

State Governments, and 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 considered 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. Thus, a Government Company or any other Company owned or controlled, directly or indirectly, by the Central Government, or by any State Government or Governments or partly by Central Government and partly by one or more State Governments is subject to audit by the CAG. An audit of the financial statements of a Company in respect of the financial years that commenced on or before 31 March 2014 continue to be governed by the provisions of the Companies Act, 1956.

Statutory Audit

1.3 The statutory auditors appointed by the CAG under Section 139 of the Companies Act, 2013, conduct audit of accounts of the Government Companies and submit their report thereon in accordance with Section 143 of the Companies Act, 2013.

The CAG plays an oversight role by monitoring the performance of the statutory auditors with the overall objective that the statutory auditors discharge the functions assigned to them properly and effectively. This function is discharged by exercising the power

- to issue directions to the statutory auditors under Section 143 (5) of the Companies Act, 2013, and
- to supplement or comment upon the statutory auditor's report under Section 143 (6) of the Companies Act, 2013.

Audit of Statutory Corporations is governed by their respective legislations. Out of three Statutory Corporations, CAG is the sole auditor for Andhra Pradesh State Road Transport Corporation. The audit of Andhra Pradesh State Warehousing Corporation and Andhra Pradesh State Financial Corporation, is conducted by Chartered Accountants and supplementary audit by CAG.

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 to 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, in respect of State Government companies and Separate Audit Reports in case of Statutory Corporations are to be placed before the Legislature under Section 394 of the Companies Act or as stipulated in the respective Acts. The Audit Reports of

CAG are submitted to the Government under Section 19A of the CAG's (Duties, Powers and Conditions of Service) Act, 1971.

Stake of Government of Andhra Pradesh

1.5 The State Government has a significant financial stake in these PSUs. This stake is 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 of by the PSUs from Financial Institutions.

Investment in State PSUs

1.6 As on 31 March 2016, the investment (capital and long-term loans) in 79 PSUs was ₹ 42,123.11 crore as detailed under:

Table 1.2: Total investment in PSUs

(₹ in crore)

Type of PSUs	Government Companies			Statutory Corporations			Grand Total
	Capital	Long Term Loans	Total	Capital	Long Term Loans	Total	
52[4] (49+3) Working PSUs	4,830.54	29,174.82	34,005.36	429.57	7,224.81	7,654.38	**41,659.74**
5 PSUs under demerger-Working	70.63	133.55	204.18	--	--	--	**204.18**
22 PSUs under demerger-Non working	74.66	184.53	259.19	--	--	--	**259.19**
Total	**4,975.83**	**29,492.90**	**34,468.73**	**429.57**	**7,224.81**	**7,654.38**	**42,123.11**

Source: Information as furnished by PSUs

As on 31 March 2016, of the total investments, 80.72 *per cent* was in Working PSUs, 18.17 *per cent* in Statutory Corporations, 0.49 *per cent* in PSUs under demerger and 0.62 *per cent* in Non-working PSUs.

This total investment consisted of 11.47 *per cent* in capital and 69.25 *per cent* in long-term loans in respect of Working PSUs. In respect of Statutory Corporations, out of the total investment, 1.02 *per cent* was in capital and

[4] Out of these 52, only 46 companies have furnished information. Six Companies viz. AP State Police Housing Corporation Limited, AP Meat Development Corporation Limited, Kakinada Smart City Corporation Limited, Vijayawada Urban Transport Company Limited, Rythu Sadhikara Samstha and Mahila Sadhikara Samstha did not furnish information. However, information in respect of AP State Police Housing Corporation Limited, AP Meat Development Corporation Limited and Mahila Sadhikara Samstha available in this office has been taken.

17.15 *per cent* in long-term loans. In respect of PSUs under demerger, out of the total investment, 0.17 *per cent* was in capital and 0.32 *per cent* in long-term loans. In respect of Non-working companies, out of the total investment, 0.18 *per cent* was in capital and 0.44 *per cent* in long-term loans as on 31 March 2016.

1.7 The sector-wise summary of investments in the Working PSUs (including Statutory Corporations) as on 31 March 2016 is given below:

Table 1.3:Sector-wise investment in PSUs

(₹ in crore)

Name of Sector	*Working PSUs*	PSUs under de-merger	Statutory Corporations	Non-working PSUs	*Investment*
Power	30,535.97	--	--	--	30,535.97
Manufacturing	32.79	104.52	--	202.41	339.72
Finance	2,455.12	6.33	2,297.52	23.57	4,782.54
Miscellaneous	9.08	4.88	--	--	13.96
Service	67.94	--	5,262.39	1.13	5331.46
Infrastructure	502.22	88.45	--	--	590.67
Agriculture & Allied	402.24	--	94.47	32.08	528.79
Total	**34,005.36**	**204.18**	**7,654.38**	**259.19**	**42,123.11**

Source: Information as furnished by PSUs

Special support and returns during the year

1.8 The State Government provides financial support to PSUs in various forms through annual budget. The summarized details of budgetary outgo towards equity, loans, grants/subsidies, loans written off and interest waived in respect of Working PSUs and PSUs under demerger for the year ended 2015-16 are as follows.

Table 1.4: Details regarding budgetary support to PSUs

(₹ in crore)

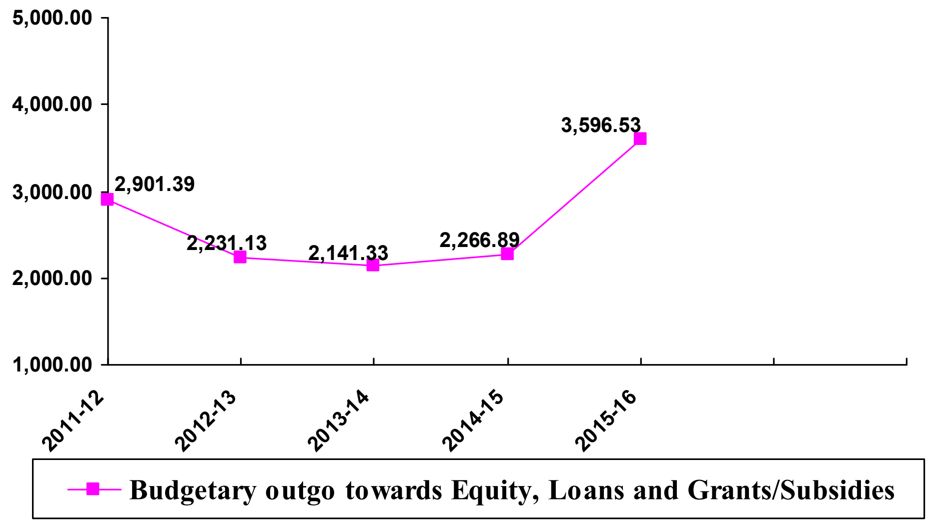
Sl. No.	Particulars	2015-16			
		52[5] Working PSUs		5 PSUs under demerger	
		No. of PSUs	Amount (A)	No. of PSUs	Amount (B)
1	Equity capital outgo from budget	7	16.28	5	0.00
2	Loans given from budget	3	536.94	5	0.00
3	Grants/Subsidy given from budget	17	6,737.45	5	3.93
4	**Total outgo to 25 PSUs**	**--**	**7,290.67**	**--**	**3.93**
5	Interest/Penal interest written off	0	0.00	0	0.00
6	Guarantees issued	0	0.00	0	0.00
7	Guarantee Commitment	6	1,342.77	0	0.00

[5] Out of these 52, only 46 have furnished information.

Sl. No.	Particulars	2015-16			
		52[5] Working PSUs		5 PSUs under demerger	
		No. of PSUs	Amount (A)	No. of PSUs	Amount (B)
8	Total Outgo of 15[6] PSUs from Sr. No 4 above	--	3,596.53	--	

Source: Information as furnished by PSUs

Chart 1.1: Budgetary outgo towards Equity, Loans and Grants/Subsidies



Budgetary support by State Government in respect of 15 PSUs increased from ₹ 2,266.89 crore during 2014-15 to ₹ 3,596.53 crore during 2015-16. However, overall budgetary support decreased from ₹ 9,384.53 crore during 2014-15 to ₹ 7,294.60 crore in 2015-16.

In order to enable PSUs to obtain financial assistance from Banks and Financial Institutions, State Government gives guarantees subject to the limits prescribed by the Constitution of India, for which guarantee fee is charged. This fee varies from 0.25 *per cent* to 1 *per cent* as decided by the State Government, depending upon the loanees. The guarantee commitment decreased from ₹ 7,581.34 crore during 2014-15 to ₹ 1,342.77 crore during 2015-16 in respect of all PSUs, including PSUs under demerger. There were three[7] PSUs which did not pay guarantee fee/commission during the year and accumulated outstanding guarantee fees/commission thereagainst was ₹ 2.62 crore (31 March 2016).

Reconciliation with Finance Accounts

1.9 The figures in respect of equity, loans and guarantees outstanding as per records of State PSUs should agree with that of the figures appearing in the Finance Accounts of the State. In case the figures do not agree, the PSUs

[6] 15 companies that were included in Andhra Pradesh as per previous report have only been taken for comparison in the chart. Also newly formed Companies do not have five years data for comparison.

[7] New and Renewable Energy Development Corporation of Andhra Pradesh Limited (₹ 3 lakh), The Nizam Sugars Limited (₹ 51.04 lakh) and Andhra Pradesh State Financial Corporation (₹ 208 lakh).

concerned and the Finance Department should carry out reconciliation of differences. The position in this regard as at 31 March 2016 was as follows:

Table 1.5: Equity, loans, guarantees 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
	(A)	*No of companies***	*(B)*	(A)-(B)
Equity	4,459.65	30	2,612.90	1,846.75
Loans	2,315.60	10	297.59	2,018.01
Guarantees	10,262.97	7	1,341.40	8,921.57

Source: As per Finance Accounts and data as provided by respective PSUs

Information as furnished by PSUs

** Information received in respect of above companies only.

Audit observed that the differences occurring in respect of 47 PSUs (information in respect of other PSUs is awaited) and some of the differences were pending reconciliation since long. The matter was taken up (October 2016) with the State Government. The Government and the PSUs should take concrete steps to reconcile the differences in a time-bound manner.

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) of the Companies Act. Failure to do so may attract penal provisions under Section 99 of the Companies Act. Similarly, in case of Statutory Corporations, their accounts are finalised, audited and presented to the Legislature as per the provisions of their respective Acts.

Table 1.6 provides the details of progress made by the Working PSUs in finalisation of accounts as of 30 September 2016.

Table 1.6: Position relating to finalisation of accounts of Working PSUs

Sl. No.	Particulars	2015-16*				
		Working PSUs				Total
		PSUs exclusive to State[8]	Formed due to demerger[9]	PSUs under demerger[10]	Statutory Corporations	
1.	Number of Working PSUs	25^	24	5	3	57

[8] Statement showing investments made by State Government in PSUs (including nine newly formed PSUs and Andhra Pradesh Beverages Corporation Limited) whose accounts are in arrears (Annexure 1.1(a))

[9] Statement showing investments made by State Government in PSUs (formed due to demerger) whose accounts are in arrears. (Annexure 1.1(c))

[10] Statement showing investments made by State Government in PSUs (under demerger) whose accounts are in arrears. (Annexure 1.1(b))

Sl. No.	Particulars	2015-16*				
		Working PSUs				Total
		PSUs exclusive to State[8]	Formed due to demerger[9]	PSUs under demerger[10]	Statutory Corporations	
2.	Number of accounts finalised during the year	17	9	3	0	29
3.	Number of accounts in arrears*	31	68	18	5	122
4.	Average arrears per PSU (3/1)	1.24	2.83	3.6	1.6	2.14
5.	Number of Working PSUs with arrears in accounts	18	24	4	3	49
6.	Extent of arrears	1 to 4 years	1 to 11 years	1 to 14 years	1 to 3 years	1 to 14 years

Source: As compiled by office of AG (E&RSA)/ Andhra Pradesh & Telangana

** Position up to September 2016*

^ 25 includes Andhra Pradesh Beverages Corporation Limited as it has finalized its accounts incorporating its share of assets and liabilities due to demerger.

It can be observed from the above that as on 30 September 2016:

- In respect of Working PSUs (exclusive to State), 31 accounts relating to 18 PSUs are in arrears,
- 68 accounts (excluding Statutory Corporations) relating to 24 PSUs, formed due to demerger, are in arrears.

In respect of PSUs under demerger except for The Nizam Sugars Limited, 18 accounts of other 4 PSUs are in arrears. As regards Statutory Corporations, all the 3 PSUs accounts are in arrears.

Further, the extent of arrears of accounts ranged from one year to 14 years in respect of PSUs under demerger. It is pertinent to mention here that AP Aviation Corporation Limited and AP Tribal Power Corporation Limited have not submitted their 1st Accounts since their formation (2005-06; 2002-03 respectively)

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 the stipulated period. The arrears of accounts continue to exist though the Departments concerned were informed annually.

1.11 The State Government had invested ₹ 756.18 crore in Equity, Loans and Grants in the PSUs (exclusive to Andhra Pradesh) for which accounts have not been finalised, as detailed in Annexure 1.1 (a).

The State Government had also invested ₹ 4,897.38 crore in Equity, Loans and Grants in the PSUs (formed due to demerger) for which accounts have not been finalised as detailed in Annexure 1.1 (c).

The State Government had invested an amount of ₹ 16.76 crore towards grants in respect of two PSUs which are under demerger during the years for which accounts have not been finalised as detailed in Annexure 1.1 (b).

In the absence of finalisation of accounts and their subsequent audit, it could not be assessed whether the investments and expenditure incurred have been properly accounted for and whether the purpose for which the amounts were invested was achieved or not. Thus Government's investment in such PSUs remained outside the control of State Legislature.

1.12 In addition to above, as on 30 September 2016, there were arrears in finalisation of accounts by Non-working PSUs. Out of 22 Non-working PSUs, 10 were in the process of liquidation whose accounts were in arrears for 2 to 14 years. Of the remaining 12 Non-working PSUs, all the PSUs had arrears of accounts.

Table 1.7: Position relating to arrears of accounts in respect of Non-working PSUs

No. of Non-working companies	Period for which accounts were in arrears	No. of years for which accounts were in arrears
10	2 to 14 years	In the process of liquidation
12	Information not available	--

Source: Information as furnished by Official Liquidator

In respect of Non-working Companies, a letter was addressed (September 2015, July 2016 and reminded October 2016) to Public Enterprises Department of State Government. The reply was awaited (November 2016).

Placement of Separate Audit Reports

1.13 The position depicted in Table 1.8 shows the status of placement of Separate Audit Reports (SARs) issued by the CAG (up to 30 September 2016) on the accounts of Statutory Corporations, in the Legislature.

Table 1.8: Status of placement of SARs in Legislature

Sl. No.	Name of statutory corporation	Year up to which SARs placed in Legislature	Year for which SARs not placed in Legislature	
			Year of SAR	**Date of issue to the Government/Present Status**
1.	Andhra Pradesh State Financial Corporation	2013-14	2014-15	**18-11-2015**
2.	Andhra Pradesh State Warehousing Corporation	2013-14 (1 June 2014)	--	--
		2014-15	--	--
3.	**Andhra Pradesh State Road Transport Corporation**	**2012-13**	**The accounts are in arrears**	**Not applicable**

Source: Information as furnished by PSUs concerned

Impact of non-finalisation of accounts

1.14 The delay in finalisation of accounts pointed out above ***(para 1.10 to 1.12)***, may also result in risk of fraud and leakage of public money apart from violation of the provisions of the relevant Statutes. In view of the above state of arrears of accounts, the actual contribution of PSUs to the State GDP for the year 2015-16 could not be ascertained and their contribution to State exchequer was also not reported to the State Legislature.

Performance of PSUs as per their latest finalized accounts

1.15 The financial position and working results of Working PSUs (Andhra Pradesh) and PSUs under demerger and Statutory Corporations are detailed in **Annexure 1.2 (a)**[11], **Annexure 1.2 (b)**[12] **and Annexure 1.2 (c)**[13]. A ratio of PSUs turnover to State GDP shows the extent of PSUs' activities in the State economy. Table below provides the details of State Working PSUs' turnover and State GDP for the year ended 31 March 2016.

Table 1.9: Details of Working PSUs turnover vis-a-vis State GDP

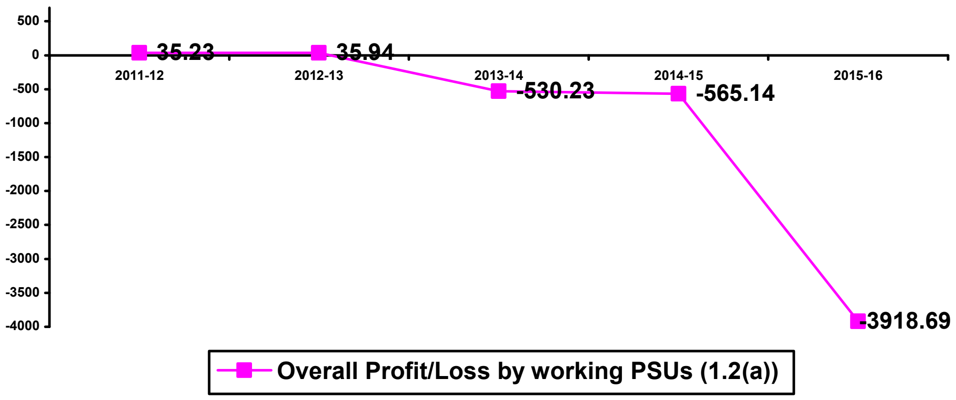
(₹ in crore)

Particulars	2015-16			
	Working PSUs		PSUs under demerger	Statutory Corporations
	PSUs exclusive to State	Formed due to demerger		
Turnover	20,654.87	25,817.46	47.60	8,463.69
Andhra Pradesh State GDP	6,03,376	6,03,376	Not Applicable	Accounts not finalised.
Percentage of turnover to State GDP	3.42	4.22	--	--
Net profit(+)/loss (-)	-3,918.69	555.00	-46.89	-993.91

Source: As per latest finalised annual accounts of PSUs

1.16 Overall profit (losses) earned (incurred) by Working PSUs (Andhra Pradesh) during 2011-12 to 2015-16 are given in the chart below:

Chart 1.2: Profit/Loss of Working PSUs (depicted in Annexure 1.2(a))



[11] PSUs exclusive to State including nine newly formed PSUs.
[12] PSUs under demerger.
[13] PSUs formed due to demerger of PSUs.

During the year 2015-16, out of eleven Working PSUs, two PSUs (Andhra Pradesh Heavy Machinery & Engineering Limited and Andhra Pradesh Power Development Company Limited) earned profit of ₹ 2.55 crore and ₹ 3.47 crore, respectively. Out of loss incurring companies, power distribution companies APEPDCL, APSPDCL and Andhra Pradesh Gas Infrastructure Corporation Limited incurred heavy losses (₹ 3,920.52 crore). Eight[14] out of nine newly formed Working PSUs have not started their commercial operations.

During the year 2015-16, out of five PSUs under demerger, The Nizam Sugars Limited earned a marginal profit of ₹ 24 lakh while Andhra Pradesh Rajiv Swagruha Corporation Limited and Infrastructure Corporation of Andhra Pradesh Limited incurred losses of ₹ 45.78 crore and ₹ 1.55 crore respectively. Andhra Pradesh Tribal Power Company Limited has not yet submitted its accounts.

1.17 Some other key parameters of PSUs are given below.

Table 1.10: Key Parameters of Working PSUs and PSUs under demerger

(₹ in crore)

Particulars	**2015-16**		
	Working PSUs		**PSUs under demerger**
	PSUs exclusive to State	**Formed due to demerger**	
Return on capital employed	-1,801.70	5,792.33	-4.16
Debt	20,216.30	32,631.20	56.05
Turnover[15]	20,654.87	34,281.15	47.60
Debt/ Turnover Ratio	0.98	0.96	1.18
Interest Payments^	2,116.99	6,209.80	6.90
Accumulated Profits / (Losses)	-10,754.29	-3983.17	-233.66

Source: As per latest finalised accounts of PSUs

^ Includes PSUs who have finalized their accounts till September 2016

1.18 As per their latest finalised accounts, 25 Working PSUs incurred an aggregate loss of ₹ 3,918.69 crore.

As per their latest finalised accounts, 5 PSUs under demerger incurred an aggregate loss of ₹ 46.89 crore. Further five[16] PSUs declared a dividend of ₹ 9.11 crore. However Andhra Pradesh State Financial Corporation did not pay its declared divined of ₹ 3.29 crore.

[14] Andhra Pradesh Solar Power Corporation Private Limited, Vijayawada Urban Transport Company Limited, Rythu Sadhikara Samstha, Bhogapuram International Airport Corporation Limited, Kakinada Smart City Corporation Limited., Amaravathi Metrorail Corporation Limited, Swachcha Andhra Corporation Limited, Andhra Pradesh Mahila Sadhikara Samstha and Andhra Pradesh Urban Greening and Beautification Corporation Limited.

[15] Turnover of Working PSUs as per the latest finalised accounts as of 30 September 2016.

[16] AP Handicrafts Development Corporation Limited, AP Mineral Development Corporation Limited, AP State Financial Corporation, AP State Seeds Development Corporation Limited and AP State Warehousing Corporation.

Winding up of Non-working PSUs

1.19 There were 22 Non-working PSUs (22 Companies and nil Statutory Corporations) as on 31 March 2016. Of these, 10 PSUs have commenced liquidation process. The number of Non-working companies as on 31 March 2016 is given below.

Table 1.11: Non working PSUs

Particulars	2015-16
No. of Non-working companies	22
No. of Non-working corporations	0
Total	**22**

Source: As compiled by office of AG (E&RSA)/ Andhra Pradesh & Telangana

Since the Non-working PSUs have not been contributing to the State economy and meeting the intended objectives, these PSUs need to be considered either to be closed down or revived. During 2015-16, three Non-working PSUs incurred an expenditure of ₹ 0.42 crore towards establishment. The information was not furnished by the other Non-working PSUs. The entire expenditure was met from the interest earned on FDRs kept with various scheduled banks, rents collected and provisions written back.

1.20 The stages of closure in respect of Non-working PSUs given as follows:

Table 1.12: Closure of Non-working PSUs

Sl. No.	Particulars	Companies	Statutory Corporations	Total
1.	Total No. of Non-working PSUs	22	0	**22**
2.	Of (1) above, the No. under			
(a)	liquidation by Court (liquidator appointed)	10	0	**10**
(b)	Voluntary winding up (liquidator appointed)	Not available		
(c)	**Closure, i.e. closing orders/ instructions issued but liquidation process not yet started.**	**Not available**		

Source: Information as furnished by Official Liquidator

During the year 2015-16, no company was finally wound-up**.** On the basis of the request of the PSU, the Hon'ble court appointed liquidator for winding-up the Company. However, these Companies had not been wound-up even after lapse of 2 to 14 years. The process of voluntary winding up under the Companies Act is much faster and needs to be adopted/ pursued vigorously. The Government may like to consider winding up 12 Non-working PSUs, where no decision about their continuation or otherwise has been taken after they became non-working.

Comments on Accounts

1.21 (a) Eleven Working PSUs forwarded their audited 17 accounts to AG during the year 2015-16. Twelve accounts (6 PSUs) were selected for supplementary audit and five accounts (five PSUs) were given Non-review certificate. In addition to the above, seven PSUs formed due to demerger have also submitted nine accounts. All of these 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 needs to be improved. The details of impact of audit comments of statutory auditors and CAG are given below:

Table 1.13. (a): Impact of audit comments on Working PSUs

(₹ in crore)

Sl. No.	Particulars	2015-16			
		No. of accounts		Amount	
		PSUs exclusive to State	Formed due to demerger	PSUs exclusive to State	Formed due to demerger
1.	Decrease in profit	0	6	0.00	4.26
2.	Increase in loss	3	0	1,611.77	0.00
3.	Non-disclosure of material facts	2	2	43.34	1,195.59
4.	Errors of classification	1	1	2.12	18.20

Source: As per comments issued by C&AG and Statutory Auditors

1.21 (b) Three PSUs under demerger forwarded three audited accounts to AG during the year 2015-16. All these PSUs 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 needs to be improved substantially. The details of impact of audit comments of statutory auditors and CAG are given below:

Table 1.13. (b): Impact of audit comments on PSUs under demerger

(₹ in crore)

Sl. No.	Particulars	2015-16	
		No. of accounts	Amount
1.	Decrease in profit	1	**0.19**
2.	Increase in loss	0	**0.00**
3.	Non-disclosure of material facts	0	**0.00**
4.	Errors of classification	0	**0.00**

Source: As per comments issued by C&AG and Statutory Auditors

During the year, the Statutory Auditors had given qualified opinion on nine accounts of seven[17] Companies. In respect of one[18] PSU, disclaimer opinion

[17] AP State Seeds Development Corporation Ltd., AP Solar Power Corporation Ltd., APEPDCL, APSPDCL, AP State Minorities Finance Corporation Ltd. AP State Film TV and Theatre Development Corporation Ltd. and The Nizam Sugars Ltd.

[18] Vizag Apparel Park for export.

was given. Two[19] Companies have revised their accounts, based on the supplementary audit conducted. DISCOMs continued to incur heavy losses.

1.22 None of the three working Statutory Corporations forwarded their accounts to AG during the year 2015-16.

Response of the Government to Audit

Performance Audit and Paragraphs

1.23 For the Report of the Comptroller and Auditor General of India for the year ended 31 March 2016, one Performance Audit and six audit paragraphs were issued to the Additional Chief Secretaries/Principal Secretaries of the respective Departments with the request to furnish replies within six weeks. However, replies in respect of five compliance audit paragraphs were awaited from the State Government (18 November 2016).

Follow up action on Audit Reports

Replies outstanding

1.24 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, erstwhile Government of Andhra Pradesh had issued (June 2004) 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 in the Legislature, in the prescribed format without waiting for any questionnaires from the COPU.

Table No.1.14: Explanatory notes not received (as on 30 September 2016)

Year of the Audit Report (Commer-cial/PSU)	Date of placement of Audit Report in the State Legislature	Total Performance Audits (PAs) and Paragraphs in the Audit Report		Number of PAs/ Paragraphs for which explanatory notes were not received			
				Exclusive to State		Common	
		PAs	Para-graphs	PAs	Para-graphs	PAs	Para-graphs
1992-93	29-03-1994	7	29	0	0	0	**0**
1993-94	28-04-1995	6	19	0	0	0	**0**
1995-96	19-03-1997	5	23	0	0	0	**2**
1996-97	19-03-1998	6	23	0	0	0	**0**
1997-98	11-03-1999	6	23	0	0	0	**7**
1998-99	03-04-2000	4	25	0	0	0	**5**
1999-00	31-03-2001	6	18	0	0	2	**6**
2000-01	30-03-2002	4	17	0	0	1	**1**
2001-02	31-03-2003	3	20	0	0	0	**0**
2002-03	24-07-2004	3	13	0	0	0	**2**
2003-04	31-03-2005	2	19	0	0	1	**0**
2004-05	27-03-2006	2	21	0	0	1	**1**

[19] AP Beverages Corporation Ltd. and AP Solar Power Corporation Ltd.

Year of the Audit Report (Commer-cial/PSU)	Date of placement of Audit Report in the State Legislature	Total Performance Audits (PAs) and Paragraphs in the Audit Report		Number of PAs/ Paragraphs for which explanatory notes were not received			
				Exclusive to State		Common	
		PAs	Para-graphs	PAs	Para-graphs	PAs	Para-graphs
2005-06	31-03-2007	4	19	0	0	1	**1**
2006-07	28-03-2008	5	24	0	1	2	**6**
2007-08	05-12-2008	3	22	0	0	1	**0**
2008-09	30-03-2010	3	24	0	0	1	**6**
2009-10	29-03-2011	3	18	0	0	0	**0**
2010-11	29-03-2012	3	22	0	0	0	**9**
2011-12	21-06-2013	2	6	0	0	2	**4**
2012-13	06-09-2014	2	9	0	1	2	**2**
2013-14	26-03-2015	2	5	0	0	1	**2**
2014-15	30-03-2016	1	4	1	4	0	**0**
Total		**82**	**403**	**1**	**6**	**15**	**54**

Source: As compiled by office of AG (E&RSA)/ Andhra Pradesh & Telangana

From the above, it could be seen that out of 485 paragraphs/ Performance Audits, explanatory notes to 76 paragraphs/ Performance Audits in respect of 10[20] departments, which were commented upon, were awaited (September 2016).

Discussion of Audit Reports by COPU

1.25 The status as on 30 September 2016 of Performance Audits and paragraphs, that appeared in Audit Reports (PSUs) and were discussed by the Committee on Public Undertakings (COPU), was as under:

Table No.1.15: PAs/Paragraphs that appeared in Audit Reports vis-a-vis discussed as on 30 September 2016

Year of the Audit Report (Commercial/PSU)	Number of PAs / Paragraphs			
	Appeared in Audit Report		Paras discussed	
	PAs	Paragraphs	PAs	Paragraphs
1992-93	7	29	6	**29**
1993-94	6	19	5	**19**
1995-96	5	23	3	**18**
1996-97	6	23	3	**22**
1997-98	6	23	2	**10**
1998-99	4	25	0	**14**
1999-00	6	18	1	**7**
2000-01	4	17	1	**15**
2001-02	3	20	0	**13**
2002-03	3	13	3	**10**
2003-04	2	19	0	**8**
2004-05	2	21	0	**14**
2005-06	4	19	0	**11**
2006-07	5	24	1	**5**
2007-08	3	22	1	**9**
2008-09	3	24	1	**7**
2009-10	3	18	1	**7**

[20] 1. Industries & Commerce, 2. Irrigation and Command Area Development (CAD), 3. Revenue, 4. Animal Husbandry, 5. Energy, 6. Agriculture & Co-operation, 7. Transport, Roads & Buildings, 8. Housing, 9. Youth Advancement, Tourism and Culture and 10. Municipal Administration & Urban Development

Year of the Audit Report (Commercial/PSU)	Number of PAs / Paragraphs			
	Appeared in Audit Report		Paras discussed	
	PAs	Paragraphs	PAs	Paragraphs
2010-11	3	22	0	**3**
2011-12	2	6	0	**0**
2012-13	2	9	0	**0**
2013-14	2	5	0	**0**
2014-15	1	4	0	**0**
	82	**403**	**28**	**221**

Source: As compiled by office of AG (E&RSA)/ Andhra Pradesh & Telangana

Compliance to Reports of Committee on Public Undertakings (COPU)

1.26 Action Taken Notes (ATNs) to 333 paragraphs pertaining to 48 Reports of the COPU presented in the State Legislature between April 1983 to March 2007 had not been received (September 2016) the details are indicated as follows:

Table No.1.16: Compliance to COPU Reports

Year of the COPU Report	Total number of COPU Reports	Total no. of recommendations in COPU Report	No. of recommendations where ATNs not received
1983-84	1	3	3
1990-91	1	4	4
1991-92	5	160	100
1993-94	5	177	97
1995-96	3	33	17
1996-97	2	38	24
1998-99	2	16	16
2000-01	13	110	43
2001-02	1	1	0
2002-03	1	24	0
2004-05	9	66	5
2004-06	1	14	0
2006-07	4	25	24
Total	**48**	**671**	**333**

Source: As compiled by office of AG (E&RSA)/ Andhra Pradesh & Telangana

Note: The above information pertaining to erstwhile composite State of Andhra Pradesh

These Reports of COPU contained recommendations in respect of paragraphs pertaining to 12[21] departments, which appeared in the Reports of the CAG of India for the years 1983-84 to 2006-07.

It is recommended that the Government may ensure: (a) sending of replies to IRs/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.

[21]: 1 Industries & Commerce, 2. Irrigation and Command Area Development (CAD), 3. Revenue, 4. Animal Husbandry, 5. Energy, 6. Agriculture & Co-operation, 7. Transport, Roads & Buildings, 8. Forest, 9. Housing, 10. Youth Advancement, Tourism and Culture, 11. Municipal Administration & Urban Development and 12. General Administration.

Coverage of this Report

1.27. This Report contains six paragraphs and one Performance Audit i.e. on Fuel management in Thermal Power Stations of Andhra Pradesh Power Generation Corporation Limited involving ₹ 7,227.65 crore.

CHAPTER II

PERFORMANCE AUDIT RELATING TO GOVERNMENT COMPANY

Fuel Management in Thermal Power Stations of Andhra Pradesh Power Generation Corporation Limited

Chapter II

Performance Audit relating to Government Company

2. Fuel Management in Thermal Power Stations of Andhra Pradesh Power Generation Corporation Limited

Executive Summary

Introduction

In the State of Andhra Pradesh, generation of power was carried out by Andhra Pradesh Power Generation Corporation Limited (APGENCO). After the formation of Telangana State, (as per the AP Reorganisation Act, 2014) APGENCO (the Company) has a capacity of 2,810 MW at two thermal power plants viz., Dr. Narla Tata Rao Thermal Power Station (Dr. NTTPS, 1,760 MW) Vijayawada, Krishna district and Rayalaseema Thermal Power Station, Muddanur, Kadapa district (RTPP, 1,050 MW). The power generation decreased from 22,235 MU (Million Units) in 2011-12 to 19,359 MU in 2015-16, mainly due to outages of power plants. Further, the total cost per unit increased from ₹ 2.94 in 2011-12 to ₹ 4.34 in 2015-16.

Absence of suitable clauses in coal procurement order, resulted in avoidable payment towards grade variation

Though the Company was aware of the clause on joint sampling of coal and under-loading/over-loading freight charges, it failed to incorporate the same in the Supply Order placed on SCCL. In the absence of the clause, the Company could not claim ₹ 918.61 crore, towards value of ungraded and differential grades of coal during the years 2014 to 2016.

Improper monitoring of coal requirements at power plants resulted in avoidable expenditure

Due to lack of proper monitoring of procurement of coal by Power Stations, the Company diverted the SCCL coal from KTPS to RTPP incurring avoidable expenditure of ₹ 186.77 crore on freight charges towards diversion of coal during the years 2011 to 2015. Further, the Company during the period from August 2014 to March 2015 diverted coal from RTPP to Dr.NTTPS and also vice versa during the same period, which resulted in avoidable expenditure of ₹ 98.36 crore towards differential freight charges and extra freight amount.

Underutilisation of washery

The Company failed to utilise the washery to its full capacity. The Company had received 17.47 LMT of coal through 'RSR mode' incurring an additional

expenditure of ₹17.47 crore on transportation during the period July 2015 to March 2016.

Acceptance of lower yield

Despite higher yield, the Company had placed orders for lower yield and received less quantity of 3.20 LMT (2011 to 2016) valued at ₹136.07 crore.

Lack of adequate unloading facilities led to delay in unloading of coal

Inadequate unloading facility in Coal Handling Plant (CHP) and inaction by the Company to augment the CHPs even after commissioning new units resulted in avoidable demurrage charges of ₹112.66 crore during 2011 to 2016.

Waiver of penalty for delay in transportation of coal

The Company's decision to waive the penalty without adhering to the terms and conditions of the contract for transportation of coal and without approval of the Board resulted in extension of undue favour to the contractors to the tune of ₹7.33 crore.

Absence of joint sampling

Though Coal India Limited had notified a panel of agencies for conducting joint sampling of coal at loading end during August 2014 itself, the company did not finalise appointment of representative for joint sampling at coal loading points.

Difference in GCV of invoiced/received coal and bunkered coal

The difference in Gross Calorific Value (GCV) as per invoiced / received coal and the bunkered coal resulted in excess consumption of coal of 86.02 Lakh MT valued ₹3,179.32 crore.

Non-compliance with Ministry of Environment and Forest guidelines on revenue realised from sale of fly ash

The Company had diverted amount realised on sale of fly ash for renovation of guest house at Power Stations, construction of school compound wall, flooring of badminton court and to meet the day to day working capital requirements, which was in violation of MoEF guidelines.

2.1 Introduction

In the State of Andhra Pradesh, generation of power was carried out by Andhra Pradesh Power Generation Corporation Limited (APGENCO). After the formation of Telangana State, (as per the AP Reorganisation Act, 2014) APGENCO (the Company) has a capacity of 2,810 MW at two thermal power plants viz., Dr. Narla Tata Rao Thermal Power Station (Dr. NTTPS, 1,760 MW)[22] Vijayawada, Krishna district and Rayalaseema Thermal Power Station, Muddanur, Kadapa district (RTPP, 1,050 MW)[23]. The details of installed capacity, actual generation and cost for the years 2011-12 to 2015-16 have been furnished in the ***Annexure-2.1***. The power generation decreased mainly due to outages[24] of power plants, from 22,235 MU (Million Units) in 2011-12 to 19,359 MU in 2015-16. Further, the total cost per unit increased from ₹ 2.94 in 2011-12 to ₹ 4.34 in 2015-16.

Fuel forms a major component of the cost of the power generation and, therefore, has a direct impact on consumers. Fuel, for the purpose of this report, mainly refers to coal which constitutes nearly 86 *per cent* (***Annexure-2.2***) of total power generation in 2011 to 2016.

The price of coal is based on its GCV (Gross Calorific Value) which is a measure of its quality. The coal is purchased at a 'basic price' determined by the coal company for normal (ROM[25]) coal. The Company during the period 2011 to 2016, procured 732.88 lakh metric tonne (LMT) of indigenous coal, 60.90 LMT of imported coal and 1,18,897 KL of oil.

As per the Electricity Act, 2003, the State Electricity Regulatory Commission (SERC) determines various norms [Plant Availability Factor (PAF)[26] and Gross Station Heat Rate (SHR)[27] etc.] for operation of power stations. Central Electricity Authority (CEA) also fixes targets for power generation for Thermal Power Stations (TPSs) considering capacity of plant, average plant load factors and plant performance. The Company works out the requirement of coal on the basis of targets so fixed and submits the proposals for coal linkage to Government of India. Based on the Company's requirement, the CEA recommends allotment of coal linkage to Standing Linkage Committee (SLC) of Ministry of Coal, Government of India (GoI) which allots coal based on the availability at various collieries.

[22] Dr. NTPPS includes: Dr. NTTPS – O&M consisting of Stage I, II, III (6x210 MW) and Dr.NTTPS Stage IV (1x 500MW).

[23] RTPP includes: RTPP consisting of Stage I & II (4x210 MW) and Stage III (1x210 MW)

[24] Non availability of power station for generation of power

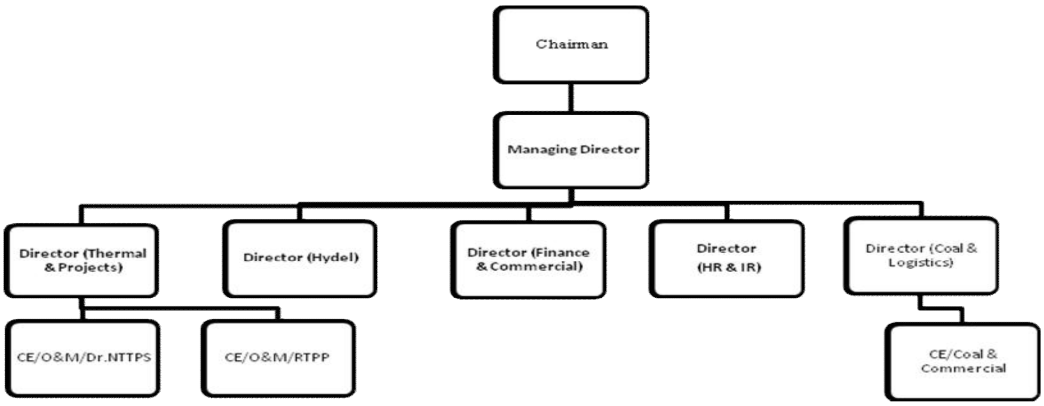
[25] Run of Mine Coal: ROM coal refers to Coal as extracted from the coal mine in its natural and unprocessed state.

[26] PAF is the ratio of actual hours of operation of the power station to the maximum hours available during a certain period.

[27] SHR is the energy (kCal) used/required to produce one unit (kWh) of electricity in a power plant.

2.2 Organisation Structure

The organisation structure of the Company (relating to purchase and transportation of fuel) is detailed below:



2.3 Scope of Audit & Methodology

The Performance Audit covered all issues relating to purchase, transportation and consumption of fuel including coal ash management in both the power generation stations (Dr. NTTPS and RTPP) of APGENCO covering the period from 2011 to 2016.

The audit methodology included

- Scrutiny of records relating to procurement, receipt and consumption of fuel, fuel cost reports, performance efficiency reports and ash generation and disposal reports;
- Examination of agenda and minutes of the Board meetings;
- Scrutiny of agreements with fuel suppliers and guidelines issued by Central Electricity Authority(CEA) / State Electricity Regulatory Commission (SERC), Ministry of Environment and Forest (MoEF), Government of India (GoI) and Andhra Pradesh Pollution Control Board (APPCB); and
- Interaction with the audited entity and analysis of the data with reference to audit criteria.

2.4 Audit Objectives

The Performance Audit was aimed to assess whether:

- The procurement of fuel was done economically, efficiently and effectively;

- The terms and conditions of agreements with the fuel suppliers were adhered to and penalties were levied in case of non-compliance/adherence thereof;
- The consumption of fuel in power generation and disposal of ash was inline with the norms fixed by SERC and Ministry of Environment and Forest; and
- An efficient and effective mechanism for inventory management and internal control existed to ensure adequate fuel availability as per prescribed norms.

2.5 Audit Criteria

2.5.1 The audit criteria derived from:

- Guidelines issued by the CEA / Electricity Act / SERC /Ministry of Environment and Forest / Company's policies and decisions;
- Provisions contained in agreements with Coal companies, Oil companies, Railways and transport agencies and other contractors/agents; and
- Norms of CEA and SERC for holding of inventory of coal and oil respectively.

2.5.2 Audit objectives and criteria were explained to the Company during an Entry Conference (May 2016). Subsequently, the audit findings were reported to the Management and the State Government (August 2016). The audit findings were discussed in the Exit Conference (September 2016). Replies to the audit findings from the Government were received in October 2016 and the same have been considered while finalizing the Report.

2.6 Audit Findings

Procurement of coal

Fuel Supply Agreement (FSA) is an agreement between the supplier and the purchaser of the coal for generation of power. FSA also indicates the Annual Contracted Quantity (ACQ) of coal pertaining to a particular year. The ACQ is the quantity of coal agreed to be supplied by the seller and to be purchased by the purchaser from the sellers' mines. The Company procured coal by entering into FSAs with the Singareni Collieries Company Limited (SCCL) and Mahanadi Coalfields Limited (MCL). Besides, the Company purchased imported coal through Central PSUs (MSTC, MMTC and PEC).

2.6.1 **a)** ***Avoidable payment of incentive to MCL ₹13.07 crore***

As per FSAs, MCL was to supply 8.7 lakh metric tons (LMT) of coal to RTPP Stage I and 10.10 LMT of coal to RTPP Stage III per annum. The Company paid price of the coal in advance (stage-wise) to MCL for supply of coal. MCL supplied coal as per the payments made by the Company. As per the agreement, if the Company procures more than 90 *per cent* of the Annual Contracted Quantity (ACQ), it is liable to pay incentive.

Based on advance payment, MCL allotted coal to the Company. The Company entered into agreements with M/s. Global Coal and Mining Private Limited and M/s. Aryan Energy Private Limited for taking delivery of coal by the contractors for processing in their washery plants at MCL and onward transportation to RTPP by Rail-cum-Sea-cum-Rail (RSR) mode.

Audit observed that while the Company had procured coal in excess of the ACQ (98 to 126 *per cent)* for Stage I during 2011 to 2016, it procured less than the ACQ (70 to 80 *per cent)* quantity for Stage III. Due to procurement of coal in excess of ACQ, the Company had to pay incentive to MCL. Thus, lack of monitoring by the Company for stage-wise procurement of coal, resulted in avoidable payment of ₹ 13.07 crore towards incentive on excess procurement for Stage-I.

The Government (October 2016) stated that the quantity for Stage III during 2011-12 was not procured due to delay in finalisation of RSR contract for transportation of coal to RTPP and quantities have been procured based on the approval of the Board to meet the requirement at RTPP.

However, the payment of incentive could have been avoided had the Company monitored the procurement of coal.

b) Non-realisation of penalty from MCL- ₹ 231.88 crore

As per FSAs, in respect of Dr. NTTPS for the period 2011 to 2015, MCL had to supply 240 LMT (Stage I to III) and 51.86 LMT (Stage IV) of coal. Towards this, the Company paid stage-wise advances. The Company received coal from MCL by Railways rakes to Dr. NTTPS. For timely placement of rakes as per ACQ, the Company was required to coordinate with Railways authorities and MCL. If the Company received less than 90 *per cent* of the ACQ, it claimed penalty.

Audit observed that during 2011 to 2015, even though advances were paid by the Company, MCL had supplied only 142.38 LMT (Stages-I to III) and 30.7 LMT (Stage IV) of coal which was 59.33 and 59.20 *per cent* of the quantity to be supplied respectively. Regarding short supply of coal, MCL stated that this was due to short placement of rakes by Railways.

Audit further observed that failure of the Company to coordinate between Railway authorities and MCL for placement of required number of rakes resulted in short delivery of coal. In this regard, though the Company had claimed (between June 2012 and August 2015) ₹ 231.88 crore during 2011 to 2016 towards compensation for short delivery of coal, the same was yet to be received from MCL (March 2016).

The Government stated (October 2016) that the Company was pursuing continuously with MCL for receipt of compensation for short supplies. The Company's Officials posted at MCL (Talcher) were regularly pursuing with Railways for allotment of more number of Railways rakes to Dr. NTTPS. The Company also assured that the same would be pursued through the Government also.

The Government's reply was not acceptable in as much as though officials were posted for pursuance with Railways for allotment of required rakes, the fact remains that the Company had failed to obtain the coal as per the ACQ.

Besides, the Company had not got the compensation for short supply of coal from MCL till date.

2.6.2 (a) Absence of suitable clauses in coal procurement order, resulted in avoidable payment of ₹ 918.61 crore towards grade variation

Whenever the Company did not receive the ACQ of coal from MCL, to meet the requirement of Dr. NTTPS, it used to divert coal from other plants i.e., KTPS[28] and RTPP.

As KTPS came under Telangana State and Dr. NTTPS came under Andhra Pradesh, diversion of coal from KTPS to Dr. NTTPS was not possible. In view of this, for the year 2014-15, to meet the requirement of coal at the Power Station (Dr.NTTPS), the Company procured 27.61 LMT of coal from SCCL at premium price (e-auction weighted average price) by placing order on 26 July 2014. This order was placed without incorporating any clause for joint sampling of coal and under-loading/over-loading freight charges. The Company had also not incorporated any clause for price adjustment, in case SCCL failed to supply the grades (Grade 7-15) mentioned in the Order. During 2015-16, without any purchase order/ MoU, the Company procured 63.5 LMT of coal from SCCL at premium price.

On review of 'coal analysis reports' and coal invoices for the years 2014 to 2016, it was observed that the Company had received coal with grade variance i.e. grades of the coal received by the power station did not match the grades indicated in the invoices. The details of the quantity of coal received along with value of ungraded coal and coal with grade variance are indicated below:

Table 2.1: Quantity of coal received with grade variation

Year	Quantity received (LMT)		Value (₹ in crore)	
	Ungraded	Grade variation	Ungraded	Grade variation
2014-15	15.57	6.08	308.90	42.26
2015-16	18.87	29.50	393.48	173.97
Total	34.44	35.58	702.38	216.23

Source: Company records

As seen from the above table, the Company had received 35.58 LMT (39 *per cent*) of varying grades of coal valued at ₹ 216.23 crore from SCCL. Besides, during the same period, the Company had also received 34.44 LMT (38 *per cent*) valued at ₹ 702.38 crore of ungraded coal.

Audit reviewed the FSA of another power station (RTPP) for supply of coal by the same supplier (SCCL) and observed that the FSA included a clause stipulating that SCCL was not to supply ungraded coal (i.e. below the grade of G15). If ungraded coal was supplied, it would not carry any basic price of the

[28] Kothagudem Thermal Power Station- KTPS was under the purview of APGENCO till bifurcation of the State of Andhra Pradesh and after bifurcation of the State, the power station came under the purview of Telangana State Power Generation Corporation Limited.

coal and carry only other charges and statutory levies. The agreement also included a clause for 'joint sampling of coal inspection' and in case of dispute with regard to grade of the coal, it was to be referred to a third party (referee) and decision of the party would be final. It was observed that though the Company was aware of the clause, it failed to incorporate the same in the Supply Order placed on SCCL. In the absence of the clause, the Company could not claim ₹ 918.61 crore, towards ungraded and differential grades of coal during the years from 2014 to 2016.

It is pertinent to mention here that the Company, while entering into MoU with SCCL for 2016-17, incorporated a clause for joint sampling.

The Government in their reply stated (October 2016) that due to requirement of coal, the Company requested SCCL to supply coal on *ad-hoc* basis with weighted-average e-auction/premium price. The Company was addressing SCCL for supply of invoice grade coal to avoid grade slippage. It was also stated that SCCL was requested (August 2016) to carry out joint sampling of coal by appointing a third party.

The Government accepted the audit observation and incorporated a suitable clause in MoU with SCCL for the year 2016-17.

(b) Avoidable payment of ₹19.94 crore due to absence of suitable clause relating to weighment charges

Audit reviewed the FSA with SCCL for procurement of coal to RTPP and observed that a clause in respect of payment of overloading and underloading charges was included. As per the FSA, if SCCL transported coal after weighment at their loading point by charging ₹ 25 per MT towards weighment charges, the overloading and underloading charges will be borne by SCCL. If weighment is not done, underloading charges will be borne by SCCL and overloading charges will be borne by the Company.

Audit observed that while procuring coal for Dr.NTTPS, from 2014 to 2016, the company had procured a quantity of 79.79 LMT of coal, under Supply order with SCCL without incorporating the above clause and paid ₹ 19.94 crore towards weighment charges to SCCL. On test check of supply records, it was seen that the Company paid overloading/underloading charges to Railways. However, due to absence of the clause, the Company could not claim the overloading/underloading charges from SCCL.

It is pertinent to mention here that the Company had entered into MoU with SCCL on 30 May 2016 for procurement of coal for both the units and included the clause for overloading and underloading charges.

The Government stated (October 2016) that due to requirement of coal, the Company requested SCCL to supply coal on *ad-hoc* basis with weighted average e-auction/premium price. It was further stated that the matter was being pursued with SCCL.

2.6.3 Diversion of coal resulted in avoidable expenditure

The Company procured coal in the name of a particular Power Station and the coal was transported to that Power Station only. If there was shortage of coal at another Power Station, the Company diverted coal from one Power Station (for which the coal was originally booked) to another Power Station (Power Station to which the coal was diverted). If the distance of the diverted Power Station was more than the distance in respect of originally intended Power Station, the Company had to pay the additional freight charges to Railways for diversion of coal. If the distance was less, the Company claimed the differential freight (short distance) charges from Railways. But, this was to be allowed when the Company paid diversion fee of ₹ 300 per wagon. Due to improper monitoring of coal requirement at Power Station, the Company incurred avoidable expenditure as discussed in the succeeding paragraphs.

(a) Improper monitoring of coal requirements at power plants resulted in avoidable expenditure of ₹ 186.78 crore towards transportation cost

During 2011 to 2015, as the Company (RTPP) did not lift the coal from SCCL as per ACQ, there was shortage of coal at RTPP. To meet the shortage, the Company diverted coal from KTPS.

Year-wise details of the quantity of coal diverted and additional freight charges incurred are indicated below:

Table 2.2: Statement showing the difference in freight charges

Year	Quantity diverted (LMT)	Weighted Average Freight from mines to RTPP (MT/₹)	Weighted Average Freight on diversion of coal from KTPS to RTPP(MT/₹)	Difference in Freight (MT/₹)	Avoidable expenditure (₹ in crore)
1	**2**	**3**	**4**	**5(4-3)**	**6 (2x5)**
2011-12	21.39	753	1,116	363	77.64
2012-13	15.86	1,029	1,408	379	60.13
2013-14	6.69	1,118	1,507	389	26.01
2014-15	5.75	1,141	1,541	400	23.00
Total	**49.69**				**186.78**

Source: Company records

It could be seen from the above table that the freight charges from mines to RTPP was less than the freight charges on diversion.

It was observed that due to lack of proper monitoring of procurement of coal by power stations, the Company diverted the SCCL coal from KTPS to RTPP incurring avoidable expenditure of ₹ 186.78 crore on freight charges towards diversion of coal.

The Government in its reply stated (October 2016) that FSA quantity pertaining to KTPS was diverted to RTPP to meet the grid demand. Presently, the Company was continuously monitoring the movement of rakes as per the requirement of coal at power stations and no rebooking of rakes was being done.

(b) Lack of proper monitoring of procurement of coal resulted in loss of ₹ 98.36 crore

During August 2014 to March 2015, the Company had diverted 2.93 LMT (4,460 wagons) of coal from RTPP to Dr. NTTPS. As the distance from SCCL to Dr.NTTPS was less than the distance between SCCL to RTPP, the

Company claimed ₹ 24.13 crore (November 2014 & February 2015) towards differential freight from Railways. The Railways rejected the claim stating that the Company had not paid the diversion fee.

Audit observed that as the Company had failed to pay the diversion fees of ₹ 13.38 lakh, it had to forego the claim amount of ₹ 24.13 crore towards differential freight amount.

Audit further observed that during the same period (August 2014 to March 2015), 7.48 LMT of coal was diverted from Dr.NTTPS to RTPP and the Company incurred an extra freight amount of ₹ 74.23 crore. During the year 2014-15, due to diversion of coal, there was loss of power generation of 247.33 MU at Dr.NTTPS.

The Government stated (October 2016) that it had requested the Railways to adjust the diversion fee from the balance funds available with Railways and the same was being pursued constantly to settle the issue on priority. It was further stated that due to urgent requirement of coal at RTPP, the rakes after reaching the Dr.NTTPS were rebooked to RTPP to minimise the generation loss.

Thus, improper monitoring of procurement of coal resulted in avoidable expenditure of ₹ 98.36 crore due to diversion of coal from RTPP to Dr.NTTPS and vice versa during the same period.

2.6.4 Delay in operation of coal washery at Talcher

The Company had entered into an MoU (May 2004) for setting-up a 'coal washery' with a capacity of 11 Million Ton Per Annum (MTPA), in two phases (i.e., 7 and 4 MTPA in two phases) at Talcher (MCL mines), on Build, Own & Operate (BOO) basis, to M/s ST-CLI Coal Washery Ltd (presently M/s Spectrum Coal & Power Limited i.e., SCPL). The washery (phase-I) was established in 2009.

In the process of washing of coal at washery, "washed coal rejects" were also generated along with the "washed coal" which was the property of the Company. The Company entered (May 2004) into an Indemnity Bond (agreement) with MCL for supply of coal to washery. As per the Indemnity Bond, the Company or the sub-lessee should return the 'washed coal rejects' to the 'party' which supplied the coal. Despite the Company being the owner of the washery coal rejects, the MCL claimed the 'washery coal rejects' as the term 'party' in the Indemnity Bond was not clearly defined.

The Company had requested (October 2014) the Ministry of Coal (MoC) to give necessary directions to MCL to accept a revised Indemnity Bond. MoC intimated (January 2015) the Company that the matter was referred to Ministry of Law for legal opinion. Ministry of Coal advised the Company to ensure the operation of washery, as an interim arrangement and that the coal rejects should be delivered to MCL. In view of dispute with MCL relating to ownership of coal rejects, even though the washery (phase-I) was established in 2009, the same was not operational till May 2015 i.e., for six years from completion of construction of the washery.

Due to the above dispute, the Company could enter (April 2015) into MoU with MCL for supply of coal to washery after a delay of six years. Thus incorporation of faulty clause by the Company in the indemnity bond, led to non-utilisation of washery and also resulted in transportation of coal through RSR mode, which was costlier.

The Government stated (October 2016) that legal opinion was obtained in May 2014. Accordingly MCL and the Government of Andhra Pradesh were addressed/ requested for solving the issue. Further, the Company was also pursuing the issue of ownership of 'washed coal rejects'.

The reply of the Government was not acceptable as the Company had not taken the legal advice before entering into agreement and this resulted in keeping the washery idle for more than six years.

2.6.5 Underutilisation of washery resulted in extra expenditure of ₹17.47 crore

The washery established at Talcher commenced its operations from May 2015 onwards. Against the capacity of the washery of 82.5 LMT of coal, for the nine month period (July 2015 to March 2016) during 2015-16, the Company provided 14.41 LMT of coal for washing.

The coal is transported to the power stations through two modes of transportation viz., 'direct' and 'Rail-cum-Sea-cum-Rail' (RSR) modes. The coal from MCL was transported to the power stations by the washery (after washing) through 'direct' mode of transportation (all rail mode). The coal from MCL was also transported through 'RSR' mode, if the coal was not issued for washery. As per the Company's records on landed cost of coal, if the coal was transported through RSR mode, the transportation cost was more by ₹ 100 per MT when compared to the coal transported through washery i.e., 'direct' mode/through washery (after incurring the washery charges also).

Audit observed that though the washery had been functioning from July 2015, the Company failed to utilise the same to its full capacity. In view of this, the Company during nine months period (July 2015 to March 2016), had received 17.47 LMT of coal through 'RSR mode' i.e., without utilising the services of washery, incurring an additional expenditure of ₹ 17.47 crore on transportation.

The Government accepted (October 2016) the audit observation and stated that based on the performance and stabilisation of the washery, the capacity of the washery would be increased gradually and coal would be washed and transported through washery after washing the same. Further, the coal transportation by RSR mode has been discontinued from September 2016.

2.6.6 Acceptance of lower yield beneficiated coal

As per the guidelines of Ministry of Environment and Forest, the power generation companies have to use washed coal (beneficiated) for generation of power. The Company had placed orders (2011 to 2016) on contractors for washing of coal with a guaranteed yield of 73.5 *per cent* of raw coal supplied by MCL from Jagannath and Bharatpur mines. After beneficiation of coal at the washery, contractors transported the same to the Company for use in generation units.

Asian Development Bank (ADB) had conducted a sectoral study on 'India-implementation of clean technology through coal beneficiation' in respect of the coal sector in India to advise Government of India on improving usage of washed coal in thermal power plants to reduce pollution. As per the study report, on washing of coal from Jagannath and Bharatpur mines, the yield was 76.2 and 81.5 *per cent* respectively.

Audit observed that despite higher yield in respect of both the mines, the Company had placed orders for lower yield (73.5 *per cent*) and received 3.20 LMT (2011 to 2016) less valued at ₹ 136.07 crore. Thus, placement of orders for lower yield with the washery contractors was not in the interest of the Company and this had resulted in extension of undue benefit to the Contractors.

The Government stated (October 2016) that the cost of washed coal was minimum at the yield of 73 *per cent*. However, orders were placed for a yield of 73.5 *per cent*. As per the directions of MoC, Performance Guarantee Test would be conducted and the yield would be decided accordingly.

The reply was not acceptable as the Company was also a party in framing the policy by ADB for use of washed coal. Therefore, it should have considered the yield as per ADB report while placing the washery contracts.

Procurement of Imported coal

2.6.7(a) Procurement of imported coal in deviation from the purchase policy

As per the Company's Purchase Policy (8.3.21), repeat orders are to be placed (i) within 6 months from the date of supply of original order; (ii) total quantity should not exceed 50 *per cent* of the originally ordered quantity and (iii) repeat order should not be placed for more than once.

The Company placed orders for procurement of imported coal on M/s Metal Scrap Trade Corporation Limited (MSTC) and M/s. Projects & Equipment Corporation Limited (PEC) for its requirement on 'Free on Rail/Road' (FOR) destination basis on firm price basis. The following points were observed.

- Though the Company (RTPP) had placed an order (June 2013) on MSTC for supply of 4 LMT of imported coal, six repeat orders were also placed during March 2014 and March 2015 for a quantity of 9.75 LMT i.e., 244 *per cent* of the originally ordered quantity.
- Similarly, the Company (Dr. NTTPS) had placed an order (April 2011) on MSTC, for supply of 2.6 LMT for imported coal. Three repeat orders (July 2011 to September 2011) were also placed for additional quantity of 2.6 LMT i.e., 100 *per cent* of originally ordered quantity.
- The Company had also placed an order (June 2013) with PEC for supply of 8.0 LMT for imported coal. Five repeat orders were also placed during March 2014 and November 2014, for a quantity of 9.50 LMT (119 *per cent*).

The Government stated (October 2016) that due to low stock levels and poor response to the tenders floated during the time and also time required for finalisation of new tenders, repeat orders were placed after taking the approval of Board.

However, it may be noted here that the Ministry of Power, GoI, while fixing the year wise targets of imported coal, had directed (April 2011) the power utilities to take necessary action to tie up for import of coal well in time and place the orders expeditiously.

(b) Non-levy of penalty for delayed delivery

The Company had placed an order (June 2013) on MSTC for procurement of 4 LMT of imported coal. As per the terms and conditions of the Order, MSTC had to supply the quantity within six months from the date of issue of order/commencement of supplies. Against the ordered quantity of 4 LMT, MSTC had supplied 2.89 LMT within the stipulated delivery period. The Company had also placed repeat order (November 2014) on MSTC for additional 2 LMT of imported coal. As per the terms and conditions of the repeat order, MSTC was to supply the quantity within forty five days from the date of issue of order/commencement of supplies. Against the repeat order, M/s MSTC supplied 1.32 LMT only within the stipulated delivery schedule. As per the terms of the Order, if the supplier failed to supply the scheduled quantity, penalty of 0.5 *per cent* (per week) subject to a maximum of 5 *per cent* of total contract value, was to be levied towards Liquidated Damages.

However, based on the request of MSTC, the Company extended the delivery period in respect of both the orders (regular and repeat order) without levy of penalty amounting to ₹ 2.03 crore.

Audit observed that due to short supply of coal by the contractor (MSTC), the Company (RTPP) could not maintain sufficient coal stock levels which resulted in loss of generation of 169.07 MU during the above period.

The Government stated (October 2016) that MSTC had informed that berthing delays at Krishnapatnam port and non-availability of rakes adversely affected the coal supply. The Board accorded approval for extension of delivery period without any penalty since MSTC was a Central PSU and also to have better contractual relations.

However, as per the terms and conditions of the Orders, it was the responsibility of the supplier to facilitate all activities at port, liaison with Railways for rakes and supply coal to power stations on destination basis.

Transportation of coal

Freight is one of the major components of cost of coal. Coal from SCCL was transported by rail and from MCL by i) all rail route and ii) Rail-cum-Sea-cum-Rail (RSR) mode from Paradip port to Kakinada port for Dr. NTTPS and from Paradip port to Krishnapatnam port for RTPP. For transportation of coal by RSR mode to power stations, the Company placed contracts with private contractors. The Company made e-payment of Railways freight for the dispatch of coal from MCL (Talcher) to power stations (Dr. NTTPS / RTPP).

2.6.8 Avoidable expenditure on ocean freight and port charges.

a) The Company procured coal from MCL. In respect of Dr. NTTPS, coal was transported from Paradip port to Dr. NTPPS via Kakinada port. The distance from Paradip port to Kakinada port is 370 nautical miles. In respect of RTPP, the coal was transported from Paradip port to RTPP via Krishanpatnam port. The distance from Paradip port to Krishnapatnam port is 652 nautical miles.

Audit observed that Dr. NTTPS had been paying ocean freight charges at the rate of ₹ 969.22 per MT for 370 nautical miles, whereas, RTPP was paying ocean freight charges at the rate of ₹ 910.43 per MT for 652 nautical miles.

Thus, though the distance from Paradip port to Kakinada port was lesser than the distance from Paradip port to Krishnapatnam port, the Company was paying ocean freight charges at higher rates (₹ 58.79 per MT) for transportation of coal to Dr.NTTPS.

The Government accepted the audit observation and stated (October 2016) that action was being taken to minimise the ocean freight.

b) The Company transported coal from Paradip port to RTPP via Krishnapatnam port. The Company had engaged (July 2013) KPMG, a consultancy firm, to study the existing coal transportation system of the Company and suggest the most optimal transportation method. KPMG submitted (March 2014) its report suggesting that the port charges at Ennore were significantly lower when compared to port charges at Krishnapatnam port. KPMG advised that transportation of coal would be cheaper if the coal was transported from Ennore port instead of Krishnapatnam port.

Audit observed that the distance from Paradip port to Ennore port (721 nautical miles) was more than the Paradip port to Krishanpatnam port. Tamil Nadu Power Generation Distribution Corporation Limited (TANGEDCO) had been transporting coal from Paradip port to Ennore port by paying ocean freight charges at the rate of ₹ 347 per MT. However, the Company had not initiated action to transport coal through Ennore port to RTPP to minimise the ocean freight charges.

The Government accepted the audit observation and stated (October 2016) that negotiation was being done with coal transport contractors for reduction of ocean freight. Besides, M/s. Shipping Corporation of India would also be contacted for transporting coal.

c) During test check of records for the year 2015-16, it was seen that the Company had paid ₹ 696.93 per MT towards port charges at Krishnapatnam port. However, MMTC had paid ₹ 514.76 per MT towards port charges at the same port for transportation of imported coal for the Company.

Audit observed that the Company was paying port charges at rates higher than MMTC at Krishnaptanam port, resulting in extra expenditure of ₹ 20.98 crore which was avoidable.

The Government accepted the audit observation and stated (October 2016) that the contracts were awarded on the basis of lowest prices. Besides, M/s. Shipping Corporation of India would also be contacted for transporting coal.

2.6.9 *Delay in unloading of coal from wagons resulted in avoidable payment of demurrage of ₹112.66 crore.*

The Company depended mainly on Railways for transportation of coal. The Railways allowed seven hours of free time for unloading of coal from wagons beyond which demurrage charges were levied. The details of number of rakes received and number of rakes on which demurrage charges paid to Railways during the period from 2011 to 2016 are as follows:

Table 2.3 Demurrage charges paid to Railways

(₹ in crore)

Year	Total rakes received (No.)	Number of rakes on which demurrage charges paid (No.)	Demurrage charges levied (₹)	Demurrage charges waived by Railways (₹)	Demurrage charges paid (₹)
2011-12	4,086	2,358	10.19	4.41	5.79
2012-13	3,945	2,882	24.54	10.73	13.81
2013-14	3,702	3,135	68.60	25.78	42.82
2014-15	4,093	3,189	34.42	12.54	21.88
2015-16	4,073	3,679	59.02	30.66	28.36
Total	**19,899**	**15,243**	**196.77**	**84.12**	**112.66**

Source: Company records

The Company had paid ₹ 112.66 crore towards demurrages during the above period. The demurrages increased from ₹ 5.79 crore in 2011-12 to ₹ 28.36 crore in 2015-16.

Audit observed that till 2014-15, though new units (Dr.NTPPS-unit-VII-January 2010, RTPP-unit-V-February 2011) were commissioned, the Coal Handling Plants (CHPs) were not augmented to handle additional coal in tune with the additional capacity. Due to this, demurrages paid by the Company increased year after year.

During 2015-16, even after manual unloading of coal from wagons by incurring expenditure of ₹ 162.09 lakh, demurrage charges increased due to non-availability of stock yard to stack the required coal to cater to the needs of all the units of the Power Stations.

Even though augmentation of CHPs was mooted, the same was deferred (July 2012) by the Company on the ground that it would be done along with future expansion of the Power Stations.

The Government in its reply (October 2016) stated that strengthening the Coal Handling Plant by providing additional wagon tipplers and stream of conveyors were envisaged in the upcoming 800 MW Super Critical plant at Dr. NTTPS. All efforts were being made to minimise the demurrage charges despite system constraints.

The Government's reply was not acceptable as the proposal for augmentation of CHP in respect of Dr.NTTPS was deferred and while envisaging the new unit of RTPP, the Company had not envisaged CHP. Inadequate unloading facility in CHP and inaction by the Company to augment the CHPs even after commissioning of new units resulted in avoidable demurrage charges of ₹ 112.66 crore during the period from 2011 to 2016.

2.6.10 Waiver of ₹ 7.33 crore towards penalty for delay in transportation of coal.

The Company awarded contracts to M/s South India Corporation Limited and M/s Sarat Chatterjee & Company for transportation of 6 LMT of coal by each contractor from MCL to Dr. NTTPS by RSR mode. As per the agreement (Clause 6), the contractor had to transport the monthly scheduled quantity to Dr. NTTPS within 35 days from the date of commencement of transportation from MCL. In case of delay in transportation, penalty was to be levied at the rate of 1.5 *per cent* per week (subject to a maximum of 5 *per cent* of the total contract value) on the awarded rate per ton of the quantity for short supply of coal after expiry of 35 days. As per clause-1.10 of the special terms and conditions of the tender specifications, the contractor would not be liable for delay in transportation of coal on account of *force majeure*. In case of force majeure, the contractor was to, within 10 days from the day of such delay, if any, inform the Company in writing explaining the causes for delay. Based on this information, the Company was to verify the credentials of delay and grant extension of time, if eligible.

As per the contract, the Contractors were to complete the transportation of coal by July 2011. However, the coal was supplied till January 2012. Hence, the Company recovered ₹ 3.04 crore from M/s. South India Corporation Limited and ₹ 4.29 crore from M/s Sarat Chatterjee & Company for delay in transportation of monthly scheduled quantity beyond the stipulated time.

After completion of the transportation of coal during January 2012, the contractors intimated (M/s South India Corporation Limited in August 2012 and M/s Sarat Chatterjee & Co. in June 2012) the Company, the reasons such as non-supply of coal by MCL, strikes and rail roko by the local villagers at Talcher, frequent downpours in Paradip and Kakinada ports during September – December (2010) and non-supply of empty rakes by Railways etc. for non-adherence to the monthly scheduled quantity.

Based on the request of the contractors, the Management waived the penalties of ₹ 7.33 crore stating that the Railways had failed to provide sufficient number of rakes as a result of which the transportation of coal was low. It was also observed that the refunds of penalties were made without approval of the Board. The Board had not ratified the decision to waive the penalty till date (March 2016).

The Government in its reply (October 2016) stated that the contractual quantity was transported by the contractors. However, there was a delay in transportation of coal to the power station due to insufficient number of rakes provided by Railways. In view of this, the Management had considered the request of both the contractors for waiver of penalties for delay in transportation.

The Government's reply was not acceptable as the Company's decision to waive the penalty without adhering to the terms and conditions of the contract and without approval of the Board resulted in extension of undue favour to the contractors to the tune of ₹ 7.33 crore.

Quality Assurance

2.6.11 Absence of Joint Sampling

Coal is classified into different grades on the basis of Gross Calorific Value (GCV)/grade. Accordingly, the prices of the coal, based on the grade / quality of coal, are notified by the collieries. The quality of coal supplied by the coal companies is determined on the basis of joint sampling of coal (by representatives of seller and purchaser) at loading point.

FSAs incorporated a clause for joint sampling of coal quality and, in case of dispute in quality, the referee's (third party) decision was to be final. The clause also stated that in case of absence of the representative from either side, the sampling was to be carried out unilaterally by the representative of the other party and such sample would be deemed to have been jointly collected and binding on both the parties.

The Government of India had formed (June 2014) a committee with representatives from Power utilities and CEA and notified a panel of agencies for conducting joint sampling of coal at loading end.

Though the power stations had been receiving ungraded coal and coal with grade variation, the Company had not appointed its representative for joint sampling as of March 2016.

The points observed during the audit are discussed in the succeeding paragraphs.

a) SCCL

From a test check of analysis reports for the years 2014 to 2016 conducted by the Company (RTPP), it was seen that there were differences between the grades supplied by SCCL and the grades as per the analysis conducted by the Company. Out of 65.81 LMT of coal received from SCCL, there was variance in grade in respect of 33.39 LMT (51 *per cent*).

Further, as per FSA, if coal received was less than G15 (GCV 2,800 kCal/kg) i.e., ungraded, it would not carry any basic price but only other charges and statutory levies. It was observed that though 23.71 LMT (36 *per cent*) of ungraded coal valued at ₹ 443.17 crore was received during the same period, the same was paid for at higher grade price.

b) MCL (IB Valley mines)

i. As per the FSA (MCL), if the quality of the coal received was less than GCV 2,200 kCal/kg, ₹ 1/- (Rupee one) per MT only was to be charged by the supplier towards the cost of the coal but other charges and statutory levies were to be paid by the Company. It was observed that no representative was appointed by the Company for joint sampling of coal at MCL (IB Valley mines).

   Test check of analysis reports for the years 2013 to 2016 conducted by the Company (Dr.NTTPS) showed that there were differences between the grades indicated by MCL and the grades as per the analysis conducted by the Company. Out of 11.46 LMT of coal received from MCL, there was variance in grade in respect of 7.99 lakh MT (70 *per cent*). Despite this, the Company paid an amount of ₹ 97.83 crore.

Further during the same period, audit observed that the Company (Dr.NTTPS) also received 1.35 LMT (12 *per cent*) of ungraded coal (lower than GCV 2,200 kCal/kg) valued at ₹ 8.91 crore. As the Company had not limited the value of coal to ₹ 1/- per MT, it incurred an extra expenditure amounting to ₹ 8.90 crore.

ii. Similarly, during 2014-15 and 2015-16, the Company (Dr. NTTPS) received 14.43 LMT of coal valued at ₹ 158.53 crore with differential GCV (other than IB valley mines of MCL). As per the analysis by MCL, the coal supplied was of the GCV of 3,401- 4,000 kCal/kg. However, during the period, on analysis by the Company, it was found that coal with GCV of 1,531-3,700 kCal/kg was also received by the Company. However, the Company did not claim the difference in price for variation in coal grade for reasons not on record.

c) Western Coalfields Limited (WCL)

The Company entered (July 2014) into a Memorandum of Understanding (MoU) with WCL for procurement of coal. As per MoU, the Company had to appoint its representative at loading point of WCL for joint sampling of coal. The Company procured 6.20 LMT of coal under this MoU.

It was seen that the Company had not appointed any representative at loading point of WCL for joint sampling for reasons not on record. Thus, the Company's claim for ₹ 59.03 crore towards grade variation was not considered by WCL on the ground of absence of the Company's representative for joint sampling.

d) Difference in average GCV of invoiced/received coal and average GCV of bunkered coal

As per norms of Central Power Research Institute (CPRI), the difference in GCV between the received coal (invoiced) and at the consumption end (bunkered coal) should be within 150 kCal/kg.

As per FSA between the Company and MCL /SCCL, joint sampling of coal was to be conducted by appointing representatives from both the parties. However, the Company did not appoint its representative in MCL (IB Valley mine) and SCCL for joint sampling.

Audit observed that the difference between the average GCV of invoiced coal and the average GCV of bunkered coal in the Thermal Power Stations was very high and ranged from 691 - 927 kCal/ kg at Dr. NTTPS and from 841 - 1128 kCal/ kg at RTPP.

The difference in the GCV as per the invoiced coal and the bunkered coal was on account of absence of automatic sample collection of coal/ absence of the Company's representative for joint sampling of coal at SCCL/MCL (IB Valley mines)/ WCL. Due to this, the Company received inferior quality of coal which resulted in excess consumption. Even though joint sampling was done by the company at MCL (other than IB Valley mines), the company did not claim the differential cost (difference of grade between invoiced and received) for reasons not on record.

Audit further observed that the Company had neither analysed reasons for difference in GCV nor taken any steps to bring it down within the CPRI norms. Audit worked out the excess consumption of coal at 86.02 LMT, due to difference in GCV i.e., in excess of 150 kCal/kg (invoiced and bunkered) valued at ₹ 3,179.32 crore during 2011-16.

The Government accepted the audit observation and stated (October 2016) that the grade slippage problem was being faced by all power generating companies and even with joint sampling as per FSA/MoU, grade variation was observed between the invoiced grade and received grade. The Company also stated that it conveyed its consent (August 2016) for signing of Tripartite Agreement with coal companies for carrying out a 3rd party sampling at loading points.

However, the Company did not take any action to appoint representative for joint sampling. Further, though Coal India Limited had notified a panel of agencies for conducting joint sampling of coal at loading end during August 2014 itself, the company did not finalise appointment of representative for joint sampling at loading point.

Consumption of coal

Each Thermal Power Station is designed for using a particular grade of coal. Using the envisaged grade of coal ensures optimisation of generation of power and economy of cost of generation.

2.6.12 Non-compliance with Ministry of Environment and Forest guidelines on use of washed coal

The process of washing raw coal of inferior quality at washery in order to remove coal dust, stones and shells and cutting the coal into proper size is called beneficiation (also called coal washing). It reduces the ash content in coal, thereby helping in reduction of the pollution and maintaining a clean environment.

Ministry of Environment and Forest (MoEF) Notification (January 2014) had mandated use of raw/blended/beneficiated coal with ash content not exceeding 34 *per cent*, with immediate effect, in respect of RTPP. In respect of Dr.NTTPS, the notification was mandated with effect from January 2015. The MoEF also directed the power plants to submit quarterly compliance reports to the Ministry and Andhra Pradesh Pollution Control Board (APPCB).

It was seen that washed coal was not used at Dr. NTTPS despite the directions of MoEF. The Power Station used coal with ash content of more than 43 to 45 *per cent*, which resulted in high generation of ash. In respect of RTPP, though the Power Station has been using the washed coal with 34 *per cent* ash content, the average ash content ranged from 43 to 44 *per cent.* This was due to blending of SCCL coal with high ash content with imported coal with low ash content. Further, the Power Stations did not submit the quarterly reports to the Ministry and APPCB.

The Government accepted the audit observation and stated (October 2016) that washed coal with ash content of less than 34 *per cent* was being utilised from August 2016 at Dr. NTTPS. In respect of RTPP, suitable blending of imported coal with SCCL coal was being applied before consumption of coal. The quarterly returns to APPCB and Ministry of Environment and Forest, in respect of average ash content in coal, would be submitted.

2.6.13 Improper blending of imported coal with indigenous coal

The Company procured imported coal having GCV of 6,000 kCal/kg for its use in Power Stations. To achieve higher generation, the Company decided to blend imported coal with indigenous coal in the ratio of 30:70.

For the years 2011 to 2013, the Company had maintained the records in conventional system. After introduction of ERP[29] during 2013-14, the Company was in the process of migration of data to the new system and was able to furnish records for 2014-15 only.

Audit test checked the records of the Company (Dr.NTTPS and RTPP) for the year 2014-15 and observed that at Dr.NTTPS, the imported coal was not blended (30 *per cent*) with the indigenous coal (70 *per cent*), even though the Board had directed (September 2011) the power stations to blend imported coal. On review of 'daily consumption records of coal' it was observed that the percentage of blending with indigenous coal ranged from 2 to 79 *per cent* and from 1 to 100 *per cent* in respect of Dr.NTTPS and RTPP respectively. This was due to lack of a proper system for blending of imported coal with indigenous coal in the required percentage.

However, due to non-availability of data, audit could not assess the impact of blending of imported coal with indigenous coal on generation of power.

The Government accepted the audit observation and stated (October 2016) that there was no blending equipment at power stations and the power plants were not designed to mix the imported coal and indigenous coal in the ratio of 30:70. Blending of coal exactly in the specified ratio was expensive. Company further stated that it had decided (August 2016) not to use imported coal for its power stations in view of improved domestic coal supply.

2.6.14 Non-procurement of WG-G9 grade from SCCL

The Company had procured 27.61 LMT and 63.5 LMT of coal (without placing order) with different grades (including G9 grade) at premium prices from SCCL during the years 2014-15 and 2015-16, respectively. Washery Grade- Grade 9 (WG-G9) met the requirement of designed GCV of Dr.NTTPS.

On a test check of invoices of WG-G9 and G9 grades of coal received from SCCL during 2015-16, it was observed that SCCL had supplied washery grade (WG-G9) coal to Dr.NTTPS at a price of ₹ 2,669 per MT. The Company, instead of procuring the WG-G9 grade of coal, procured only G9 coal (not washery grade) at a premium rate of ₹ 2,775/MT, for reasons not on record.

[29] Enterprise Resource Planning (ERP) software is the name of the package supplied by a Company i.e., SAP

Besides, though the Company had procured G9 grade coal at a premium rate, it received much lower grade coal of lesser GCV and not the G9 grade mentioned in the invoice. Thus, the Company failed to procure WG-G9 grade which gave guaranteed GCV, without any oversized stones and foreign material and paid higher prices for lower grades.

The Government accepted the audit observation and stated (October 2016) that the SDSTPS (a JV of the Company) had entered into a MoU with SCCL for procurement of WG-G9 grade of coal at a price of ₹ 2,778 per MT during the year 2015-16 and the price was reduced to ₹ 2,256 per MT during 2016-17. The Company would examine the cost economics of the coal and take necessary action.

2.6.15 Avoidable payment of ₹93.84 lakh on water cess.

As per the provisions of the Water (Prevention & Control of Pollution) Cess Act, 1977, water cess was to be paid as per the rates specified. As per the Environment (Protection) Act, 1986, a consumer was eligible for concessions and rebates on water charges if the consumer complied with pollution norms as specified by the Andhra Pradesh Pollution Control Board (APPCB).

Audit observed from the records of the RTPP that it was complying with the pollution norms of APPCB. However, the Company paid water cess at normal rates i.e., without any concession. This resulted in avoidable payment of ₹ 93.84 lakh (2011-16) towards water cess. Besides, the power station could not avail of the rebate (at the rate of 25 *per cent*) on water cess amounting to ₹ 23.46 lakh (2011 to 2016).

In respect of Dr. NTTPS, the Suspended Particulate Matter (SPM) values in stack emissions had exceeded the norms due to usage of poor quality of coal. Thus, due to higher levels of pollution, it could not avail of concessional rate of water cess.

The Government accepted the audit observation and stated (October 2016) that in respect of Dr. NTTPS, measures were taken from time to time to comply with the norms. In respect of RTPP, the Company stated that it would represent to APPCB for consideration for payment of water cess at concessional rates.

Ash Management

Ash is the residue after combustion of coal for generation of power in coal based Thermal Power Stations. A portion of the ash, around 20 *per cent*, is collected as 'bottom ash' at the bottom of the furnace. Another portion, around 80 *per cent* is collected as 'fly ash' in the Electrostatic Precipitators (ESP)'. This has to be collected and disposed off without letting it out into the atmosphere. Undisposed 'bottom ash' and 'fly ash' are collected as 'pond ash' into a pond. Ash management assumes significance as ash generated from the power plant is a threat to the environment. However, it has some value due to its various uses viz., in road laying and brick industry etc.

2.6.16 Fly ash not used within the stipulated period of five years as per Ministry of Environment and Forest notification

Fly ash is a valuable resource and raw material for cement, concrete and many other high value added applications. The utilisation of fly ash for part substitution of cement in concrete/mortar etc. necessitates setting up of an efficient system of fly ash collection which is economic, effective and eco-friendly.

As per Ministry of Environment and Forest Notification (November 2009), 100 *per cent* fly ash generated from existing units is to be utilized within five years from the date of notification i.e., by October 2014 and within four years by new Units i.e., by January 2015 and February 2016 for Dr.NTTPS-IV and RTPP-III, respectively.

The quantum of ash generated and utilised in respect of both the Thermal Power Stations of the Company during the period 2011 to 2016 are detailed below:

Table 2.4: Generation and utilisation of fly ash

(Figures in LMT)

Year	Coal consumed	Ash generated	Ash utilised	Ash utilisation in percentage
2011-12	152.87	63.02	39.85	63.23
2012-13	149.42	61.87	45.44	73.44
2013-14	145.71	60.47	42.92	70.98
2014-15	149.35	64.21	40.60	63.23
2015-16	145.29	64.91	43.37	66.82
Total	**742.64**	**314.48**	**212.18**	**67.46**

Source: Company records

During the years 2011 to 2016, the Company had utilised only 67.46 *per cent* of fly ash. During the years 2012-13 and 2013-14, the Company increased the utilisation of ash for laying roads for National Highways. Even after a lapse of six and half years of issue of Notification, the Company has not been able to utilise 100 *per cent* fly ash as per the directions of MoEF.

The Government accepted the audit observation and stated (October 2016) that measures were being taken and action plan prepared for 100 *per cent* utilisation of ash.

2.6.17 Loss of revenue on Cenosphere

A small proportion of the pulverized fuel ash produced from the combustion of coal in Power Stations is formed as Cenosphere. It is estimated that Cenosphere is present to an extent of one *per cent* in fly ash from thermal stations as per Andhra Pradesh Industrial Technological Consultancy Organisation (APITCO). It is commercially useful as an extender for plastic compounds, being compatible with plastisol, thermoplastics, latex, polyester, epoxies, phenolic resins, and urethanes. Synthetic foams are also made with Cenosphere. It is compatible with cement and other building materials such as coatings and composites. It is used in a wide variety of other products, including sports equipment, insulators, automobile bodies, marine craft bodies, paints and fire and heat protection devices.

During 2011 to 2016, the two TPSs had produced 314.48 LMT of ash which should have contributed 3.14 LMT (one *per cent*) of Cenosphere. The Company has not sold any quantity of Cenosphere so far (March 2016). The Kothagudem Thermal Power Station (Thermal Power Station of Telangana State Power Generation Corporation Limited) sold it at a rate of ₹ 14,360 per MT. The Company did not make any arrangements for collection of Cenosphere, which has high demand and value in the market and could have earned more revenue for the Company.

The Government in its reply (October 2016) stated that the Company would explore the options for collection and sale of Cenosphere.

2.6.18 Non-compliance with Ministry of Environment and Forest guidelines on revenue realized from sale of fly ash.

As per Ministry of Environment and Forest Notification (November 2009), the amount collected from sale of fly ash and fly ash based products should be kept in a separate account. It should be utilised only for development of infrastructure or facilities, promotion and facilitation activities, until 100 *per cent* fly ash utilisation level was achieved.

It was seen that the Company had earned revenue of ₹ 233.98 crore by selling the fly ash during 2011 to 2016 and kept it in a separate account as per MoEF guidelines.

However, it was observed that in contravention of guidelines of MoEF, the Company had diverted ₹ 6.36 crore for other activities viz., renovation of guest house at Power Stations, construction of school compound wall and flooring of badminton court.

In compliance with the guidelines of MoEF, TPSs had transferred the amount received on sale of fly ash to separate bank account of the Company on monthly basis. The Company utilised ₹ 77.98 crore only for development of infrastructure or facilities, promotion and facilitation activities related to increase in the utilisation of fly ash activities. The remaining funds were diverted to meet the day to day working capital requirements, which was in violation of MoEF guidelines. This was evident from the fact that bank account relating to the amount realised on sale of fly ash showed a balance of ₹ 10,000 only as on 31 March 2016.

The Government accepted the audit observation and stated (October 2016) that in view of the urgent requirement of guest houses, other works and paucity of funds, the funds were diverted from fly ash account. It was further stated that as and when funds were available, the Management would transfer the funds to the fly ash account along with interest.

Inventory Management

Inventory management seeks to ensure enough inventories so as to aid unimpeded generation and to avoid excessive inventory to reduce locking up of funds. It also seeks to maintain the quality of stock.

The Company had no inventory policy on fuel to achieve the aforesaid objectives. It was observed that inventory assessment, planning and procurement were inadequate and ineffective and this resulted in loss of generation and also accumulated stocks of coal and oil, as discussed in the following paragraphs.

2.6.19 Loss of generation due to low stock levels of coal

As per the directions of CEA, each Power Station was required to maintain its coal stock levels. In this regard, Dr.NTTPS and RTPP were required to maintain a stock level of 20 and 25 days, respectively. High stock levels may cause reduction/deterioration in GCV. It may also cause loss due to winds and shrinkage, apart from utilisation of additional space and blocking of funds. Low stock levels may result in loss of generation. Hence, the Company had to carefully assess the requirement of coal, based on the generation capacity and maintain sufficient coal stock levels.

Audit observed that against the CEA norms, during 2011-12 to 2014-15, the average stock levels maintained by the Power Stations of the Company ranged from 3 to 5 days (Dr. NTTPS & RTPP). During the year 2015-16, the average stock levels maintained by the Power Stations of the Company were 18 days (Dr.NTTPS) and 30 days (RTPP), respectively. Further analysis of records showed that due to maintenance of low stock levels, during 2011-12 to 2014-15, the Company incurred loss of power generation of 721.59 MU. The excess coal stock during the year 2015-16 was due to excessive coal procurement and non-regulation of coal supplies during planned and forced outages.

The Government accepted the audit observation and stated (October 2016) that efforts would be made to maintain required stock levels at all times. The Government further stated that a circular had been issued (September 2016) to power stations to maintain required stock levels.

2.6.20 Excess holding of oil stock resulted in blocking of funds of ₹ 16.89 crore

In case of low quality coal, oils are mainly used for start-up of the unit and to maintain the required heat. For procurement of these oils, the Company entered into agreements with public sector oil companies viz., Bharat Petroleum Corporation Limited (BPCL), Indian Oil Corporation Limited (IOCL) and Hindustan Petroleum Corporation Limited (HPCL). Oil companies raised the bills at the prevailing rates of oil at the time of delivery.

State Electricity Regulatory Commission (SERC) has fixed a norm of two months' consumption for stock holding for the purpose of reimbursement of interest on working capital. On review of the receipts, consumption and stock levels of oil, it was observed that the Power Stations were procuring oils without any assessment.

Against the norm of two months' consumption, the Thermal Power Stations were maintaining oil stocks ranging from one to nineteen months' consumption. Further, the Company had not fixed minimum, maximum and reordering levels based on the requirements of the plants to enable them to keep the stock levels as prescribed. Lack of proper management of receipts and consumption and balance stock of oils not only resulted in overstocking but also led to blocking of funds to the tune of ₹ 16.89 crore as on March 2016.

The Government stated (October 2016) that the stock levels were dependent upon the actual operating and atmospheric conditions. However, audit observation would be taken into consideration for maintaining oil stocks at optimum level.

2.6.21 Non-stacking of oversized stones

Coal received from coal mines was stocked in the stockyard. As per FSAs of MCL and SCCL, the coal supplied by the seller should generally be free from oversized stones above 250 mm. These stones were to be segregated by the purchaser and equivalent cost along with Railways freight and surface transportation charges were to be paid by the seller. The purchaser was to demarcate a site for stacking of oversized stones and quantify the same. The purchaser was to notify the seller to inspect stones of more than 250 mm within 15 days, and after joint inspection, the stones could be disposed off.

Audit observed that though the power stations received big boulders/ foreign material, the same were not segregated for assessment/ joint inspection. Due to non-assessment of quantity of stones/ foreign material, the Company could not lodge claims for the same, resulting in financial loss to the company, the quantum of which could not be calculated by Audit.

The Government stated (October 2016) that it was not possible to segregate and stack stones as the coal was received from different mines. The collection and stacking of stones of sizes more than 250 mm were to be stored separately and weighment had to be done jointly with coal companies to prefer claims. All these activities were expensive and was not economical when compared to basic price of coal.

The Government's reply was not acceptable as the receipt of big boulders and foreign material had also caused delay in unloading of Railways wagons, resulting in increase in demurrage charges. Further, it also resulted in damaging the equipment of Power Stations.

2.6.22 Delay in disposal of coal mill rejects resulting in loss of revenue.

During crushing/grinding, the low quality or un-ground coal generated from the coal mills is called Coal Mill Rejects. The reasons for high mill rejects are insufficient air to mills, poor quality of coal, excess wear and tear of grinding media, exhaust fan blades and overfeeding of coal to mills which indicates poor maintenance of mills**.** Further, lack of regular overhauls result in excess mill rejects. These rejects are stacked in coal stock yard of the plant and are sold when accumulated.

During 2011-16, RTPP had generated 1.54 LMT of coal mill rejects and sold 1.01 LMT. It was observed that RTPP had incurred an expenditure of ₹ 142.76 lakh during the period towards removal, collection and cleaning of coal mill rejects and their transportation to stock yard. As the Company did not identify any separate stock yard for coal mill rejects, the coal rejects were dumped into crushed / uncrushed coal stock yard.

There was no separate stacking facility for mill rejects and the same was mixed with normal coal. In the absence of separate stacking facility, the possibility of lifting the normal coal by the contractors during lifting of mill rejects could not be ruled out. Further, the RTPP had written off the loss of mill rejects at the rate of 15 *per cent* without any physical verification or approval by the competent authority.

In respect of Dr. NTTPS, out of 86,270 MT of mill rejects, 57,081 MT only was sold. The Company spent ₹ 8.25 lakh on transportation of unsold / non-lifting of mill rejects from hopper to stock yard.

Thus, the improper system of stacking of mill rejects and delay in sale had resulted in loss of revenue of ₹ 7.20 crore (82,489 MT) during the period 2011-16.

The Government stated (October 2016) that the unsold stock was utilised for ground preparation for further stacking of raw coal in stock yard and due to non-finalisation of sale order, the mill rejects were not sold. Further, storage of mill rejects for longer period caused some losses in total quantity and some of the quantities were burnt down due to inherent temperature properties.

The Government's reply was not acceptable as the Company had failed to take action to dispose off the coal mill rejects immediately to avoid loss on account of natural spontaneous combustion.

2.6.23 Diversion of coal to Sri Damodaram Sanjeevaiah Thermal Power Station (SDSTPS)

During the period of 2014-15 and 2015-16, the Company had diverted 28.66 LMT (18.68 LMT from RTPP and 9.98 LMT from Dr. NTTPS) washed coal and 1.46 LMT of imported coal to SDSTPS on returnable basis[30]. The SDSTPS returned only 1.09 LMT of washed coal to RTPP during the year 2014-15.

Audit observed that during the year 2014-15, the Company had diverted the coal without considering coal requirement at RTPP, which resulted in loss of generation of 335.55 MU. Further, the TPSs did not get the balance washed coal of 27.57 LMT and imported coal of 1.46 LMT (March 2016). This resulted in blocking of funds of ₹ 964.08 crore.

It was further observed that though as per guidelines of Ministry of Environment and Forest (w.e.f. January 2015), the Company was required to use coal with ash content of less than 34 *per cent*, Dr. NTTPS could not utilise the washed coal (with less than 34 *per cent* of ash content) due to diversion of the same to SDSTPS.

Thus, diversion of washed coal to SDSTPS lacked justification.

The Government stated (October 2016) that to meet the additional requirement of coal, based on request of APPDCL, washed coal was diverted to SDSTPS. It was further stated that the Company had stopped diversion of washed coal from Dr.NTTPS.

[30] The Company diverted coal to SDSTPS on the condition that the quantity of coal had to be returned

The Government's reply was not acceptable as the Company had not taken steps to get back the coal supplied to SDSTPS.

Energy Audit

2.6.24 Non-implementation of energy audit recommendations

As per Energy Conservation Act, 2001, all the power stations are required to carry out energy audit on regular basis for conservation of energy, detection of wastages and excess consumption of fuel and other consumables for taking remedial action. It was, however, observed that RTPP (Stage II & III) had not conducted any energy audit during 2011 to 2016. Further, the recommendations of energy audit conducted in respect of RTPP Stage-I (June 2012) were not implemented in full.

The Government accepted the audit observation and stated (October 2016) that action plan for implementation of recommendations was prepared and was under implementation.

Internal Control

2.6.25 Deficient internal control

Audit observed that internal control[31] system of the Company was deficient to the following extent:

- There was no proper mechanism to review the procurement and its utilisation according to the requirement.
- There was no mechanism to review the inventory levels of coal.
- Demurrage charges were not monitored for taking remedial action for reduction.

Acknowledgement

Audit acknowledges and appreciates the co-operation and assistance extended by the officers and the Management of the Company at various stages of conducting the Performance Audit.

Conclusion

The Company failed to plan the procurement of coal as per the FSA resulting in purchase of coal at higher rates. This also resulted in payment of incentive, non-recovery of penalty and diversion of coal. Non-monitoring of freight charges on transportation of coal resulted in incurring additional expenditure. Due to inadequate unloading facilities of coal at power stations, the Company incurred avoidable expenditure on demurrage charges. In the absence of effective joint sampling method, the Company received inferior grade of coal from coal companies. The washery contracts were finalised by accepting lower yield. This also resulted in excess consumption of coal. The Company

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[31] Internal control is a process and a tool designed for providing reasonable assurance for efficiency of operations, reliability of financial reporting & compliance with applicable laws and statutes to ensure effective functioning as well as effectiveness of the internal control system and detection of errors and frauds.

did not adhere to the Ministry of Environment and Forest guidelines due to usage of non-washed coal with high ash content and also did not comply with the utilisation of fly ash. There was no system in place for sale of Cenosphere. Lack of inventory management system for fuel caused low and high levels of stocks which resulted in loss of generation and blocking up of funds.

Recommendations

The Company should

- ***Plan the procurement of coal as per FSA to avoid purchase of coal at higher rate and diversions,***
- ***Review the freight charges to minimize the same to reduce the fuel cost,***
- ***Take steps to appoint representative for joint sampling to avoid receipt of inferior grade of coal,***
- ***Review the washery contracts for obtaining higher yield on washed coal,***
- ***Adhere to Ministry of Environment and Forest guidelines for usage of washed grade coal and fly ash and***
- ***Evolve a policy to maintain optimum levels of fuel stocks to avoid loss of generation and blocking up of funds.***

In the Exit Conference the Government accepted the recommendations and assured of implementing the same.

CHAPTER III

COMPLIANCE AUDIT OBSERVATIONS

Chapter III

3. COMPLIANCE AUDIT OBSERVATIONS

GOVERNMENT COMPANIES

Andhra Pradesh Power Development Company Limited

3.1 Implementation of Sri Damodaram Sanjeevaiah Thermal Power Station at Krishnapatnam in Andhra Pradesh

3.1.1 Introduction

The construction of Sri Damodaram Sanjeevaiah Thermal Power Station (SDSTPS) at Krishnapatnam (Project) was envisaged (2006) to meet growing demand for power in the State of Andhra Pradesh. For implementation of the Project, Andhra Pradesh Power Generation Corporation Limited (APGENCO) was authorised by Government of Andhra Pradesh (GoAP) as an implementing agency.

Andhra Pradesh Power Development Company Limited (Company) was incorporated (March 2006) as a Special Purpose Vehicle (SPV) for setting up the Project. The Share Capital of the Company was contributed by APGENCO (50.45 *per cent*), four Distribution Companies of erstwhile Andhra Pradesh (44.72 *per cent*) and Government of Andhra Pradesh (4.83 *per cent*). The Project consisted of two super critical thermal power units of 800 MW each, under Phase I.

APGENCO had entered into an agreement (December 2005) with M/s Lahmeyer International (India) Private Limited (Consultant) for preparation of Detailed Project Report (DPR). As per the agreement, the DPR was to be submitted by the Consultant within 180 days.

The execution of the Project was awarded to three contractors viz., (i) M/s BHEL (Boilers & Auxiliaries) (August 2008), (ii) M/s L&T (TG & Auxiliaries) (September 2008) and (iii) M/s Tata Projects Limited (Balance of Plant) (August 2009).

The estimated cost (August 2006) of the project as per the Detailed Project Report (DPR) was ₹ 8,432 crore. As per the DPR, the scheduled Commercial Operation Dates (COD) of the Project were August 2012 for Unit-I and February 2013 for Unit-II.

The estimated cost increased to ₹ 12,290 crore (April 2014) due to the inclusion of additional works viz., External Coal Conveying System (ECCS), township, initial spares of major equipment, water treatment plant, transmission lines, exchange rates variation etc. The cost further increased to ₹ 12,630 crore (July 2015) due to increase in the cost of land, fish barrier and groyens extension etc. The increase in project cost was also due to increase in Interest During Construction (IDC), financial charges, exchange rate variation and price variation due to delay in execution of works.

Audit was conducted during April to June 2016, covering the period 2013-16 to ascertain whether the Project was implemented economically and efficiently. Audit covered the planning, preparation of DPR, agreements and execution of various works under the project.

3.1.2 Audit Findings

Delay in Preparation of DPR and award of contracts

The preparation of DPR and award of contracts for execution of the Project were reviewed and the observations are discussed below:

3.1.2.1 Delay in submission of DPR

As per the terms and conditions of the agreement (15 December 2005) with the Consultant, the DPR was to be submitted within 180 days from the date of agreement i.e., by May 2006. However, the Consultant submitted the DPR in August 2006 i.e., with a delay of three months. On submission of the DPR, the Company noticed that the Consultant had not included the works of initial spares, environmental issues, water treatment plant, exchange rate variation and transmission lines in the DPR, though included in the Scope of work for preparation of DPR. The inclusion of the above works subsequently resulted in increase in project cost by 49.79 *per cent* from ₹ 8,432 crore to ₹ 12,630 crore. The delay in submission of DPR led to delay in award of contracts and escalation in costs.

3.1.2.2 Defective Detailed Project Report

The Detailed Project Report did not include important items viz., (i) water treatment plant (ii) environmental issues (iii) initial spares (iv) exchange rate variation and (v) transmission lines.

Audit observed that non-inclusion of these items in the DPR resulted in the revision of estimates of the project cost thrice (July 2012, April 2014 and July 2015).

The Management stated that APGENCO, the implementing agency, had no experience in taking up construction of power plants with super-critical technology.

The reply of the Management was not acceptable as the Company should have selected implementing agency/consultant who had experience in such super-critical technologies. Frequent changes to the DPR have resulted in delay in implementation of the project and consequential additional costs, as discussed in subsequent paragraphs.

3.1.2.3 Additional interest burden of ₹52.64 crore due to higher debt-equity ratio

As per the DPR, the estimated cost of phase-1 (800 MW x 2) was ₹ 8,432 crore. As per the DPR, the Company was to maintain debt equity ratio of 80:20. Due to delay in implementation and inclusion of additional items of work, the estimated cost of the project increased to ₹ 12,630 crore (July 2015).

Audit observed that the company had not increased the equity component proportionate to the increase in project cost. The equity of the company remained at ₹ 2,068.27 crore (March 2016), resulting in shortfall of ₹ 457.73 crore. This in turn led to additional borrowings and interest burden of ₹ 52.64 crore.

The Management stated that the equity holders were being pursued to increase equity contribution. It was further stated that the revenue generated from the project was being used to meet the project cost.

However, additional interest burden due to higher loan component would result in further increase in unit cost of production and increase in per unit cost to consumers.

3.1.2.4 Avoidable payment of ₹ 84.00 crore towards 'Execution and Supervision' charges

The Company had entered into Project Execution Agreement (October 2009) with APGENCO for implementation of the Project. As per the agreement, 'Execution and Supervision (E&S)' charges were payable to APGENCO at the rate of one *per cent* of the project cost. On request of APGENCO, the Company enhanced (March 2010) the E&S charges to two *per cent* and paid ₹ 168 crore at the rate of two *per cent* of the DPR cost of ₹ 8,432.20 crore towards E&S charges to APGENCO.

Audit observed that the Company enhanced E&S charges within six months from the date of the agreement and before the commencement of the project work, though there was no contractual obligation. The Company incurred an additional expenditure of ₹ 84.00 crore towards payment of enhanced E&S charges.

Audit further observed that while enhancing the E&S charges, the Company had failed to include the penalty clause for delay in the completion of the Project. The project was delayed by two and half years. Though the time schedule was defined and fixed in the agreement with APGENCO, the Company had not imposed any penalty for delayed execution of the Project for about two and half years due to absence of such clause in the agreement with APGENCO.

The Management accepted the audit observation.

Contract Management

The Company had invited (December 2006) International Competitive Bidding (ICB) for EPC (Engineering, Procurement and Construction) contract. As only one bid was received, on the advice of GoAP, the Company divided the works into three packages viz., (i) Boilers & Auxiliaries (ii) Turbine Generator (TG) & Auxiliaries and (iii) Balance of Plant (BOP). Accordingly, the Company floated tenders for two packages (Boiler and TG) on ICB and the zero dates[32] fixed for the two contractors were: (i) M/s BHEL (Boilers & Auxiliaries) (August 2008) and (ii) M/s L&T (TG & Auxiliaries) (September

[32] The date of implementation of project begins

2008). As per the CEA norms, the contract for Balance of Plant (BOP) was to be awarded within six months from the award of the other two contracts i.e. by February 2009. However, after awarding these two contracts, the Company invited ICB for the BOP works and selected TPL, out of two bidders and awarded the contract of Balance of Plant (BOP) to M/s Tata Projects Limited in August 2009 i.e., with a delay of six months.

3.1.2.5 Irregular refund of liquidated damages (LD) to M/s BHEL – ₹ 240 crore out of borrowed funds

The Company had issued (25 July 2008) Letter of Intent (LOI) for the execution of erection and commissioning of Boiler & Auxiliaries to M/s BHEL. As per the LOI, the works were to commence from 29 August 2008 (zero date) and were to be completed by July 2012 for Unit-I and January 2013 for Unit-II. The Company extended the completion dates till 31 March 2013 for Unit I and till 30 June 2013 for Unit II with imposition of LD. The same were further extended to 31 March 2014 for Unit I and II with imposition of LD (with the approval of the Board) at 10 *per cent* (maximum) of the contract value.

As there was delay in execution of the works by M/s BHEL, the Company recovered (March 2014) ₹ 240 crore towards LD. Audit observed that the Company refunded (July 2014) the LD to M/s BHEL even though M/s BHEL had been slow in execution of works against approved schedules, which consequently affected the schedule of M/s L&T (for the erection of TG) and M/s TPL (for BOP works). Audit further observed that the contract for the BOP was awarded to TPL with a delay of six months (August 2009) which resulted in delay in achieving the Commercial Operation Dates (CODs) of the plant. It was also observed that this refund was made from the loan funds of the PFC. Due to this delay, the Company had to extend the completion dates of those two works viz., TG and BOP and paid ₹ 86.83 crore (till March 2016) towards price escalation to TPL during the extended period of the contract.

The Management replied that M/s BHEL had reduced their working cycle and speeded up synchronisation of Unit-I.

However, the refund of LD was a violation of terms and conditions of the agreement and was not in the best financial interest of the Company. Further, non-synchronisation of the units as per the schedule resulted in delay in achieving the CODs.

3.1.2.6 Non-recovery of interest to the tune of ₹ 6.47 crore on advances paid to contractors

The Company awarded contracts for supply of equipment, machinery and for execution of works and extended interest free advances to two contractors to the tune of ₹ 557.49 crore (L&T- ₹ 217.49 crore and Tata Projects Limited- ₹ 340.00 crore).

Audit observed that there was delay in execution of works by L&T and TPL, leaving balance works worth ₹ 56.24 crore to be completed as of July 2013. Commercial Operation Dates were achieved in February and August 2015 for Unit-I and II, respectively.

Audit observed that the Company had not incorporated any clause in the agreement to recover the advances with interest in case of delay in the execution of the works by the agencies. As per guidelines of Central Vigilance Commission (CVC), interest was to be charged on delayed recoveries. Non-recovery of interest of ₹ 6.47 crore (at PFC loan interest rate) on the advances resulted in undue favour to the contractors.

The Management replied (May 2016) that a suitable clause/provision for recovery of interest from contractor would be incorporated in future.

3.1.2.7 Avoidable expenditure of ₹69.43 crore on transportation of coal to Coal Handling Plant

The contract for supply, erection and commissioning of External Coal Conveying System (ECCS) between Krishnapatnam port and coal stock yard was awarded to M/s Indwell Constructions Private Limited, Vijayawada at a cost of ₹ 139.67 crore. The Letter of Intent (LOI) was issued on 21 April 2014 for completion by July 2015.

Audit observed that even after issuing notices for completion of ECCS system, the system was not completed fully as observed during trial operations (March 2016) and the company extended time till July 2016 for commissioning of the system.

Though the Commercial Operation Dates (CODs) were declared (February and August 2015) for both the units, the ECCS was not ready for transportation of coal for the project. The Company made alternative arrangement for transportation of coal by road at a cost of ₹ 55.46 crore (March 2016).

Further, as per the provisions of the agreement, Liquidated Damages (LD) were recoverable at the rate of 0.5 *per cent* of the contract price per each week of the delay subject to a maximum of 10 *per cent* of the total contract value. However, the Company did not recover LD of ₹ 13.97 crore despite delay in completion of the project (till March 2016).

The Management in its reply (June 2016) stated that the time given to the contractor for completion of the project was unrealistic.

The reply was not acceptable as the contractor was to complete the work as per the agreement.

3.1.2.8 Delay in completion of 'Integrated Township and Infrastructural Works' – Non-levy of liquidated damages of ₹2.09 crore

The Company had issued (7 March 2012) LOI to M/s GKC-SRR Joint Venture (Contractor), Hyderabad for the construction of Integrated Township and Infrastructural Works (IT & I works) at a cost of ₹ 124.95 crore. The work was to be completed by October 2013. However, only 27.03 *per cent* of work valued at ₹ 33.78 crore was completed upto October 2013. The Company extended the time upto September 2015 without levy of LD.

Audit observed that the agency completed 66.57 *per cent* of the IT & I works worth ₹ 83.18 crore upto September 2015. As per the agreement, LD to the extent of five *per cent* of the remaining value of work was to be imposed for the delay. However, the Company had not imposed LD on incomplete works.

This resulted in extension of undue benefit of ₹ 2.09 crore to the contractor since the delay was attributable to the contractor.

The Management stated that the LD was not imposed as the contractor was handing over the township in phases meeting the requirement of the Company.

The Management reply was not acceptable as there was no provision in the agreement for handing over in phased manner. Further, LD was also not imposed as per the agreement. The quarters and other infrastructural facilities have not been handed over to the Company as of March 2016.

3.1.2.9 Non-payment of Labour Cess of ₹44.19 crore

The Building and Other Construction Workers (Regulation of Employment and Conditions of Services) Act, 1996 and the Building and Other Construction Workers Welfare Cess Act, 1996 (Cess Act) and Cess Rules, 1998 were enacted by the Government of India with an objective to collect cess from employers undertaking construction activity and to implement welfare measures for the construction workers who are registered as beneficiaries with the 'Building and Other Construction Workers Welfare Board' constituted by the State Government.

The Company entered into four contracts (EPC packages) with M/s BHEL, M/s L&T, M/s INDWELL and M/s Navayuga Engineering Limited, in connection with the implementation of the project.

The Labour Department (GoAP) had issued demand notices to the Company for payment of Labour Cess and the same was not paid by the Company (May 2016).

Audit observed that the Company had failed to specifically incorporate recovery of Cess in the agreements and thus did not collect and pay Cess amounting to ₹ 44.19 crore to the Labour Department.

The Management in its reply stated (May 2016) that the contractor (TPL) had approached the court and that the information would be furnished, based on the outcome of the court case.

3.1.2.10 Non-receipt of mandatory spares

As per the agreement with the suppliers, certain spares (capital spares) were to be supplied by the contractor along with the main equipment. The object of obtaining these spares along with main equipment was to keep them as stand by, in case of emergency.

Audit observed that the essential spares in respect of two contractors viz., M/s BHEL and TPL (M/s BHEL- ₹ 20.95 crore and USD 0.05 crore) and (TPL- ₹ 0.41 crore and EURO 0.002 crore) were not received from suppliers (March 2016) even though CODs of Unit I and II were declared. The Company had neither received nor had reconciled the receipt of mandatory spares so far (March 2016).

The Management replied (May 2016) that essential spares from the suppliers were still awaited/unbilled (March 2016).

However, the fact remained that neither had the company taken up the issue with the suppliers nor reconciled the same till date (May 2016).

Coal related issues

The Company entered into Fuel Supply Agreement (FSA) with MCL for supply of coal for running the plant. The Company also entered into agreements with transport contractors for beneficiation (washing of coal after removal of stones and other waste material) and supply of coal. The FSAs and MoUs were reviewed in Audit and the observations are discussed below:

3.1.2.11 Delay in entering into MoU with MCL for supply of coal, resulted in avoidable expenditure of ₹12.98 crore

The Company had FSA (September 2013) with MCL for supply of coal to Unit I and II. The Company entered into MoU for Unit I on 16 May 2015. In respect of Unit II, though synchronisation was done in December 2014, MoU with MCL was entered into belatedly in November 2015 for the supply of coal at the rate of ₹ 4,030 per MT. After commissioning of the Unit II in August 2015, the Company faced shortage of coal for running the Plant due to delay in entering into MoU with the MCL for the supply of coal. To meet the requirement, the company entered into MoU (October 2015) with SCCL for supply of 5 LMT of coal at the rate of ₹ 5,266 per MT till March 2016. This resulted in procurement of 1.05 LMT coal (till March 2016) at avoidable additional price of ₹ 1,236 per MT (SCCL: ₹ 5,266 - MCL: ₹ 4,030).

Audit observed that failure of the Company to enter into MoU immediately on synchronisation of Unit-II in December 2014 led to the procurement of coal at the higher price from SCCL. This resulted in avoidable expenditure of ₹ 12.98 crore (₹ 1,236 per MT x 1.05 LMT).

3.1.2.12 Undue benefit of ₹35.34 crore on beneficiation and transportation of coal from MCL

The Company had entered into an agreement with two contractors for beneficiation and transportation of coal. At the time of beneficiation, some quantity of coal rejects was being removed from the coal and the balance coal transported to the Company. The transportation cost is arrived at by deducting the value of the coal rejects from the transportation cost and the net amount is paid to the transporter by the Company.

The Company, at the time of issue of tenders, had incorporated a condition (3.3 Section III Reject Disposal under Annexure-II- Part-II of special terms of the tender specification) that the tenderer should quote the transportation cost considering 'Reserve Price' at ₹ 250 per MT for coal rejects. As per the tender specification, 'Reserve Price' was the minimum price per MT of the 'rejected coal' below which the contractor could not quote.

Audit observed that the Company had disregarded the 'Reserve Price' of coal rejects indicated in the Tender and finalised the price of coal rejects at ₹ 102.76 per MT resulting in an undue benefit of ₹ 35.34 crore (24 LMT x ₹ 147.24 per MT) to the contractors.

The Management replied (May 2016) that necessary amendments to the agreement had been carried out.

However, documents relating to such amendments were not furnished to audit.

Inefficiencies in operation of plant

The efficiency of the plant in terms of consumption of auxiliary power was examined and the observations are discussed below:

3.1.2.13 Excess consumption of 'Auxiliary Power' against APERC Norms-Avoidable expenditure of ₹116.97 crore

Auxiliary Consumption denotes the power consumed by Plant and equipment for generation of power. As per the DPR, Auxiliary Consumption should be upto six *per cent* of the total power generated.

Audit observed that during 2014-16, due to forced outages (controllable breakdowns) and low plant load factor, the auxiliary power consumption exceeded the norms by 229.36 MU (**Annexure 3.1**) valued at ₹ 116.97 crore.

The Management stated that all possible efforts would be made to keep the auxiliary consumption within the norms.

Efficiency of the plant

The performance of the plant depends on the use of coal, matching boiler conditions. The output efficiency depends on (a) Plant availability (b) Plant Load Factor (c) Capacity utilization and (d) Outages etc. The efficiency achieved by the plant was examined and the observations are discussed below:

3.1.2.14 Plant Availability

Plant availability means the ratio of actual hours operated to maximum possible hours available during a specific period. The norm of the Central Electricity Regulatory Commission (CERC) for plant availability during the period 2014-16 was 85 *per cent*. During 2014-15 to 2015-16, the average percentage of Plant Availability of Unit I and II was 42.43 and 53.37 respectively. The plant availability was significantly less than the norm in both the years, mainly due to poor quality of coal, tube leakages etc.

3.1.2.15 Plant Load Factor

Plant Load Factor (PLF) refers to the ratio between the actual generation and the maximum possible generation at installed capacity. The CERC has fixed the PLF norm at 85 *per cent* for this thermal power station. Against this, the PLF was 18.14 and 35.46 *per cent* for the years 2014-15 and 2015-16 respectively.

The poor performance was due to low-availability and forced outages of plant viz., shortage of coal, poor quality of coal and boiler leakages etc., in 2014-15 and 2015-16 mainly in respect of Unit II. This also resulted in potential loss of saleable energy worth ₹ 9,251.43 crore.

3.1.2.16 Capacity Utilisation

Capacity Utilisation is the ratio of actual generation to possible generation during actual hours of operation. The details of possible generation based on actual hours of operation and actual generation for two years are as follows:

Table 3.1: Statement showing generation of power

Year	Possible generation (MU) (@ 85 *per cent* of PLF)	Actual generation (MU)	Difference (MU)
2014-15	920.45 (Unit I)	429.68 (Unit I)	490.77 (Unit I)
2015-16	8,820.96 (Unit I+II)	4,585.80 (Unit I+II)	4,235.16 (Unit I+II)
Total	**9,741.41** (Unit I+II)	**5,015.48** (Unit I+II)	**4,725.93** (Unit I+II)

Source: Information furnished by the Company

Audit observed that due to forced outages, feeding constraints, auxiliary constraints, stabilisation/shut downs, and planned outages, there was loss of power generation during the years 2014-15 and 2015-16.

The Management stated (May 2016) that the Performance Guarantee tests of both units were yet to be carried out.

However, during the period there was generation loss and the Company had foregone the revenue to that extent, apart from non-achievement of supply of power to the consumers.

3.1.2.17 Forced Outages

Outages refer to the periods for which the plant remains closed for attending planned/forced maintenance.

It was seen that there were forced outages on 23 occasions during 2014-16 involving 1,673 hours, mainly due to poor quality of coal, tube leakages etc. The loss of generation, as calculated by Audit was ₹ 675.69 crore.

The Management in its reply stated that the technical problems were being studied for adopting the best operation and maintenance practice and exploring all possible ways for improving the performance of units.

Environmental issues

The Ministry of Environment and Forest (MoEF), Government of India, Central Pollution Control Board (CPCB) and Andhra Pradesh Pollution Control Board (APPCB) are vested with power under these Acts. The compliance with these provisions was reviewed in audit and observations are discussed below:

3.1.2.18 Poor implementation of green belt against the guidelines of MoEF

As per the guidelines of Ministry of Environment and Forest, Government of India, green belt was to be developed covering the plant area by planting trees (including landscaping) in 1/3rd of the total plant area. MoEF had granted initial clearance (July 2007) to the Company to develop green belt in 420 acres out of 1,250 acres of project land. However, the Company acquired (March 2016) 1,497.27 acres of land for the project and was required to maintain the green belt in 499 acres. MoEF instructed (July 2015) that development of green belt should be completed by the end of 2015.

Audit observed that the Company developed only 173.50 acres (March 2016) of green belt against 499 acres required.

Audit also observed that the Company had not considered the total land for arriving at the extent of green belt required and had not obtained revised permission.

The Management stated that though the estimation was made for development of green belt during the preparation of budget, the same could not be allocated due to shortage of funds. It was also stated that steps were being taken to develop green belt in due course.

3.1.2.19 Failure to maintain APPCB limit for Air pollution

As per the conditions of 'APPCB Consent Order' (April 2015), the emission levels of Suspended Particulate Matter (SPM) of the plant should be within the prescribed limit of less than 100 mg/NM^3. To maintain the standards, the Company installed Electrostatic Precipitators (ESPs) to minimise the SPM. The plant also installed (2015) online monitoring system in both the units for periodical recording of SPM levels at a cost of ₹ 2.47 crore.

Audit observed that during April 2015 to March 2016 (except during August and September 2015), concentration levels of SPM ranged from 101.409 to 565.76 micrograms/cubic metre in Unit-I, whereas they were within the limits (except in June and November 2015) in Unit-II, indicating failure of the company to take effective measures to control the concentration of SPM in Unit-I.

It was also seen that APPCB had conducted the 'Ambient Air Quality and Stack Monitoring' test (July 2015) and directed the Company to control the emissions as they had exceeded the limits.

While accepting the observation, the Management stated (April 2016) that the existence of high level of air pollution was due to erroneous readings of the SPM. It was also stated that the faulty equipment was under rectification.

3.1.2.20 Non-compliance with the parameters in respect of hazardous waste

The Hazardous Waste (Management and Handling) Rules, 1989 (Rule 5) provide that every occupier handling hazardous waste has to obtain authorisation from State Pollution Control Board/Committee and the Board has the authority to suspend or cancel authorisation (Rule 6) to any unit which is operating without authorisation or in violation of conditions of operations issued under these Rules.

The Company received authorisation from APPCB (16 April 2015) which was valid till 31 March 2017.

Audit observed that certain parameters viz., biological, radioactive, heavy metals, toxic chemicals etc., were not being tested by the Company though they were required to be tested every six months (mandatory) as per the prescribed norms.

The Management stated (May 2016) that these tests were being conducted as and when necessitated through an approved laboratory.

The reply of the Management was not acceptable as the norms stipulated that the Company was to furnish half yearly report as per the parameters along with test results to APPCB. However, the Company had furnished the half yearly report to APPCB without indicating the test results.

Conclusion:

The delay in submission of DPR had a cascading effect which resulted in the commissioning of the plant. The DPR was prepared without inclusion of important components of work. The debt-equity ratio was not maintained at the required level of 80:20. The Company refunded the LD recovered from BHEL despite delay in completion of works. The contractors were paid advances and interest was not recovered even though there were delays in execution of works. Due to delay in completion of external coal conveying system, coal was transported by road involving additional expenditure. Due to delay in signing MoU for supply of coal with MCL, the Company purchased coal at the higher rate. The saleable energy was lost due to delay in commissioning of the plant. The plant failed to meet the efficiency parameters as per SERC. The Company also failed to comply with requirement of environmental guidelines fully.

Eastern Power Distribution Company of Andhra Pradesh Limited

3.2 Continuation of Single Bulb Subsidy without commitment of Government and approval of APERC resulted in loss of revenue ₹ 13.24 crore

Continued Single Bulb Subsidy without commitment of Government of Andhra Pradesh (GoAP) and approval of APERC which resulted in loss of revenue of ₹ 13.24 crore.

As per the Electricity Act, 2003 (No: 36 of 2003), the Andhra Pradesh Electricity Regulatory Commission (APERC) shall determine the tariff for retail supply of electricity to various categories of Low-Tension (LT) and High-Tension (HT) consumers by the Distribution Companies (DISCOMs). If the State Government decides to grant any Subsidy to any class of consumers, the APERC approves the scheme in accordance with the provisions of Electricity Act. Further, for the approved scheme the State Government shall pay in advance, every month, the total subsidy amount to compensate the DISCOMs/licensees. In case the Subsidy is not paid by the Government in advance, the DISCOMs/ licensees shall adopt the applicable tariff while billing the consumers.

The Government of erstwhile Andhra Pradesh (GoAP) had decided (September 2004) to provide 'Single Bulb Subsidy'[33] of ₹ 10 per month towards the cost of consumption of 1 x 40 watts bulb (for 6 hours a day) during the month to every domestic consumer with consumption of 15 units per month (in the slab 0-50 units) and having a connected load of 250 watts. Accordingly, the same was allowed by APERC in the Tariff Orders up to the year 2008-09. Subsequently, APERC had allowed (June 2009) the Single Bulb

[33]Single Bulb Subsidy is a subsidy extended by Government to consumer whose consumption of power is less than 15 units per month.

Subsidy for 2009-10 also after taking commitment for grant of Subsidy from Government of Andhra Pradesh.

It was observed in audit that Eastern Power Distribution Company of Andhra Pradesh Limited (APEPDCL), continued the Single Bulb Subsidy of ₹ 13.24 crore during the period from 2009-10 to 2012-13 (June 2012) without any commitment from Government of Andhra Pradesh for extension of subsidy and without any provision in the Tariff Order.

Audit also observed that in the absence of commitment from Government of Andhra Pradesh and approval of APERC, APEPDCL should have adopted the applicable tariff while billing the consumers. Non-application of the relevant tariff resulted in loss of revenue of ₹ 13.24 crore.

To an audit query (June 2014), APEPDCL had replied in August 2014 that the Government of Andhra Pradesh had been requested to release the amount of ₹ 13.24 crore towards the Subsidy allowed during the above period and also sought clarification regarding continuance of the Subsidy.

Due to non-reimbursement of the Subsidy, APEPDCL has written-off the amount of ₹ 13.24 crore in their 97th Board Meeting held on 19 March 2016.

Andhra Pradesh Aviation Corporation Limited

3.3 Irregularities in Management of Andhra Pradesh Aviation Corporation Limited

3.3.1 Introduction

Andhra Pradesh Aviation Corporation Limited (Company) was incorporated in March 2006 by erstwhile Government of Andhra Pradesh with main objective of acquisition, operation and maintenance of helicopters/aircraft for development of aviation sector in Andhra Pradesh. After bifurcation of the State, the Company is continuing the activities relating to State of Andhra Pradesh.

On a review of the records for the period from inception to 2015-16, the following deficiencies were noticed.

3.3.2 Audit Findings

Operational activity

3.3.2.1 Loss of helicopters

Government of Andhra Pradesh (GoAP) (Infrastructure & Investment Department) had transferred (February 2008) the Helicopter Wing along with two helicopters to the Company. The helicopters were operated and maintained by the Company. The Company lost one helicopter (BELL 430), in an accident on 2 September 2009. The Committee, which probed the reasons (May 2010) for crash of the helicopter (BELL 430), observed lapses on the part of the Company / Government of Andhra Pradesh *viz*., (i) posting of a person without aviation experience as Managing Director of the Company, (ii) non-appointment of Chief Operating Officer and Quality Control Manager and

(iii) appointment of a firm with unqualified personnel i.e., 'OSS Management Services Private Limited' for maintenance of helicopters though the firm did not have qualified engineers. The Committee recommended (May 2010) that a separate hangar be constructed for VIP helicopters of the Company.

It was observed in audit that no action was taken by the Company on the above recommendation to construct a separate hangar. The Company lost second helicopter (Augusta 139) in a fire accident on 17 December 2012 when it was parked in the space provided by AP Aviation Academy.

After losing both the helicopters in accidents, the Company did not acquire any helicopter / aircraft during the period from 2012-13 to 2015-16 (up to December 2015)

3.3.2.2 Irregular expenditure of ₹ 14.33 crore on hiring of helicopter

After the loss of both the helicopters in accidents, for meeting the flying requirements of VIPs, the Company hired helicopters from 11 aviation agencies and incurred expenditure of ₹ 9.91 crore, ₹ 20.04 crore and ₹ 20.74 crore during 2012-13, 2013-14 and 2014-15 respectively.

The Company, with a view to avoiding difficulty in sourcing helicopters at short notice, entered into agreement (September 2014) with M/s Saras Aviation Services (SAS), Hyderabad. The agreement, *inter-alia*, envisaged hiring one/two twin engine helicopter for minimum 100 hours of flying per month (at the rate of ₹ 2.50 lakh per hour) for a period of five years from 1 October 2014 with a minimum guarantee fee of ₹ 25 lakh per month. After a lapse of nine months from entering the agreement, the Company arrived at the requirement of 45-50 hours of average flying. However, no formal amendment was on record in respect of the reduced average flying hours.

Audit examined the records of the Company and observed the followings:

- The Company did not follow competitive bidding process for selection of SAS as service provider.
- The agreement was executed without any assessment of the flying hours for which helicopters were to be hired.
- The Company could not produce the files / records relating to the assessment of flying hours, selection of SAS for supply of helicopters, actual flying hours and could produce only the agreement with SAS and payments made to SAS.
- The Company paid ₹ 5.06 crore to SAS i.e. for the period from July to September 2014 towards utilisation of hired helicopters though the agreement with the service provider was effective from October 2014. In the absence of records pertaining to utilisation of hired helicopters, the genuineness of the above payment could not be verified.
- As per clause 12.1 of the agreement effective from 1 October 2014, the minimum guaranteed flying charges were ₹ 25 lakh for 100 hours per month. However, the Company paid ₹ 5.06 crore from October to December 2014 and ₹ 4.21 crore from January to March 2015 towards flying charges at 60 hours and 50 hours per month respectively.

Audit observed that payment of ₹ 14.33 crore in deviation to the terms of the agreement was irregular.

- As per the agreement, the base station declared was Hyderabad (Begumpet). The Company had to pay lodging, boarding, transportation and medical charges of the crew if the crew were utilised at a station other than the base station. As a result, the Company paid ₹ 1.31 crore (September 2014 to March 2015) towards lodging, boarding, transportation and medical charges of the crew without maintaining any records relating to actual usage of helicopters and its crew. These payments were made to a firm 'Sahasra Business Services' with whom the Company had not signed any agreement.

Financial activity

3.3.2.3 Non-establishment of regular revenue system

As per the Memorandum of Association, based on request of Government of Andhra Pradesh, the Company has to provide helicopter / aircraft services to the dignitaries of Government of Andhra Pradesh, and collect rental charges from the hiring parties. However, the Board of the Company subsequently resolved not to collect the same (Board Meeting No.4 held on 31 March 2008) on the ground that the collection of charges was only an inter-departmental transfer of funds.

Audit observed that in view of the above decision, the Company had foregone its source of revenue and depended on the budgetary support of Government of Andhra Pradesh. Further, the State Government released ₹ 67.17 crore (2011-15) as grants (plan) and the grants received from Government of Andhra Pradesh were spent on its day-to-day expenditure on hiring of helicopters for the VIPs of State Government.

3.3.2.4 Non-finalisation of Annual Accounts

As per the Companies Act, 1956 (Section 619), the annual accounts of the Company are to be certified by the Statutory auditors appointed by the CAG of India and on certification, the same are to be submitted to CAG of India for supplementary audit. Non-submission of accounts was in violation of provisions of Section 619 of the Companies Act, 1956.

Audit observed that even though Statutory Auditors appointed by CAG of India had certified the Accounts from inception to 2013-14, the same were not furnished to CAG of India till date (June 2016) for supplementary audit and the reasons for non-submission were not on record.

3.3.2.5 Loss of interest of ₹ 7.18 crore due to keeping the funds idle in current account

The insurance amount of ₹ 11.05 crore received against loss of first helicopter was kept in Fixed Deposit and, on this, the Company earned an interest of ₹ 4.14 crore. However, the insurance amount of ₹ 59.85 crore received against loss of second helicopter was kept in a current account due to which, the Company lost potential interest revenue of ₹ 7.18 crore (at the rate of 8 *per cent* for 1.5 years).

Audit also observed that though the ownership of the helicopter rested with Government of Andhra Pradesh (Infrastructure & Investment Department), the Company had not transferred the funds to Government of Andhra Pradesh and an amount of ₹ 27.31 crore from these funds were utilised towards day to day operations of the Company without any approval from Government of Andhra Pradesh.

3.3.2.6 Non-availment of Cenvat credit on service tax

The Company earned revenue by leasing helicopters/aircraft to VIPs of Government of Andhra Pradesh. As per the Finance Act, 1994 (Section 66), the Company being a service provider had to recover the Service Tax from the clients and pay the same to the Government. However, the Company failed to recover the Service Tax. Only after receipt of notice (September 2015) from Service Tax Department for non-payment of Service Tax, the Company paid an amount of ₹ 9.27 crore for 2010-15. The Company, on the other hand, paid ₹ 8.57 crore for the period from 2010-15 to its service providers. Therefore, the Company had the opportunity to deduct ₹ 8.57 crore as Cenvat credit from its tax liability, which would have drastically reduced its tax liability to ₹ 0.70 crore (₹ 9.27 crore – ₹ 8.57 crore) only. Thus, the Company did not claim service tax from the Government/service receivers and also did not avail of Cenvat credit, resulting in payment of ₹ 17.84 crore, besides loss of ₹ 17.14 crore (₹ 17.84 crore – ₹ 0.70 crore).

3.3.2.7 Transfer of funds without indicating the nature of transaction

As per the general accounting principles, there should be proper accounting for each and every receipt and payment and there should be proper authorisation for making any payment.

Audit observed that during the year 2012-13, an amount of ₹ 2.60 crore was paid and accounted for under the sub-head RTGS – operational and maintenance expenditure. The nature of this expenditure and the party to whom the payment was made and the relevant reference to the invoice under which the amount was paid were not on record.

Non-compliance with Statutory provisions

The Company, in its day to day operations, has to comply with various statutory provisions like conducting regular Board meetings, Annual General Meetings etc., under the Companies Act, 1956 and also has to comply with the directions of the Andhra Pradesh State Public Enterprises Department, Government of Andhra Pradesh.

3.3.2.8 Non-display of name and location of registered office:

As per the Companies Act, 1956 (Section 146), the Company should furnish information of location of registered office to the Registrar of Companies and print/ affix its name and address of its Registered Office in a conspicuous position and also display its name and address in legible characters in all its business letters, letter heads, notices and other official publications.

Audit observed that the Company had failed to comply with the provisions of Section 146 till date (June 2016). Further, the Company also failed to disclose the address of its Registered Office on its annual financial statements.

3.3.2.9 Failure to conduct minimum number of Board meetings/Annual General Meetings

As per the Companies Act, 1956, the Board of the Company shall meet at least once in three calendar months and at least four such meetings shall be held in every financial year (Section 285). Further, the Company shall convene one Annual General Meeting in each financial year within six months from the close of the financial year (Sections 166 and 210).

Audit observed that the Company since inception conducted only 10 Board Meetings (including three circular resolutions) (till March 2015) against minimum 32 meetings. The Company had conducted only one Annual General Meeting on 25 July 2009 since its incorporation.

Audit further observed that the Company had not conducted Annual General Meetings and failed to get the approval of the annual financial statements from the stake holders of the Company year after year.

3.3.2.10 Non-implementation of Board's decisions

The Board took important decisions viz., i) to take appropriate measures to identify and revive the inactive airports (July 2006) and ii) to develop heliports in all the districts headquarters (March 2008) to improve aviation sector in the State.

Audit observed that the Company had not taken any action to implement the decisions of the Board till date (June 2016) for reasons not on record.

3.3.2.11 Non-compliance with Statutory Auditors observations

The Statutory Auditors have repeatedly pointed out in their reports that the Company failed to maintain records showing full particulars, i.e., details and situation of the fixed assets, no stock records for stores and spares were maintained and all the purchases were debited to the revenue statement without reference to balance on hand.

However, the Company had not rectified the lapses and also not laid down the delegation of powers.

3.3.2.12 Non-implementation of directions of Andhra Pradesh State Public Enterprises Department

As per the directions (2002) of the Public Enterprises Department, Annual Action Plan and Perspective Plan were to be submitted by all State PSUs to the concerned Administrative Department.

Audit observed that the Company had not prepared Perspective Plan. This resulted in failure to achieve main objective of development of aviation sector in the State.

The Management in its reply stated (May 2016) that a consultant would be appointed to look into the issues relating to Board Meetings, Service Tax, Income Tax etc.

Andhra Pradesh Mineral Development Corporation Limited

3.4 Non-achievement of milestones on time led to payment of penalty to the tune of ₹ 1.57 crore and blocking up of ₹ 285.85 crore

Failure to adhere to the milestones of Government of India for commencement of production of coal resulted in avoidable payment of penalty of ₹ 1.57 crore and blocking up of ₹ 285.85 crore.

At the request (January 2007) of Andhra Pradesh Mineral Development Corporation Limited (Company), Ministry of Coal (MoC), Government of India (GoI) had allocated (July 2007) 'Suliyari-Belwar Coal Block' in Singrauli district of Madhya Pradesh for development of mineral-based industries and for generation of captive power. The allotment letter *inter-alia* stipulated various milestones to be achieved by the Company. In the event of lapses, if any, observed during the Annual Review, in achieving the milestones, a proportionate amount was to be encashed and deducted from the Bank Guarantee.

The due dates for achieving some of the important milestones were i) to apply for Prospecting Licence[34] (PL) within three months of allotment and purchase of Geological Report[35] (GR) within two years of issue of PL and ii) Mining Lease (ML) application was to be submitted within three months from procurement of GR to ensure earliest commencement of production.

The Company could not get the Prospecting Licence as it had failed to furnish the requisite interim GR, the plan showing the location and the features of the coal block, while submitting the application to Madhya Pradesh Government in October 2007. The Company, by virtue of its past association with Mineral Exploration Corporation Limited (MECL), was aware that MECL, a central PSU, could undertake exploration without obtaining a PL and by which the GR could be purchased. The Company entered into an agreement with MECL for exploration and also for purchase of GR, only in April 2010 i.e. after a delay of two and half years from July 2007 when the Coal Block was allotted. This delay in entering into agreement with MECL had resulted in delay in purchase of GR and consequent delay in submission of application for Mining Lease. The GR could be purchased from MECL only in October 2011 and Mining Lease (ML) application was submitted in October 2012.

Audit observed that the above delay in entering into agreement with MECL had a cascading effect and the Company failed to achieve the other milestones also. Ministry of Coal had issued three show cause notices (September 2009, October 2010 and June 2013) seeking explanation for the delays. Though the Company submitted the explanations, the same were rejected by Ministry of Coal and penalty of ₹ 1.57 crore was imposed and deducted (March 2014) from the Bank Guarantee submitted by it.

[34] A Prospecting Licence is a permit, issued by the State, which allows the licensee to prospect for minerals.

[35] Geological reports are concise, informative and well documented reports used to present, analyse and summarise field data for both industry and research purposes. They should be accompanied by geological maps, figures, stratigraphic columns, tables, graphs, etc.

The Company had deposited ₹ 285.85 crore with Government of Madhya Pradesh towards acquisition of land (till August 2014). In the meanwhile, the Hon'ble Supreme Court of India cancelled (September 2014) allotment of all coal blocks which had not commenced production. Consequently, the 'Suliyari-Belwar coal block' allotted to the Company was also cancelled as production had not commenced in this coal block. The amount deposited with Government of Madhya Pradesh had not been received back till date.

The Government of Andhra Pradesh in its reply (December 2016) stated that efforts were being made to get the refund ₹ 1.57 crore deducted as penalty, from MoC/GoI. However, there has been no response from the Government of India in this regard so far (December 2016). Regarding deposit of ₹ 285.85 crore made upto August 2014 for acquisition of land, the GoAP stated that it was live and efforts were being made to revive the process of acquisition of land.

The reply was not tenable as the MoC had clearly indicated in June 2009 itself that the Company should get Prospecting Licence etc., like any other parties and MoC was not concerned with the difficulties involved. Therefore, the chances of getting refund of penalty amount is remote. Despite deposit of ₹ 285.85 crore upto August 2014, the land has not been acquired till date.

Indira Gandhi Centre for Advanced Research on Livestock Private Limited

3.5 *Extension of undue benefit to the contractor to the tune of ₹ 9.44 crore*

Grant of extension of time to the Contractor in violation of the agreement resulted in payment of price escalation of ₹ 9.44 crore.

Government of Andhra Pradesh (GoAP) had decided to establish (January 2008) Indira Gandhi Centre for Advanced Research on Livestock (IGCARL) at Kadapa district in Andhra Pradesh and incorporated the same as a Company (November 2008).

A Memorandum of Understanding (MoU) was entered into (September 2007) by GoAP[36] with Andhra Pradesh Industrial Infrastructure Corporation Limited (APIICL) for construction of IGCARL building complex. APIICL, being the executing agency, was required to select the contractor for completion of the project by December 2008. APIICL awarded the work of "construction of IGCARL building complex and providing infrastructure facilities" to a Contractor (IVCRL). Accordingly, APIICL signed an agreement (March 2008) for ₹ 78.85 crore with the contractor for execution of the work for completion by September 2009 (18 months from agreement date).

As per the agreement, price adjustment in respect of cement, bitumen, steel,

[36] Officer of Special Duty, Special Secretary to Government, Government of Andhra Pradesh, Animal Husbandry, Dairy Development & Fisheries Department.

petrol, oil and lubricants (POL) was to be allowed if work was completed within the original agreement period only. The price adjustment was also allowed if extension was granted on valid grounds viz., land acquisition, shifting of utilities and natural calamities.

The Company had granted extension of time (September 2010) without assigning any reason and the contractor completed the work in September 2010.

In this regard audit observed that the contractor completed the work in September 2010 i.e., with a delay of 12 months. The Company paid ₹ 9.44 crore towards price escalation during the extension period of contract i.e., beyond the agreement period which is against the terms and conditions of the agreement.

The Management stated (September 2016) that extension of time was granted on account of change of drawings, strikes, bundhs, agitations and unprecedented rains which were beyond the control of the executing agency.

The analysis of disruption of work caused by above said reasons is not available in the records produced to audit. However, as per the agreement extension is permissible limited to the actual period of delay due to land acquisition, shifting of utilities and natural calamities.

Thus, granting extension of time in violation of the agreement conditions and subsequent payment of price escalation (₹ 9.44 crore) resulted in extension of undue benefit to the contractor.

STATUTORY CORPORATION

Andhra Pradesh State Warehousing Corporation

3.6 Non-adherence to the provisions of Income Tax Act resulted in avoidable payment of penalty and interest to the tune of ₹ 7.30 crore.

Failure of the company to assess its income tax properly resulted in payment of penalty and interest of ₹ 7.30 crore.

As per Section 208 of Income Tax Act, a Corporation, whose estimated tax liability for the Financial Year exceeds ₹ 10,000 or more, shall pay tax in advance in the form of 'advance tax' by 15 June (Up to 15 *per cent* of advance tax), by 15 September (up to 45 *per cent* of advance tax), by 15 December (up to 75 *per cent* of advance tax) and by 15 March (up to 100 *per cent* of advance tax) of every year.

As per the Income Tax Act, different types of interests / penalties are levied in respect of payment of advance tax, as detailed below:

(a) Section 234-A deals with delay in filing the 'Return of Income'. The delay in filing Return attracts penalty at the rate of one *per cent* per month/part of the month.

(b) Section 234-B deals with (i) short payment of advance tax (where the advance tax paid by the tax payer is less than 90 *per cent* of the assessed tax[37]) and (ii) non-payment (when the tax payer has failed to pay advance tax though is liable to pay the same). The above defaults attract interest at the rate of one *per cent* per month/part of the month.

(c) Section 234-C deals with default in payment of installment(s) of advance tax which attracts interest at the rate of one *per cent* per month/part of a month (simple interest) if the Corporation fails to pay the advance tax on or before 15 June (which is less than 12 *per cent* of advance tax payable), on or before 15 September (which is less than 36 *per cent* of advance tax payable), on or before 15 December (which is less than 75 *per cent* of advance tax payable), on or before 15 March (which is less than 100 *per cent* of advance tax payable).

Audit observed that due to failure to file the return on time and assess the estimated income properly in all the three years, the Corporation had to pay ₹ 7.30 crore towards interest and penalty under the various provisions of the Income Tax Act, as detailed in the table below.

Table: 3.2 Statement showing details of penalty and interest paid

Previous year	**Assessment year**	**Due date for filing original return**	**Actual date of filing original return**	**Amount paid (₹)**			
				Penalty	Interest	Interest	Total
				234 A	234 B	234 C	
2011-12	2012-13	30.09.2012	31.10.2012	27, 31, 267 (1 Month)	1,91,18,869 (7 months)	1,37, 92,897	3,56,43,033
2012-13	2013-14	30.09.2013 Extended up to 31.10.2013	30.09.2013	--	69,83,731 (24 months)	28,45,246	98,28,977
2013-14	2014-15	30.09.2014 Extended up to 30.11.2014	30.09.2014	--	1,89,84,660 (16 months)	85,02,846	2,74,87,506
				27,31,267	**4,50,87,260**	**2,51,40,989**	**7,29,59,516**

Source: Information furnished by the Company

The Corporation in its reply (June 2016) stated that the Food Corporation of India had revised (2011-12) the storage charges belatedly pertaining to earlier years which resulted in payment of interest on differential claims thereon.

[37] Assessed tax means amount of tax as determined under Section 143(1) and where regular assessment is made, the tax on total income as determined under regular assessment as reduced by tax deducted/collected at source, remit/ deduction claimed under various Sections like 90/90 A/91 and tax credit claimed under Sec 115JAA/115JD.

The reply was not tenable as the tax was payable on accrued income and the delay in receipt of income from FCI was not an acceptable reason. Further, the Corporation paid interest during 2012-13 and 2013-14 also for delayed payments / short payments, which indicate that the Corporation is irregular in tax compliance leading to avoidable payment of penalty and interest.

Hyderabad
The 13-02-2017

(LATA MALLIKARJUNA)
Accountant General
(Economic & Revenue Sector Audit)
Andhra Pradesh and Telangana

Countersigned

New Delhi
The 17-02-2017

(SHASHI KANT SHARMA)
Comptroller and Auditor General of India

ANNEXURES

Annexure 1.1 (a)

Statement showing investments made by State Government in PSUs (exclusive to State only*) whose accounts are in arrears.

(Referred to in paragraph 1.11)

(Figures in Columns 4 & 6 to 8 are ₹ in crore)

Sl. No.	Sector and name of Company	Year upto which account are finalised	Paid up Capital	Period of accounts pending finalisation	Investment made by State Government during the year of which accounts are in arrears		
					Equity	Loans	Grants
1	2	3	4	5	6	7	8
A.	**Working Government Companies**						
	AGRICULTURE AND ALLIED						
1	Andhra Pradesh Meat Development Corporation Limited	2013-14	6.87	2014-15	0.00	0.00	0.00
				2015-16	0.00	0.00	0.00
2	Indira Gandhi Centre for Advanced Research on Livestock Private Limited	2014-15	0.01	2015-16	0.00	0.00	0.00
	Sub Total		**6.88**		**0.00**	**0.00**	**0.00**
	MANUFACTURING						
3	Krishnapatnam International Leather Complex Private Limited.	2013-14	0.10	2014-15	0.00	0.00	0.00
				2015-16	0.00	0.00	0.00
4	Ongole Iron Ore Mining Company Private Limited	2012-13	0.11	2013-14	0.00	0.00	0.00
				2014-15	0.00	0.00	0.00
				2015-16	0.00	0.00	0.00
5	Andhra Pradesh Beverages Corporation Limited	2014-15	0.14	2015-16	0.00	0.00	0.00
6	Andhra Pradesh State Beverages Corporation Limited	first Accounts not submitted	0.05	2015-16	0.05	0.00	0.00
	Sub Total		**0.40**		**0.05**	0.00	0.00
	INFRASTRUCTURE						
7	Andhra Pradesh State Fibernet Limited	First Accounts not submitted	7.00	2015-16	7.00	54.84	75.00

Sl. No.	Sector and name of Company	Year upto which account are finalised	Paid up Capital	Period of accounts pending finalisation	Investment made by State Government during the year of which accounts are in arrears		
					Equity	Loans	Grants
1	2	3	4	5	6	7	8
8	Bhogapuram International Airport Corporation Limited	First Accounts not submitted	1.00	2015-16	1.00	0.00	1.00
9	Andhra Pradesh Gas Infrastructure Corporation (P) Limited	2014-15	50.00	2015-16	10.00	0.00	0.00
10	Amaravati Metro Rail Corporation Limited	First Accounts not submitted	5.00	2015-16	5.00	0.00	0.50
	Sub Total		**63.00**		**23.00**	**54.84**	**76.50**
	SERVICES						
11	Vijayawada Urban Transport Company Ltd.	First Accounts not submitted		2012-13	NA	NA	NA
				2013-14	NA	NA	NA
				2014-15	NA	NA	NA
			0.50	2015-16	NA	NA	NA
12	Vizag Apparel Park for Export Limited	2011-12	0.05	2012-13	0.00	0.00	0.00
				2013-14	0.00	0.00	0.00
				2014-15	0.00	0.00	0.00
				2015-16	0.00	0.00	0.00
	Sub Total		**0.55**		**0.00**	**0.00**	**0.00**
	MISCELLANEOUS						
13	Andhra Pradesh State Skill Development Corporation Limited	2014-15	7.36	2015-16	2.79	0.00	403.75
14	Andhra Pradesh Mahila Sadhikara Samstha	First Accounts not submitted	1.00	2014-15	0.00	0.00	0.00
				2015-16	0.00	0.00	0.00
15	Rythu Sadhikara Samstha	First Accounts not submitted	NA	2014-15	NA	NA	NA
			NA	2015-16	NA	NA	NA
16	Kakinada Smart City Corporation Limited	First Accounts not submitted	0.00	2015-16	0.00	0.00	0.00

Sl. No.	Sector and name of Company	Year upto which account are finalised	Paid up Capital	Period of accounts pending finalisation	Investment made by State Government during the year of which accounts are in arrears		
					Equity	Loans	Grants
1	2	3	4	5	6	7	8
17	Andhra Pradesh Urban Greening and Beautification Corporation Limited	First Accounts not submitted	0.25	2015-16	0.25	0.00	12.00
18	Swatch Andhra Corporation Limited	First Accounts not submitted	0.25	2014-15	0.25	0.00	100.00
				2015-16	0.25	0.00	82.50
	Sub Total		**8.86**		**3.54**	**0.00**	**598.25**
	Grand Total		**79.69**		**26.59**	**54.84**	**674.75**

* Including Andhra Pradesh Beverages Corporation Limited which has finalized its accounts after duly considering (demerger proposals) assets and liabilities of Andhra Pradesh State.

Annexure 1.1(b)

Statement showing investments made by State Government in PSUs (under demerger) whose accounts are in arrears

(Referred to in paragraph 1.11)

(Figures in Columns 4 & 6 to 8 are ₹ in crore)

Sl. No.	Sector and name of Company	Year upto which account are finalised	Paid up Capital	Period of accounts pending finalisation	Investment made by State Government during the year of which accounts are in arrears		
					Equity	Loans	Grants
1	2	3	4	5	6	7	8
A.	**Working Government Companies**						
	FINANCE						
1	Andhra Pradesh State Film, Television and Theatre Development Corporation Limited	2014-15	6.22	2015-16	0.00	0.00	2.62
	INFRASTRUCTURE						
2	Andhra Pradesh Rajiv Swagruha Corporation Limited	2013-14	0.05*	2014-15 2015-16	0.00	0.00	0.00
3	Infrastructure Corporation of Andhra Pradesh Limited	2014-15	30.12	2015-16	0.00	0.00	0.00
	POWER						
4	Andhra Pradesh Tribal Power Company Limited	First Accounts not submitted	0.25	2002-03	0.00	0.00	0.87
				2003-04	0.00	0.00	0.00
				2004-05	0.00	0.00	1.00
				2005-06	0.00	0.00	0.00
				2006-07	0.00	0.00	0.75
				2007-08	0.00	0.00	2.91
				2008-09	0.00	0.00	2.44
				2009-10	0.00	0.00	1.57
				2010-11	0.00	0.00	0.23
				2011-12	0.00	0.00	0.89
				2012-13	0.00	0.00	0.98
				2013-14	0.00	0.00	0.52
				2014-15	0.00	0.00	0.67
				2015-16	0.00	0.00	1.31
	Total		**36.64**		**0.00**	**0.00**	**16.76**

*Does not include Share application money in view of Companies Act 2013.

Annexure 1.1(c)

Statement showing investments made by State Government in PSUs (formed due to demerger*) whose accounts are in arrears

(Referred to in paragraph 1.11)

(Figures in Columns 4 & 6 to 8 are ₹ in crore)

Sl. No.	Sector and name of Company	Year upto which account are finalised	Paid up Capital	Period of accounts pending finalisation	Investment made by State Government during the year of which accounts are in arrears		
					Equity	Loans	Grants
1	2	3	4	5	6	7	8
A.	**Working Government Companies**						
	AGRICULTURE AND ALLIED						
1	Andhra Pradesh State Agro Industries Development Corporation Limited	2013-14	21.50	2014-15	0.00	0.00	0.00
				2015-16	0.00	0.00	0.00
2	Andhra Pradesh Forest Development Corporation Limited	2013-14	12.72	2014-15	0.00	0.00	0.00
				2015-16	0.00	0.00	0.00
3	Andhra Pradesh State Irrigation Development Corporation Limited	2013-14	133.81	2014-15	0.00	0.00	0.00
				2015-16	0.00	0.00	0.00
4	Andhra Pradesh State Seeds Development Corporation Limited	2014-15	2.76	2015-16	0.00	0.00	0.00
	Sub Total		**170.79**		**0.00**	**0.00**	**0.00**
	MANUFACTURING						
5	Leather Industries Development Corporation of Andhra Pradesh Limited	2013-14	2.27	2014-15	33.42	0.00	1.56
				2015-16	0.00	0.00	2.85
6	Andhra Pradesh Mineral Development Corporation Limited	2012-13	6.31	2013-14	0.00	0.00	0.00
				2014-15	0.00	15.00	0.00
				2015-16	0.00	0.00	0.00
	Sub Total		**8.58**		**33.42**	**15.00**	**4.41**
	POWER						
7	New & Renewable Energy Development Corporation of Andhra Pradesh	2013-14	0.22	2014-15	0.00	0.00	0.87
				2015-16	0.00	0.00	1.28
8	Andhra Pradesh Power Generation Corporation Limited	2013-14	1228.69	2014-15	0.00	0.00	0.00
				2015-16	0.00	0.00	0.00
9	Transmission Corporation of Andhra Pradesh Limited	2013-14	779.22	2014-15	0.00	0.00	0.00
				2015-16			
	Sub Total		**2008.13**		**0.00**	**0.00**	**2.15**

Sl. No.	Sector and name of Company	Year upto which account are finalised	Paid up Capital	Period of accounts pending finalisation	Investment made by State Government during the year of which accounts are in arrears		
					Equity	Loans	Grants
1	2	3	4	5	6	7	8
	FINANCE						
10	Andhra Pradesh Power Finance Corporation Limited	2014-15	16.91	2015-16	0.00	0.11	0.00
11	Andhra Pradesh Handicrafts Development Corporation Limited	2013-14	2.00	2014-15	0.00	0.00	0.37
				2015-16	0.00	0.00	1.48
12	Andhra Pradesh State Minorities Finance Corporation Limited	2012-13	5.00	2013-14	0.00	0.00	96.83
				2014-15	0.00	3.80	20.03
				2015-16	0.00	0.00	58.00
13	Andhra Pradesh State Christian Minorities Finance Corporation Limited	First Accounts not submitted		2009-10	0.00	0.00	199.73
				2010-11	0.00	0.00	8.00
				2011-12	0.00	0.00	17.15
				2012-13	0.00	0.00	8.23
				2013-14	0.00	0.00	11.75
				2014-15	0.00	0.00	0.17
				2015-16	0.00	0.00	16.50
	Sub Total		**23.91**		**0.00**	**3.91**	**438.24**
	INFRASTRUCTURE						
14	Andhra Pradesh State Police Housing Corporation Limited	2013-14	0.75	2014-15	0.00	0.00	0.00
				2015-16	0.00	0.00	0.00
15	Andhra Pradesh Industrial Development Corporation Limited	2013-14	96.23	2014-15	0.25	0.00	0.00
16	Andhra Pradesh Industrial Infrastructure Corporation Limited	2013-14	9.52	2014-15	0.00	0.00	0.00
				2015-16			0.00
17	Andhra Pradesh State Housing Corporation Limited	2009-10	0.25	2010-11	0.00	891.68	0.00
				2011-12	0.00	939.63	0.00
				2012-13	0.00	0.00	0.00
				2013-14	0.00	1128.01	0.00
				2014-15	0.00	429.12	0.00
				2015-16	0.00	287.66	0.00
18	Andhra Pradesh Urban Finance Infrastructure Development Corporation Limited	2013-14	0.15	2014-15	0.00	0.00	0.00
				2015-16	0.00	0.00	160.00

Sl. No.	Sector and name of Company	Year upto which account are finalised	Paid up Capital	Period of accounts pending finalisation	Investment made by State Government during the year of which accounts are in arrears		
					Equity	Loans	Grants
1	2	3	4	5	6	7	8
19	Andhra Pradesh Aviation Corporation Limited	Accounts not submitted since inception (2005-06)		2005-06	NA	NA	NA
				2006-07	NA	NA	NA
				2007-08	NA	NA	NA
				2008-09	NA	NA	NA
				2009-10	NA	NA	NA
				2010-11	NA	NA	NA
				2011-12	0.00	0.00	17.68
				2012-13	0.00	0.00	17.87
				2013-14	0.00	0.00	14.90
				2014-15	0.00	0.00	30.98
			0.25	2015-16	0.00	0.00	13.26
	Sub Total		**107.15**		**0.25**	**3676.10**	**254.69**
	SERVICES						
20	Andhra Pradesh State Civil Supplies Corporation Limited	2012-13	3.00	2013-14	0.00	0.00	0.00
				2014-15	0.00	0.00	0.00
				2015-16	0.00	0.00	0.00
21	Andhra Pradesh Trade Promotion Corporation Limited	2013-14	0.50	2014-15	0.00	0.00	0.19
				2015-16	0.00	0.00	0.00
22	Andhra Pradesh Technology Services Limited	2013-14	0.31	2014-15	0.00	0.00	0.00
				2015-16	0.00	0.00	0.00
23	Andhra Pradesh Tourism Development Corporation Limited	2013-14	2.19	2014-15	0.00	0.00	0.63
				2015-16	0.00	0.00	88.00
	Sub Total		**6.00**		**0.00**	**0.00**	**88.82**
	MISCELLANEOUS						
24	Overseas Manpower Company of Andhra Pradesh Limited	First Accounts not submitted (2015-16)	0.00	2015-16	0.00	0.00	0.00
	Sub Total		**0.00**		**0.00**	**0.00**	**0.00**
	WORKING CORPORATIONS						
	FINANCE						
25	Andhra Pradesh State Financial Corporation	2014-15	219.35	2015-16	0.00	0.00	0.00
	Sub Total		**219.35**		**0.00**	**0.00**	**0.00**

Sl. No.	Sector and name of Company	Year upto which account are finalised	Paid up Capital	Period of accounts pending finalisation	Investment made by State Government during the year of which accounts are in arrears		
					Equity	Loans	Grants
1	2	3	4	5	6	7	8
	AGRICULTURE						
26	Andhra Pradesh State Warehousing Corporation	2013-14	8.97	2014-15	0.00	0.00	0.00
				2015-16	0.00	0.00	0.00
	Sub Total		**8.97**		**0.00**	**0.00**	**0.00**
	SERVICES						
27	Andhra Pradesh State Road Transport Corporation	2013-14 Provisional	201.27	2014-15	0.00	13.21	0.00
				2015-16		249.18	118.00
	Sub Total		**201.27**		**0.00**	**262.39**	**118.00**
	Total		**2754.15**		**33.67**	**3957.40**	**906.31**

* Excluding Andhra Pradesh Beverages Corporation Limited which has finalized its accounts after duly considering (demerger proposals) assets and liabilities of Andhra Pradesh State

Annexure 1.2(a)

Summarised financial position and working results of PSUs (exclusive to State only*) as per their latest finalised financial statements/accounts

(Referred to in paragraph 1.15)

(Figures in Columns 5 to 12 are ₹ in crore)

Sl. No.	Sector / name of the Company	Period of accounts	Year in which accounts are 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 of return on capital employed	Manpower
1	2	3	4	5	6	7	8	9	10	11	12	13	14
	AGRICULTURE AND ALLIED												
1	Andhra Pradesh Meat Development Corporation Limited	2013-14	2014-15	6.87	0.00	-17.81	0.00	0.00	0.00	-8.13	0.00	0.00	0
2	Indira Gandhi Centre for Advanced Research on Livestock Private Limited	2013-14	2015-16	0.01	0.00	-0.18	0.00	-0.10	0.00	349.06	-0.10	-0.03	0
	Sub Total			**6.88**	0.00	**-17.99**	0.00	**-0.10**	0.00	**340.93**	**-0.10**		**0**
	INFRASTRUCTURE												
3	Andhra Pradesh Gas Infrastructure Corporation (P) Limited	2014-15	2015-16	40.00	0.00	-25.74	0.00	-21.32	0.00	14.26	-21.32	-149.51	0
4	Andhra Pradesh Gas Distribution Corporation Limited	2015-16	2016-17	30.00	1.05	-1.54	0.00	-0.57	0.00	37.01	-0.57	-1.93	4
5	Bhogapuram International Airport Corporation Limited.	First Accounts not submitted											
6	Andhra Pradesh State Fibernet Limited	First Accounts not submitted											

Sl. No.	Sector / name of the Company	Period of accounts	Year in which accounts are 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 of return on capital employed	Manpower
1	2	3	4	5	6	7	8	9	10	11	12	13	14
7	Kakinada Smart City Corporation Limited	First Accounts not submitted											
8	Amaravati Metro Rail Corporation Limited	First Accounts not submitted											
	Sub Total			**70.00**	**1.05**	**-27.28**	**0.00**	**-21.89**	**0.00**	**51.27**	**-21.89**		**4**
	MANUFACTURING												
9	Andhra Pradesh Heavy Machinery and Engineering Limited (S)	2015-16	2016-17	17.27	0.00	43.39	83.07	2.54	0.00	60.66	2.64	4.35	382
10	Krishnapatnam International Leather Complex Private Limited	2013-14	2016-17	0.10	0.00	-7.01	0.00	-0.28	0.00	3.08	-0.13	-4.22	11
11	Ongole Iron Ore Mining Company Private Limited	2012-13	2015-16	0.11	3.66	-0.09	0.00	-0.02	0.00	3.68	-0.02	-0.54	0
12	Andhra Pradesh Beverages Corporation Limited	2014-15 (2nd June to march 31st)	2015-16	0.14	0.00	9.6	116.05	-2.36	0.00	9.74	-2.36	-24.28	386
13	Andhra Pradesh State Beverages Corporation Limited	First Accounts not submitted											
	Sub Total			**17.62**	**3.66**	**45.89**	**199.12**	**-0.12**	0.00	**77.16**	**0.13**		**779**
	POWER												
14	Andhra Pradesh Power Development Company Limited	2014-15	2016-17	2068.28	8532.21	3.47	111.43	3.47	0.00	10630.29	842.37	7.92	72

Sl. No.	Sector / name of the Company	Period of accounts	Year in which accounts are 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 of return on capital employed	Manpower
1	2	3	4	5	6	7	8	9	10	11	12	13	14
15	Eastern Power Distribution Company of Andhra Pradesh Limited	2015-16	2016-17	121.23	4332.14	-1459.68	8433.21	-471.86	7.23	2993.69	-18.85	-0.63	7858
16	Southern Power Distribution Company of Andhra Pradesh Limited	2015-16	2016-17	358.72	7346.69	-9297.57	11910.76	-3427.34	43.32	-1592.16	-2602.63	-133.41	16609
17	Andhra Pradesh Solar Power Corporation Limited	2015-16	2016-17	0.10	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.00	
	Sub Total			**2548.33**	**20211.04**	**-10753.78**	**20455.40**	**-3895.73**	**50.55**	**12031.92**	**-1779.12**		**24539**
	SERVICES												
18	Vizag Apparel Park for Export Limited	2011-12	2015-16	0.05	0.00	-0.15	0.00	0.11	0.00	0.22	0.11	50.00	
19	Vijayawada Urban Transport Company Limited	First Accounts not submitted											
20	Visakhapatnam Urban Transport Company Limited	2015-16	2016-17	0.05	0.00	-0.02	0.00	-0.0036	0.00	0.02	-0.0036	-25.00	0
	Sub Total			**0.10**	**0.00**	**-0.17**	**0.00**	**0.1064**	**0.00**	**0.24**	**0.1064**		**0**
	MISCELLANEOUS												
21	Andhra Pradesh State Skill Development Corporation	2014-15	2015-16	2.11	0.55	-0.96	0.35	-0.96	0	1.15	-0.83	-72.59	56
22	Rythu Sadhikara Samstha	First Accounts not submitted											
23	Andhra Pradesh Mahila Sadhikara Samstha	First Accounts not submitted											

Sl. No.	Sector / name of the Company	Period of accounts	Year in which accounts are 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 of return on capital employed	Manpower
1	2	3	4	5	6	7	8	9	10	11	12	13	14
24	Swacha Andhra Corporation Limited	First Accounts not submitted											19
25	Andhra Pradesh Urban Greening and Beautification Corporation Limited	First Accounts not submitted											
	Sub Total			**2.11**	**0.55**	**-0.96**	**0.35**	**-0.96**	**0**	**1.15**	**-0.83**		**75**
	Grand Total			**2645.04**	**20216.30**	**-10754.29**	**20654.87**	**-3918.69**	**50.55**	**12502.67**	**-1801.70**		**25397**

* Including Andhra Pradesh Beverages Corporation Limited which has finalized its accounts after duly considering (demerger proposals) assets and liabilities of Andhra Pradesh State.

Annexure 1.2(b)

Summarised financial position and working results of PSUs (under demerger) as per their latest finalised financial statements/accounts

(Referred to in paragraph 1.15)

(Figures in Columns 5 to 12 are ₹ in crore)

Sl. No	Sector / name of the Company	Period of accounts	Year in which accounts are 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 of return on capital employed	Manpower
1	2	3	4	5	6	7	8	9	10	11	12	13	14
A.	WORKING COMPANIES												
1	Andhra Pradesh State Film, Television and Theatre Development Corporation Limited	2014-15	2015-16	6.22	0.10	2.10	5.63	0.20	1.01	8.42	0.02	0.28	25
2	Andhra Pradesh Rajiv Swagruha Corporation Limited (No profit/loss)	2013-14	2014-15	0.05	0.00	9.30	41.71	-45.78	Accounts under finalisation	9.35	-9.77	-104.49	166
3	The Nizam Sugars Limited.	2015-16	2016-17	34.00	55.95	-241.24	0.00	0.24	0.00	-149.67	7.14	-4.77	
	MISCELLANEOUS												
4	Andhra Pradesh Tribal Power Company Limited	First Accounts not submitted											5
	INFRASTRUCTURE												
5	Infrastructure Corporation of Andhra Pradesh Limited	2014-15	2015-16	30.12	0.00	-3.82	0.26	-1.55	0.00	26.30	-1.55	-5.89	60
	Grand Total A			**70.39**	**56.05**	**-233.66**	**47.60**	**-46.89**	**1.01**	**-105.60**	**-4.16**		**256**
B.	**NON-WORKING COMPANIES**												
	AGRICULTURE AND ALLIED												
1	Andhra Pradesh Fisheries Corporation Limited	1.4.02 to 9.5.02		4.67	8.67	-21.75	0.00	0.00	0.00	-7.24	0.00	0.00	
2	Proddutur Milk Foods Limited	1983-84	1990-91	1.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8

Sl. No	Sector / name of the Company	Period of accounts	Year in which accounts are 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 of return on capital employed	Manpower
1	2	3	4	5	6	7	8	9	10	11	12	13	14
3	Andhra Pradesh Dairy Development Corporation Limited	2013-14 (14 M)	2014-15	15	0.00	-5.24	0.00	0.00	0.00	9.76	0.00	0.00	
	FINANCING												
4	A.P Small Scale Industrial Development Corporation Limited	2001-02	2003-04	9.62	13.92	-20.03	0.02	2.18	0.00	2.93	2.18	74.4	
5	Andhra Pradesh Tourism Finance Limited	2002-03	2004-05	2.00	0.00	0.07	0.11	0.11	0.00	2.05	0.11	5.37	
	MANUFACTURING												
6	Allwyn Auto Limited	1994-95		0.15	14.45	-13.54	0.00	-6.46	0.00	-2.97	-6.46	217.51	
7	Allwyn Watches Limited	1998-99	2002-03	0.15	64.93	-248.70	13.00	-70.69	0.00	95.75	-70.69	-73.83	
8	Andhra Pradesh Electronics Development Corporation Limited	2002-03	2006-07	12.72	0.68	-10.74	0.00	-0.75	0.00	3.68	-0.75	-20.38	
9	Andhra Pradesh Scooters Limited	1992-93	1993-94	11.11	11.19	-34.49	0.00	-3.70	0.00	-3.79	-3.70	97.63	
10	Andhra Pradesh Steels Limited (S)	1991-92	1993-94	2.03	2.12	-6.51	0.00	-2.09	0.00	-2.51	-2.09	83.27	
11	Aptronix Communications Limited (S)			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
12	Hyderabad Chemicals and Fertilizers Limited (S)	1984-85	1986-87	0.78	8.25	-0.63	0.00	0.62	0.00	-1.34	0.62	-46.27	
13	Marine and Communication Electronics (India) Limited (S)	1992-93	1994-95	1.89	4.77	-4.21	0.00	-4.70	0.00	7.23	-4.70	-65.01	
14	Republic Forge Company Limited	1991-92	1993-94	7.77	54.77	-23.41	0.00	-3.24	0.00	8.82	-3.24	-36.73	
15	Southern Transformers and Electricals Limited(S)	1993-94	1996-97	0.58	0.78	-5.78	0.00	-0.57	0.00	-1.45	-0.57	39.31	
16	Andhra Pradesh Automobile Tyres & Tubes Limited	1992-93	NA	0.75	0.00	-0.77	0.00	0.00	0.00	0.00	0.00	0.00	

Sl. No	Sector / name of the Company	Period of accounts	Year in which accounts are 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 of return on capital employed	Manpower
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**
17	Golkonda Abrasives Limited	1997-98	NA	0.55	0.00	-7.44	0.00	-0.01	0.00	0.00	-0.01	0.00	
18	Krishi Engineering Limited	1984-85	NA	0.52	0.00	-3.54	0.00	-0.52	0.00	0.00	-0.52	0.00	
19	PJ Chemicals Limited	1989-90	NA	0.38	0.00	-3.56	0.00	-0.51	0.00	0.00	-0.51	0.00	
20	Suganthy Alloy castings Limited	1983-84	NA	0.20	0.00	-0.26	0.00	-0.16	0.00	0.00	-0.16	0.00	
21	Vidyut Steels Limited	1985-86	NA	0.88	0.00	-1.55	0.00	-0.40	0.00	0.00	-0.40	0.00	
	SERVICE												
22	Andhra Pradesh Essential Commodities Corporation Limited	2012-13	2015-16	1.13	0.00	9.49	0.00	-0.03	0.00	10.62	0.00	-0.027	0
	Grand Total B			**74.84**	**184.53**	**-402.59**	**13.13**	**-90.92**	**0.00**	**121.54**	**-90.89**		**8**
	TOTAL A+B			**145.23**	**240.58**	**-636.25**	**60.73**	**-137.81**	**1.01**	**15.94**	**-95.05**		**264**

Annexure 1.2 (c)

Summarised financial position and working results of PSUs (formed due to demerger*) as per their latest finalised financial statements/accounts

(Referred to in paragraph 1.15)

(Figures in Columns 5 to 12 are ₹ in crore)

Sl. No	Sector / Name of the Company	Period of accounts	Year in which accounts are 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 of return on capital employed	Manpower
	2	3	4	5	6	7	8	9	10	11	12	13	14
	AGRICULTURE AND ALLIED												
1	Andhra Pradesh State Agro Industries Development Corporation Limited	2013-14	2015-16	21.50	47.93	-12.84	27.55	-6.07	0.22	111.77	-4.40	-3.94	179
2	Andhra Pradesh Forest Development Corporation Limited	2013-14	2014-15	21.82	20.61	288.10	240.33	176.8	-6.11	455.4	182.25	40.02	392
3	Andhra Pradesh State Irrigation Development Corporation Limited	2013-14 (14M)	2014-15	133.81	48.08	-53.28	62.17	24.83	0.00	128.61	30.27	23.54	209
4	Andhra Pradesh State Seeds Development Corporation Limited	2014-15 (2/6 to 31/3)	2015-16	2.76	133.62	2.81	46.49	1.58	-2.67	221.9	1.58	0.71	199
	Sub Total			**179.89**	**250.24**	**224.79**	**376.54**	**197.14**	**-8.56**	**917.68**	**209.70**		**979**
	FINANCE												
5	Andhra Pradesh State Minorities Finance Corporation Limited	2012-13	2015-16	5.00	9.63	-50.32	4.66	-22.85	0.00	99.16	-0.23	-0.23	0
6	Andhra Pradesh Handicrafts Development Corporation Limited	2013-14	2015-16	2.00	0.49	12.41	78.23	2.14	0.00	24.49	2.14	8.74	111

Sl. No	Sector / Name of the Company	Period of accounts	Year in which accounts are 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 of return on capital employed	Manpower
	2	3	4	5	6	7	8	9	10	11	12	13	14
7	Andhra Pradesh State Christian Minorities Finance Corporation Limited	First Accounts not submitted											35
8	Andhra Pradesh Power Finance Corporation Limited	2014-15	2016-17	16.91	2144.39	0.00	222.40	0.00	0.00	2161.30	222.23	10.28	
	Sub Total			**23.91**	**2154.51**	**-37.91**	**305.29**	**-20.71**	**0.00**	**2284.95**	**224.14**		**146**
	INFRASTRUCTURE												
9	Andhra Pradesh State Police Housing Corporation Limited	2013-14 (14 M)	2015-16	1.81	0.00	0.01	190.92	0.00	Accounts under finalisation	1.82	0.00	0.00	173
10	Andhra Pradesh Industrial Development Corporation Limited	2013-14	2015-16	96.23	8.06	0.00	13.80	8.10	-14.38	183.95	8.33	4.53	57
11	Andhra Pradesh Industrial Infrastructure Corporation Ltd.	2013-14	2014-15	16.33	341.98	500.26	1213.75	28.31	0.00	871.57	28.31	3.25	166
12	Andhra Pradesh State Housing Corporation Limited.	2009-10	2013-14	0.25	12011.88	-4213.86	68.26	-661.98	0.00	7798.52	-63.55	-0.81	5765
13	Andhra Pradesh Urban Finance and Infrastructure Development Corporation Limited	2013-14 (14 M)	2015-16	0.15	0.00	-0.09	0.00	-0.05	0.00	0.06	-0.05	-83.33	40
14	Andhra Pradesh Aviation Corporation Limited	First Accounts not submitted since 2005-06											
	Sub Total			**114.77**	**12361.92**	**-3713.68**	**1486.73**	**-625.62**	**-14.38**	**8855.92**	**-26.96**		**6201**

Sl. No	Sector / Name of the Company	Period of accounts	Year in which accounts are 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 of return on capital employed	Manpower
	2	3	4	5	6	7	8	9	10	11	12	13	14
	MANUFACTURING												
15	Andhra Pradesh Mineral Development Corporation Limited	2012-13	2014-15	6.31	15.00	617.63	595.4	324.78	-68.04	752.32	327.02	43.47	177
16	Leather Industries Development Corporation of Andhra Pradesh Limited	2013-14	2015-16	3.90	26.93	-81.75	0.01	-8.67	-1.42	-14.43	-7.55	52.32	58
	Sub Total			**10.21**	**41.93**	**535.88**	**595.41**	**316.11**	**-69.46**	**737.89**	**319.47**		**235**
	POWER												
17	New & Renewable Energy Development Corporation of Andhra Pradesh	2013-14 (14M)	2015-16	0.22	0.00	32.13	52.87	12.10	-0.03	32.39	12.35	38.13	79
18	Andhra Pradesh Power Generation Corporation Limited	2013-14	2014-15	2106.8	10818.78	1880.97	13862.6	555.76	0.00	15373.18	2536.52	16.50	5934
19	Transmission Corporation of Andhra Pradesh Limited	2013-14	2014-15	779.22	7.45	102.77	1332.4	102.77	16.6	786.66	489.96	62.28	4016
	Sub Total			**2886.24**	**10826.23**	**2015.87**	**15247.87**	**670.63**	**16.57**	**16192.2**	**3038.83**		**10029**
	SERVICES												
20	Andhra Pradesh State Civil Supplies Corporation Limited	2012-13	2015-16	3.00	48.25	157.95	7614.66	13.40	6.23	212.20	0.06	0.03	372
21	Andhra Pradesh Trade Promotion Corporation Limited	2013-14	2014-15	0.86	0.00	71.02	35.9	2.95	-8.32	94.86	2.98	3.14	9
22	Andhra Pradesh Technology Services Limited	2014-15	2016-17	0.31	0.00	56.06	9.78	7.49	0	58.17	13.4	26.39	107
23	Andhra Pradesh Tourism Development Corporation Limited	2013-14	2015-16	3.55	9.79	16.00	145.06	-6.43	150.49	29.54	-0.22	-0.74	1147
	Sub Total			**7.72**	**58.04**	**301.03**	**7805.40**	**17.41**	**148.40**	**394.77**	**16.22**		**1635**

Sl. No	Sector / Name of the Company	Period of accounts	Year in which accounts are 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 of return on capital employed	Manpower
	2	3	4	5	6	7	8	9	10	11	12	13	14
	MISCELLANEOUS												
24	Overseas Manpower Company of Andhra Pradesh Limited	2013-14	2015-16	0.05	0.00	0.25	0.22	0.04	-0.24	0.46	0.04	8.7	3
	Sub Total			**0.05**	**0.00**	**0.25**	**0.22**	**0.04**	**-0.24**	**0.46**	**0.04**		**3**
	WORKING CORPORATIONS												
	FINANCE												
25	Andhra Pradesh State Financial Corporation	2014-15	2015-16	206.01	2315.21	165.57	437.26	38.53	0.00	3058.28	282.39	9.23	363
	Sub Total			**206.01**	**2315.21**	**165.57**	**437.26**	**38.53**	**0.00**	**3058.28**	**282.39**	**3**	**363**
	AGRICULTURE												
26	Andhra Pradesh State Warehousing Corporation	2013-14	2015-16	8.97	2.13	330.21	298.88	122.83	-4.72	359.03	123.09	34.28	237
	Sub Total			**8.97**	**2.13**	**330.21**	**298.88**	**122.83**	**-4.72**	**359.03**	**123.09**		**237**
	SERVICES												
27	Andhra Pradesh State Road Transport Corporation	2013-14	2015-16	201.27	4620.99	-3805.08	7727.55	-1155.27	0.00	11516.92	1605.41	13.94	61806
	Sub Total			**201.27**	**4620.99**	**-3805.08**	**7727.55**	**-1155.27**	**0.00**	**11516.92**	**1605.41**		**61806**
	Total of Corporation			**416.25**	**6938.33**	**-3309.30**	**8463.69**	**-993.91**	**-4.72**	**14934.23**	**2010.89**		**62406**
	Grand Total			**3639.04**	**32631.2**	**-3983.17**	**34281.15**	**-438.91**	**67.61**	**44318.13**	**5792.33**		**81634**
	Excluding Corporations			**3222.79**	**25692.87**	**-673.77**	**25817.46**	**555.00**	**72.33**	**29383.90**	**3781.44**		**19228**

* Excluding Andhra Pradesh Beverages Corporation Limited which has finalized its accounts after duly considering (demerger proposals) assets and liabilities of Andhra Pradesh State.

Annexure-2.1

Statement showing station-wise installed capacity, actual generation and their cost during the period 2011-12 to 2015-16

(Referred to in paragraph 2.1)

Name of the Unit	Installed Capacity (MW)	Generation Capacity (MU)	Actual Generation (MU)				
			2011-12	2012-13	2013-14	2014-15	2015-16
Dr.NTTPS-Stage-I (210 x2)	420	3,127.32	3,285.84	2,964.64	2,745.68	2,978.02	2,911.24
Dr.NTTPS-Stage-II (210 x2)	420	3,127.32	3,437.43	3,427.82	3,165.98	3,064.77	3,178.55
Dr.NTTPS-Stage-III (210 x 2)	420	3,127.32	3,314.82	3,274.00	3,140.74	3,043.28	2,968.91
Dr.NTTPS-Stage-IV (500 x1)	500	3,723.00	4,121.19	3,744.05	3,781.02	3,618.78	3,007.53
RTPP-Stage-I (210 x 2)	420	3,127.32	3,254.26	2,918.97	2,624.35	2,759.27	2,910.50
RTPP-Stage-II (210 x 2)	420	3,127.32	3,315.00	3,281.09	3,009.59	2,984.79	2,954.90
RTPP-Stage-III (210 x 1)	210	1,563.66	1,506.51	1,492.55	1,422.75	1,419.46	1,427.29
Total	**2,810**	**20,923.26**	**22,235.05**	**21,103.12**	**19,890.11**	**19,868.37**	**19,358.92**

Thermal Power Plant	Particulars	2011-12	2012-13	2013-14	2014-15*	2015-16*
Total APGENCO	Generation of power (MU)	22,235.05	21,103.12	19,890.11	19,868.37	19,358.92
	Fixed cost per unit (₹)	0.79	0.85	0.99	1.21	1.42
	Variable cost per unit (₹)	2.15	2.48	2.65	2.89	2.92
	Total cost per unit (₹)	2.94	3.33	3.64	4.10	4.34

***2014-15 and 2015-16 cost details are provisional**

Annexure-2.2

The category wise details of installed capacity and actual generation of power in APGENCO during the period from 2011-12 to 2015-16

(Referred to in paragraph 2.1)

Particulars	**2011-12**	**2012-13**	**2013-14**	**2014-15**	**2015-16**
Installed capacity (MW)					
Thermal	2,810.0	2,810.0	2,810.0	2,810.0	2,810.0
Hydel	1,747.6	1,747.6	1,747.6	1,747.6	1,747.6
Wind Mills	2.0	2.0	2.0	2.0	2.0
Total installed capacity (MW)	**4,559.6**	**4,559.6**	**4,559.6**	**4,559.6**	**4,559.6**
% of thermal capacity to total installed capacity	61.63	61.63	61.63	61.63	61.63
Generation (MU)					
Thermal	22,235	21,103	19,890	19,868	19,359
Hydel	3,361	2,491	4,004	3,750	2,471
Wind Mills	-	-	-	-	-
Total Generation (MU)	**25,596**	**23,594**	**23,894**	**23,618**	**21,830**
% of thermal capacity to total generation	86.87	89.44	83.24	84.12	88.68

Total generation (Thermal) during the last five years – 1,02,455 MU (86 *per cent*)

Total generation during the last five years – 1,18,532 MU (100 *per cent*)

Annexure 3.1

Excess consumption of 'Auxiliary Power' against APERC Norm

(Referred to in paragraph 3.1.2.13)

Unit-No.	Financial year	Actual Generation in (MU)	Auxiliary Consumption		As per APERC norms (%)	Auxiliary consumption in unit as per APERC norms	Excess consumption in MU	Cost of Generation per Unit	Excess consumption (₹ in crore)
			Total No. of Units (MU)	Percentage (%)					
Unit-1	2014-15	1276.2	157.19	12.32	6.00	76.57	80.62	5.1	41.11
Unit-2	2014-15	367.695	38.8	10.55	6.00	22.06	16.74	5.1	8.54
Unit-1	2015-16	3,046.69	251.08	8.24	6.00	182.80	68.28	5.1	34.82
Unit-2	2015-16	1,936.79	179.932	9.29	6.00	116.21	63.72	5.1	32.50
								Total	***116.97***

GLOSSARY

Glossary

ACQ	Annual Contracted Quantity
ADB	Asian Development Bank
AG	Accountant General
APEPDCL	Eastern Power Distribution Company of Andhra Pradesh Limited
APERC	Andhra Pradesh Electricity Regulatory Commission
APGENCO	Andhra Pradesh Power Generation Corporation Limited
APIIC	Andhra Pradesh Industrial Infrastructure Corporation Limited
APITCO	Andhra Pradesh Industrial Technological Consultancy Organisation
APPCB	Andhra Pradesh Pollution Control Board
APPDCL	Andhra Pradesh Power Development Company Limited
APSPDCL	Southern Power Distribution Company of Andhra Pradesh Limited
ARR	All Rail Route
ATNs	Action Taken Notes
BHEL	Bharat Heavy Electrical Limited
BOP	Balance of Plant
CAG	Comptroller and Auditor General of India
CEA	Central Electricity Authority
CERC	Central Electricity Regulatory Commission
CHPs	Coal Handling Plants
COD	Commercial Operation Date
COPU	Committee on Public Undertakings
CPCB	Central Pollution Control Board
CPRI	Central Power Research Institute
CVC	Central Vigilance Commission
DISCOMs	Distribution Companies
DPR	Detailed Project Report
Dr.NTTPS	Dr. Narla Tata Rao Thermal Power Station
E&S	Execution & Supervision
ECCS	External Coal Conveying System
ESPs	Electrostatic Precipitators
FCI	Food Corporation of India
FDRs	Fixed Deposits Receipts
FoR	Free on Rail or Road
FSA	Fuel Supply Agreement
GCV	Gross Calorific Value
GDP	Gross Domestic Product
GoAP	Government of Andhra Pradesh

GR	Geological Report
HPCL	Hindustan Petroleum Corporation Ltd.
HT	High Tension
ICB	International Competitive bidding
IDC	Interest During Construction
IGCARL	Indira Gandhi Centre for Advance Research on Livestock Private Limited
IOCL	Indian Oil Corporation Ltd.
IVCRL	Iragavarapu Venkata Reddy Construction Limited
KTPS	Kothagudem Thermal Power Station
LD	Liquidity Damages
LMT	Lakh Metric Tonne.
LoI	Letter of Intent
LT	Low Tension
MCL	Mahanadi Coalfields Limited
MECL	Mineral Exploration Corporation Limited
ML	Mining Lease
MMTC	Metals and Minerals Trading Corporation
MoC	Ministry of Coal
MoEF	Ministry of Environment and Forest
MoU	Memorandum of Understanding
MSTC	Metal Scrap Trading Corporation Limited
MT	Metric Tonne
MTPA	Million Ton Per Annum
MW	Mega Watt
OSS	Operation Support System
PAF	Plant Availability Factor
PEC	Projects & Equilibrium Corporation Ltd.
PFC	Power Finance Corporation
PL	Prospecting License
PLF	Plant Load Factor
POL	Petrol, Oil and Lubricants
PSUs	Public Sector Undertakings
RSR	Rail-Cum-Sea-Cum-Rail
RTPP	Rayalaseema Thermal Power Station
SAR	Separate Audit Report
SAS	Saras Aviation Service
SCCL	The Singareni Collieries Company Limited.
SCPL	Spectrum Coal & Power Limited
SDSTPS	Sri Damodaram Sanjeevaiah Thermal Power Station
SHR	Station Heat Rate
SLC	Standing Linkage Committee
SPM	Suspended Particulate Matter

SPV	Special Purpose Vehicle
TANGEDCO	Tamil Nadu Power Generation Distribution Corporation Limited
TG	Turbine Generator
TPL	Tata Projects Limited
TPSs	Thermal Power Stations
USD	US Dollar
VIPs	Very Important Persons
WG-G9	Washery Grade – Grade 9