Functioning
of
Power Sector PSUs

PART I

Chapter I

Functioning of Power Sector PSUs

1. Introduction

1.1 The power sector companies play an important role in the economy of the State. Apart from providing critical infrastructure required for development of the State's economy, the sector also adds significantly to the Gross State Domestic Product (GSDP). A ratio of PSUs-turnover to GSDP shows the extent of PSUs-activities in the State economy. Audit analysed the turnover of power sector PSUs *vis-a-vis* the GSDP during 2013-14 to 2017-18. ***Table 1.1*** provides the details of turnover of three PSUs against the GSDP for the five years ending 2017-18.

Table 1.1: Details of power sector PSUs turnover *vis-a-vis* GSDP

(₹in crore)

Particulars	2013-14	2014-15	2015-16	2016-17	2017-18
Turnover[1]	3,297.92	3,671.56	4,332.42	4,900.03	5,899.50
Gross State Domestic Product	1,77,745	1,95,723	2,27,959	2,54,341[2]	2,83,821[3]
Percentage of Turnover to GSDP	1.86	1.88	1.90	1.93	2.08

Source: Financial Statements received from PSUs and the information provided by the Directorate of Economic & Statistics, GoA.

As can be seen from the ***Table 1.1***, the turnover of the three PSUs had increased consistently during five years from ₹ 3,297.92 crore (2013-14) to ₹ 5,899.50 crore (2017-18) and registered an overall increase of 78.89 *per cent* in their turnover during the said period. This was mainly due to increase of ₹ 1,727.20 crore (65.37 *per cent*) in the billed revenue of State Power Distribution utility[4] from ₹ 2,642.15 crore (2013-14) to ₹ 4,369.35 crore (2017-18) on account of several factors like, increase in consumer base, periodic tariff revision, improved billing efficiency, *etc*. The increase in PSUs turnover (78.89 *per cent*) was encouraging as compared to the growth rate (59.68 *per cent*) of GSDP during the said period (2013-18). This had correspondingly increased the contribution of PSUs turnover to GSDP from 1.86 *per cent* (2013-14) to 2.08 *per cent* (2017-18).

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[1] Turnover as per the latest finalised accounts as on 30 September of the respective year.
[2] Provisional estimates of GSDP.
[3] Quick estimates of GSDP
[4] Assam Power Distribution Company Limited

1.2 Formation of power sector PSUs

The Electricity Act, 2003 enacted by the Government of India (GoI) provides a framework conducive to development of the power sector; promote transparency and competition and protect the interest of the consumers. As part of power sector reforms, the erstwhile Assam State Electricity Board (ASEB) was unbundled (October 2003) by Government of Assam (GoA) into five successor PSUs[5] meant to take up the Generation (Assam Power Generation Corporation Limited), Transmission (Assam Electricity Grid Corporation Limited) and Distribution (Lower Assam Electricity Distribution Company Limited, Central Assam Electricity Distribution Company Limited and Upper Assam Electricity Distribution Company Limited) activities. Subsequently, the three Distribution PSUs were merged into one Company (*with effect from* 1 April 2009) which was renamed as Assam Power Distribution Company Limited. Assam Electricity Regulatory Commission (AERC) was the regulatory body that regulated the activities of the PSUs relating to purchase, sale and supply of power in the State and also fixed the tariff for generation, transmission and distribution of electricity in the State.

Disinvestment, restructuring and privatisation of power sector PSUs

1.3 During the year 2017-18, no disinvestment, restructuring or privatization was done by the GoA in the power sector.

Investment in power sector PSUs

1.4 The activity-wise summary of investment in the PSUs as on 31 March 2018 is given in ***Table 1.2*** below:

Table 1.2: Activity-wise investment in power sector PSUs

Activity	Number of PSUs	Investment (₹ in crore)		
		Equity	Long term loans	Total
Generation of Power	1	455.86	965.54	1,421.40
Transmission of Power	1	99.93	567.38	667.31
Distribution of Power	1	251.45	2,335.96	2,587.41
Total	**3**	**807.24**	**3,868.88**	**4,676.12**

Source: Compiled based on information received from PSUs.

As per the information furnished by the three PSUs, the total investment[6] as on 31 March 2018 was ₹ 4,676.12 crore, which included the investment of GoA (₹ 3,584.07 crore) and Others[7] (₹ 1,092.05 crore). The investment was made by

5 Though the three PSUs were formally incorporated on 23 October 2003, these PSUs started functioning from 2005-06 when they prepared their first Annual Accounts.

6 Investment represents paid-up capital *plus* long-term loans

7 Asian Development Bank and Power Finance Corporation Limited.

the GoA (equity: ₹ 807.24 crore and long-term loans: ₹ 2,776.83 crore) and Others (Long-term loans: ₹ 1,092.05 crore). The investment of GoA had grown by 101.53 *per cent* from ₹ 1,778.47 crore in 2013-14 to ₹ 3,584.07 crore in 2017-18.

The leap in the investment of power sector PSUs was mainly on account of net addition of ₹ 1,805.60 crore (185.91 *per cent*) in the long-term borrowings of three PSUs during last five years from ₹ 971.23 crore (2013-14) to ₹ 2,776.83 crore (2017-18). The said loan funding was provided by GoA with the aim to implement several infrastructure development projects and schemes such as, Re-structured Accelerated Power Development and Reforms Programme, *etc*.

Budgetary support to power sector PSUs

1.5 The Government of Assam (GoA) provided financial support to the three PSUs in various forms through the annual budget. The details of year-wise budgetary outgo towards equity, loans and grants in respect of three PSUs for the five years ending March 2018 are given in ***Table 1.3***.

Table 1.3: Year-wise budgetary support by GoA to power sector PSUs

(₹ in crore)

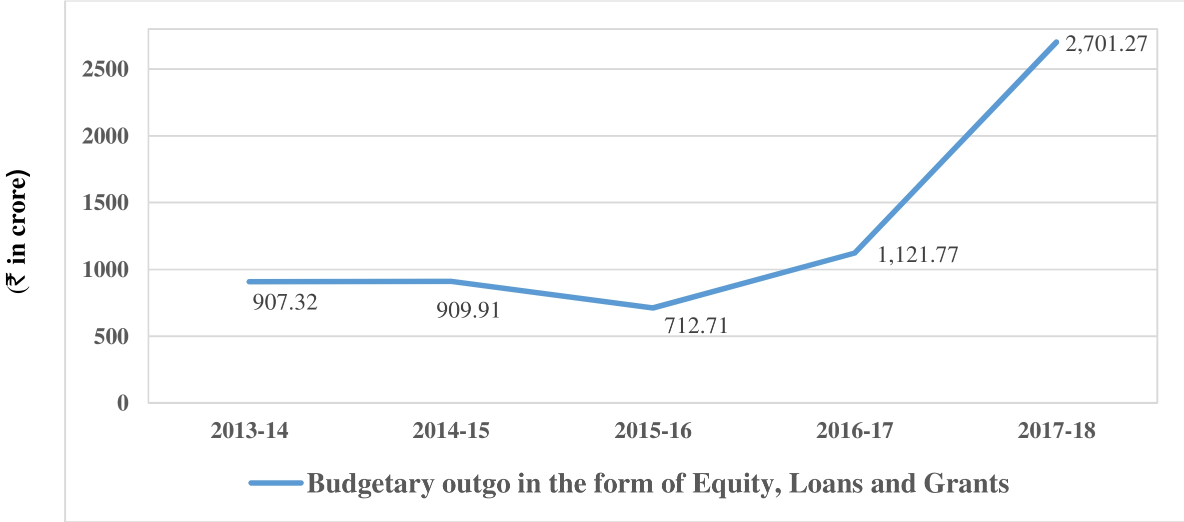
Sl. No.	Particulars	2013-14		2014-15		2015-16		2016-17		2017-18	
		No. of PSUs	Amount	No. of PSUs	Amount	No. of PSUs	Amount	No. of PSUs	Amount	No. of PSUs	Amount
1.	Equity outgo from budget	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
2.	Loans given from budget	3	237.38	3	577.12	3	275.52	3	192.40	3	424.29
3.	Grants/Subsidy from budget	3	669.94	1	332.79	2	437.19	3	929.37	2	2,276.98
4.	**Total Outgo**[8]	**3**	**907.32**	**3**	**909.91**	**3**	**712.71**	**3**	**1,121.77**	**3**	**2,701.27**
5.	Guarantee commitment	0	0.00	0	0.00	2	1,497.84	2	1,497.84	2	1,497.84
6.	Guarantee issued	0	0.00	0	0.00	1	47.97	1	39.63	1	31.29

Source: Information furnished by the PSUs

The graphical presentation of the budgetary outgo towards equity, loans and grants to three PSUs during past five years has been given in ***Chart 1.1.***

[8] Actual number of PSUs which received equity, loans, grants/subsidies from the State Government

Chart 1.1: Year-wise budgetary outgo of GoA to power sector PSUs



As can be noticed from ***Chart 1.1***, the year-wise budgetary outgo to three PSUs in the form of equity, loans, grants, *etc*. had shown an increasing trend after 2015-16. The budgetary support provided during the year 2017-18 (₹ 2,701.27 crore) was significantly higher than that provided during 2015-16 (by 279 *per cent*) and 2016-17 (by 141 *per cent*).

Ministry of Power (MoP), Government of India launched (20 November 2015) Ujwal DISCOM Assurance Yojana (UDAY) for operational and financial turnaround of State owned Power Distribution Companies (DISCOMs). As per the Memorandum of Understanding (MoU) entered into (4 January 2017) between GoI, GoA and the State power distribution company (APDCL[9]) under the UDAY, GoA had committed to provide necessary funding to APDCL in the form of equity and grants to the extent of 75 *per cent* (₹ 1,132.53 crore) of the outstanding debts (₹ 1,510.04 crore) of APDCL (owed to GoA) as on 30 September 2015. Despite this commitment, however, GoA has not provided any funding to APDCL in this regard so far (March 2018).

As mentioned above, there was substantial increase in the grants provided by GoA during the year 2017-18 (₹ 2,701.27 crore) in comparison to previous two years (2015-16: ₹ 712.71 crore; 2016-17: ₹ 1,121.77 crore). The grants provided by GoA during 2017-18 included the financial assistance (₹ 1,020.96 crore) to APDCL under UDAY towards payment of its power purchase dues (₹ 560.58 crore) and creation of infrastructure (₹ 460.38 crore). The provisions of UDAY and status of implementation of the scheme by three DISCOMs are discussed under ***paragraph 1.21*** of this Chapter.

[9] Assam Power Distribution Company Limited

Reconciliation with Finance Accounts of Government of Assam

1.6 The figures in respect of equity and loans extended by the GoA and remaining outstanding as per the records furnished by the PSUs should agree with the figures appearing in the Finance Accounts of the State. In case, the figures do not agree, the PSUs concerned and the Finance Department are required to carry out reconciliation of differences in figures. The position in this regard as on 31 March 2018 is summarised in ***Table 1.4***.

Table 1.4 – Equity and loans outstanding as per the State Finance Accounts *vis-à-vis* records of power sector PSUs

(₹in crore)

Outstanding in respect of	Amount as per Finance Accounts	Amount as per records of PSUs	Difference
Equity	1,398.75[10]	807.24	591.51
Loans	4,356.95	2,776.83	1,580.12

Source: Information furnished by the PSUs and Finance Accounts

It can be noticed that there were significant unreconciled differences in the figures of equity and loans as per two sets of records. The equity figures shown in the Finance Accounts pertained to the erstwhile Assam State Electricity Board, which was unbundled (October 2003) into three power sector companies under the Transfer scheme, 2005 of GoA. The said unbundling was, however, not given effect in the Finance Accounts. As the un-reconciled differences of outstanding investments remained significant, the GoA and the PSUs concerned need to take concrete steps to reconcile the differences in a time-bound manner.

Submission of accounts by power sector PSUs

1.7 The financial statements of the PSUs for every financial year are required to be finalised within six months from the end of the relevant financial year *i.e.* by 30 September in accordance with the provisions of Section 96 (1), read with Section 129 (2) of the Companies Act 2013 (Act). Failure to do so may attract penal provisions under Section 99 of the Act. As per the Act, the PSU and every officer of the PSU who is at default shall be punishable with fine which may extend upto ₹ 1 lakh and in the case of a continuing default, with a further fine which may extend upto ₹ 5,000 for every day during which such default continues. ***Table 1.5*** provides the details of progress made by three PSUs in finalisation of accounts as on 30 September 2018.

[10] Erstwhile Assam State Electricity Board

Table 1.5: Position relating to finalisation of accounts of power sector PSUs

Sl. No.	Particulars	2013-14	2014-15	2015-16	2016-17	2017-18
1.	Number of PSUs	3	3	3	3	3
2.	Number of accounts submitted during current year	3	4	3	2	4
3.	Number of PSUs which finalised accounts for the current year	0	1	1	0	1
4.	Number of previous year accounts finalised during current year	3	3	2	2	3
5.	Number of PSUs with arrears in accounts	3	2	2	3	2
6.	Number of accounts in arrears	3	2	2	3	2
7.	Extent of arrears	One year	One year	One year	One year	One year

Source: Compiled based on accounts of PSUs received during October 2017 to September 2018.

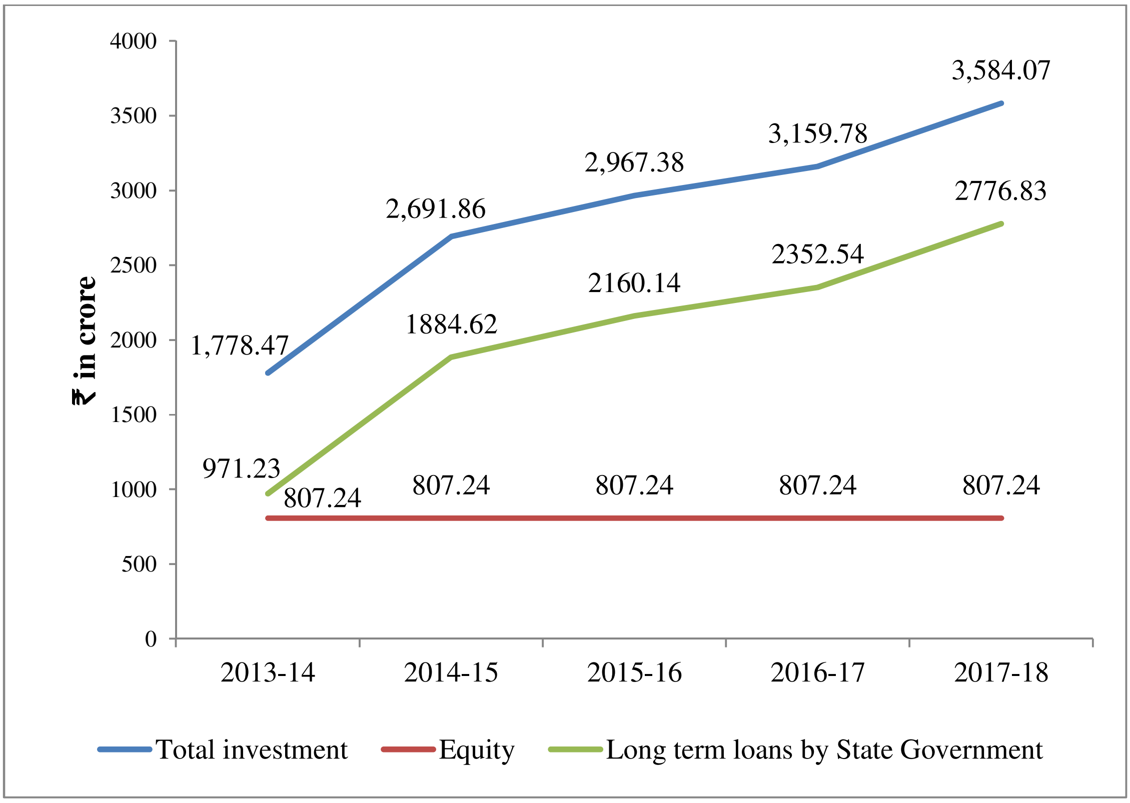
As can be noticed from ***Table*** above, the number of accounts in arrears of the three PSUs remained between two and three. The administrative departments have the responsibility to oversee the activities of the PSUs. The administrative departments concerned were also responsible to ensure that the PSUs finalise and adopt their accounts within the stipulated period. In view of the arrears in finalisation of accounts by the PSUs, the Principal Accountant General (PAG) had been taking up (December 2017 and May 2018) the matter regularly with the GoA and the administrative department concerned (Power Department, GoA) for liquidating the arrears of accounts of PSUs. Persistent delay in finalisation of accounts is fraught with the risk of fraud and leakage of public money apart from violation of the provisions of the Companies Act, 2013.

Performance of power sector PSUs

1.8 The financial position and working results of three PSUs as per their latest finalised accounts as on 30 September 2018 are detailed in ***Appendix 3***. The PSUs are expected to yield reasonable return on investment (RoI) made by Government in the PSUs. The total investment in the PSUs as on 31 March 2018, as per the information provided by the PSUs (***Appendix 2)*** was ₹ 4,672.12 crore consisting of ₹ 807.24 crore as equity and ₹ 3,868.88 crore as long term loans. Out of this, GoA had an investment aggregating ₹ 3,584.07 crore in the three PSUs consisting of equity (₹ 807.24 crore) and long term loans (₹ 2,776.83 crore).

The year-wise status of investment of GoA in the form of equity and long term loans in the three PSUs during the period 2013-14 to 2017-18 is as shown in ***Chart 1.2***.

Chart 1.2: Total investment of GoA in power sector PSUs



Investment of GoA (equity and long-term loans)

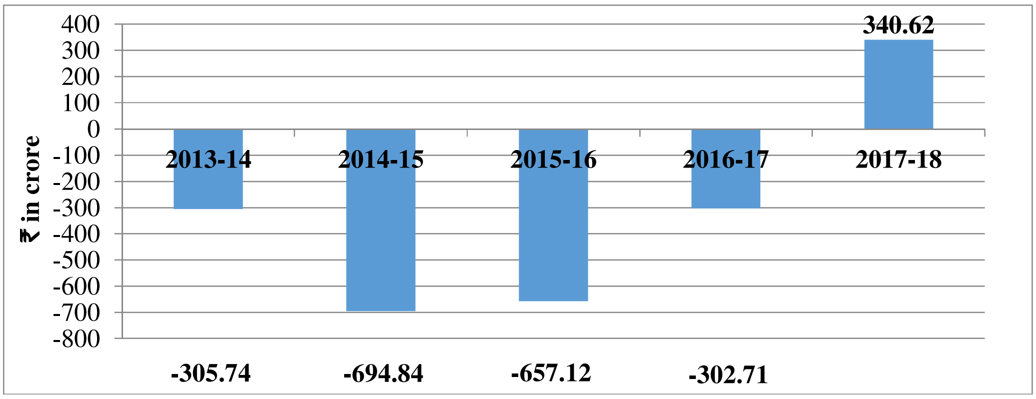
The profitability of a company is traditionally assessed through Return on Investment (RoI), Return on Equity and Return on Capital Employed. RoI measures the profit or loss made in a fixed year relating to the amount of money invested in the form of equity and long term loans and is expressed as a percentage of profit to total investment. Return on Capital Employed on the other hand, is a financial ratio that measures the company's profitability and the efficiency with which its capital is used and is calculated by dividing company's earnings before interest and taxes (EBIT) by capital employed. Further, Return on Equity is a measure of performance calculated by dividing 'net profit after tax' by Shareholders' fund.

Return on Investment

1.9 Return on Investment (RoI) is the percentage of profit or loss to the total investment. The overall position of profit/losses[11] earned/incurred by the three PSUs during 2013-14 to 2017-18 is depicted in ***Chart 1.3.***

[11] Figures are as per the latest finalised accounts during the respective years.

Chart 1.3: Profit/Losses earned/incurred by power sector PSUs



As may be noticed from ***Chart 1.3***, during first four years from 2013-14 to 2016-17, the PSUs had incurred overall operational losses ranging between ₹ 302.71 crore (2016-17) and ₹ 694.84 crore (2014-15).

During the year 2017-18, the three PSUs earned overall profit of ₹ 340.62 crore[12] as per their latest finalised accounts as on 30 September 2018 as compared to aggregate loss of ₹ 302.71 crore incurred during 2016-17 (***Appendix 3)***. The aggregate profit earned by the three PSUs was mainly because of the net profit of ₹ 357.39 crore registered by the power transmission PSU (Assam Electricity Grid Corporation Limited) during 2017-18. This turnaround in the operational results of this PSU was due to allowance (2017-18) of the prior period revenue gaps (₹ 319.93 crore) by Assam Electricity Regulatory Commission (AERC) for recovery as a tariff component during the truing up process of the provisional tariff. Accordingly, the said revenue gaps after their recovery as a tariff component, have been recognised as operational revenue in the accounts of the PSU leading to the profit (₹ 357.39 crore) registered by the PSU during 2017-18.

Position regarding the profit earned/loss incurred by three PSUs during 2013-14 to 2017-18 is given in ***Table 1.6.***

Table 1.6: Position of power sector PSUs regarding profit earned/loss incurred

Year	Total PSUs in power sector	Number of PSUs which earned profits during the year	Number of PSUs which incurred loss during the year	Number of PSUs which had marginal profit/loss during the year
2013-14	3	1	2	0
2014-15	3	0	3	0
2015-16	3	0	2	1
2016-17	3	0	2	1
2017-18	3	2	1	0

[12] This includes net profits of two PSUs (Assam Power Generation Corporation Limited: ₹ 17.21 crore and Assam Electricity Grid Corporation Limited: ₹ 357.39 crore) and net loss of remaining PSU (Assam Power Distribution Company Limited: ₹ 33.98 crore).

As can be noticed from ***Appendix 3*,** out of two PSUs, which earned profits as per their latest finalised accounts as on 30 September 2018, one PSU (Assam Power Generation Corporation Limited) had not finalised its accounts for the year 2017-18. Hence, there is no assurance regarding the existence of the profits of this PSU for the year ended 31 March 2018.

(a) Return on GoA Investment on the basis of historical cost of investment

1.10 GoA infused funds in the form of equity, loans and grants/subsidies in all three PSUs. The funds infused by GoA in the PSUs in the form of equity qualifies to be considered as investment for the purpose of working out RoI. In the case of long term loans, only 'interest free loans' should be considered as investment since Government does not receive any interest on such loans and are therefore, in the nature of equity investment by Government. In the case of power sector PSUs, however, the entire loans provided by GoA till 31 March 2018 are 'interest bearing loans' and hence, the said loans have not been considered as part of GoA investment for the purpose of working out RoI. Further, the funds made available by GoA in the form of the grants/subsidy have also not been reckoned as investment since they do not qualify to be considered as investment.

Thus, for the purpose of working out RoI, the GoA funding provided to the power sector PSUs in the form of equity has only been considered as GoA investment.

The funding committed by GoA under Ujwal DISCOM Assurance Yojana (UDAY) of GoI in the form of grants/equity for taking over debts of power distribution company (APDCL) qualifies to be considered as investment. Despite commitment, however, GoA has not provided any funding for the purpose so far (***paragraph 1.21.3***). As such, GoA investment does not include any amount on this account for the purpose of deriving RoI on investment of GoA.

The total investment of GoA in three PSUs in the form of equity as on 31 March 2018 was ₹ 807.24 crore. The equity investment of GoA in these three PSUs at the end of 2017-18 has been arrived at by considering the initial equity[13] *plus* the equity infused during the later years. Apart from the above investment in equity, the GoA has also infused budgetary support in the power sector PSUs in the form of long term loans (interest bearing) and grants. It was observed that the investment in loans and grants by GoA at the end of 31 March 2018 was ₹ 2,776.83 crore and ₹ 6,480.18 crore which had substantially increased in comparison to ₹ 971.24 crore and ₹ 2,503.85 crore as on 31 March 2014.

The return on investment (RoI) on historical cost basis for the period 2013-14 to 2017-18 has been computed in both ways, *viz.* with and without considering the

[13] Equity infused by GoA at the time of inception (2005-06) of three PSUs.

'interest bearing loans' and 'grants' as part of the GoA investment and same has been given in ***Table 1.7*** below:

Table 1.7: Return on GoA investment on historical cost basis

Year	Funds infused by the GoA in form of equity on historical cost basis (*₹in crore*)	Funds infused by the GoA in form of equity, loans and grants on historical cost basis (*₹in crore*)	Total Profits/ Losses[14] for the year (*₹in crore*)	RoI on equity (*per cent*)	RoI on equity, loans and grants (*per cent*)
2013-14	807.24	4,282.33	-305.74	-37.87	-7.14
2014-15	807.24	5,528.50	-694.84	-86.08	-12.57
2015-16	807.24	6,241.21	-657.12	-81.40	-10.53
2016-17	807.24	7,362.98	-302.71	-37.50	-4.11
2017-18	807.24	10,064.25	340.62	42.20	3.38

As can be noticed from the ***Table*** above, the RoI on GoA investment (Equity only) in three power PSUs was negative during the first four years (2013-17). During the year 2017-18, however, the RoI turned positive (42.20 *per cent*) because of the aggregate profits (₹ 340.62 crore) of the power sector PSUs mainly contributed by one power sector PSU (Serial No. A2 of ***Appendix 2***) as discussed under ***paragraph 1.9*** *supra***.** At the same time, considering the loans and grants as part of the total investment of GoA (equity, loans and grants), the RoI (3.38 *per cent*) was much lower than the RoI (42.20 *per* cent) on equity investment.

(b) Return on Investment on the basis of Present Value of Investment

1.11 In view of the significant investment by State Government (GoA) in the PSUs, return on such investment is essential from the perspective of the Government. Traditional calculation of return based only on historical cost of investment may not be a correct indicator of the adequacy of the return on the investment since such calculations ignore the present value of money.

The present value (PV) of the Government investments has been computed to assess the rate of return on the PV of GoA investments in the PSUs as compared to historical value of investments. In order to bring the historical cost of GoA investments to its PV at the end of each year upto 31 March 2018, the past investments/year-wise equity infused by GoA in the three PSUs have been compounded at the year-wise average rate of interest on Government borrowings

[14] As per the latest accounts of three PSUs finalised as on 30 September of the respective year.

which is considered as the minimum cost of funds to the Government for the concerned year[15].

Further, as mentioned earlier, GoA did not provide any 'interest free loans' to three PSUs till 31 March 2018. As such, the PV of the GoA investment was computed on the equity investment infused by GoA in these PSUs since their inception till 31 March 2018.

Thus, the PV of the State Government investment in power sector PSUs was computed on the basis of following assumptions:

- The funds made available in the form of 'interest bearing loans' and grant/subsidies have not been reckoned as investment. Further, in absence of any funding to APDCL by GoA for taking over its debts despite the commitment made under UDAY ***(paragraph 1.5)***, no amount on this account has been considered as part of GoA investment for the purpose of working out the PV and RoI on GoA investment.
- The average rate of interest on government borrowings for the concerned financial year was adopted as compounded rate for arriving at PV since this interest rate represents the cost incurred by the Government towards investment of funds for the year and therefore considered as the minimum expected rate of return on investments made by the Government.
- For the purpose of computing returns, 'earnings after interest and taxes' has been taken into account.

Further, during the years from 2013-14 to 2016-17 when the three PSUs incurred losses ***(paragraph 1.10)***, a more appropriate measure of their performance is the erosion of Net Worth due to these losses. The erosion of Net Worth of the PSUs is commented upon in ***paragraph 1.14***.

1.12 The PSU wise position of GoA investment in the three PSUs in the form of equity since inception of these PSUs till 31 March 2018 is indicated in ***Appendix 4.*** The consolidated position of the PV of the GoA investment and the total earnings relating to the three PSUs since their inception (2005-06) till 31 March 2018 is indicated in ***Table 1.8***.

[15] The average rate of interest on government borrowings was adopted from the Reports of the CAG of India on State Finances (Government of Assam) for the concerned year.

Table 1.8: Year wise details of GoA investment and PV of GoA investment from 2005-06 to 2017-18

(₹in crore)

Year	Present value of total investment at the beginning of the year	Equity infused by GoA during the year	Total investment at the end of the year	Average rate of interest on government borrowings (in *per cent*)	Present value of total investment at the end of the year	Minimum expected return to recover cost of funds for the year	Total earnings for the year (net profit)
i	ii	iii	iv = ii + iii	v	vi = (iv*v) ÷ 100 + iv	vii = (iv*v) ÷ 100	viii
2005-06		718.56	718.56	8.18	777.34	58.78	0
2006-07	777.34	-	777.34	7.66	836.88	59.54	-1.12
2007-08	836.88	-	836.88	7.14	896.64	59.75	-109.81
2008-09	896.64	-	896.64	6.76	957.25	60.61	-150.53
2009-10	957.25	-	957.25	6.83	1,022.63	65.38	-51.90
2010-11	1,022.63	88.68	1,111.31	6.58	1,184.43	73.12	-11.33
2011-12	1,184.43	-	1,184.43	6.78	1,264.74	80.30	-599.19
2012-13	1,264.74	-	1,264.74	6.57	1,347.83	83.09	-524.85
2013-14	1,347.83	-	1,347.83	6.53	1,435.84	88.01	-305.74
2014-15	1,435.84	-	1,435.84	6.40	1,527.74	91.89	-694.84
2015-16	1,527.74	-	1,527.74	6.47	1,626.58	98.84	-657.12
2016-17	1,626.58	-	1,626.58	6.57	1,733.45	106.87	-302.71
2017-18	1,733.45	-	1,733.45	6.33	**1,843.18**	109.73	340.62
Total		**807.24**					

The amount of GoA investment in the three PSUs since their inception has increased from ₹ 718.56 crore (2005-06) to ₹ 807.24 crore (2017-18) due to further investments made (2010-11) by GoA in shape of equity (₹ 88.68 crore). The PV of investments of the GoA as on 31 March 2018 worked out to ₹ 1,843.18 crore.

It could also be seen from ***Table 1.8*** that the earnings of PSUs during 2006-07 to 2016-17 were negative which indicates that instead of generating returns on the invested funds, these PSUs could not even recover the cost of funds to the Government. The positive total earning for the year 2017-18, however, remained substantially higher than the minimum expected return towards the GoA investment in these PSUs.

The details of the Return on GoA investment at historical and present value for the period from 2013-14 to 2017-18 have been given in ***Table 1.9.***

Table 1.9: Return on GoA investment

(₹in crore)

Year	Total Profit for the year	Funds infused by the GoA in form of equity on historic cost basis	RoI by GoA on historical cost basis (*per cent*)	PV of the investment by GoA at end of the year	RoI by GoA considering the PV (*per cent*)[16]
2013-14	-305.74	807.24	-37.87	1,435.84	-
2014-15	-694.84	807.24	-86.08	1,527.74	-
2015-16	-657.12	807.24	-81.40	1,626.58	-
2016-17	-302.71	807.24	-37.50	1,733.45	-
2017-18	340.62	807.24	42.20	1,843.18	18.48

As can be noticed from the ***Table*** above, the RoI on the GoA investment was negative during the first four years (2013-17) because of the losses incurred by three PSUs. During the year 2017-18, the RoI on the present value of investment was positive at 18.48 *per cent,* which was far below the RoI of 42.20 *per cent* at historical cost of GoA investment. The increase in RoI during 2017-18 was due to the aggregate profit (₹ 340.62 crore) earned by the PSUs mainly because of net profit (₹ 357.39 crore) of one PSU, namely, Assam Electricity Grid Corporation Limited (AEGCL) as discussed under ***paragraph 1.9*** *supra*.

(c) Funding under UDAY

1.13 As mentioned under ***paragraph 1.10*** *supra,* GoA has not provided any funding to the power distribution company (APDCL) under UDAY in the form of grants/equity for taking over its debts. As such, GoA investment does not include any amount on this account to derive RoI on investment of GoA.

The GoA had, however, provided grants amounting to ₹ 1,170.96 crore[17] to APDCL during 2016-18 under UDAY towards payment of power purchase dues (₹ 660.58 crore) and infrastructure development (₹ 510.38 crore). As the grants of ₹ 660.58 crore was provided to meet the past liabilities of APDCL, this should also be considered as part of GoA investment. If we consider this grant as investment of GoA, the return on investment would further get reduced.

The return on GoA investment was worked out in both ways, *viz.* after considering the said grants as part of GoA investment and without considering the said funding as GoA investment. A comparative analysis of RoI on GoA investment under both the situations has been presented in ***Table 1.10*.**

[16] In the case of negative returns (losses) during 2013-17, the percentage of RoI on PV of investment would show improved position as compared to that on the historical value of investment, which is not a realistic picture. Hence, these figures have been omitted.

[17] Includes grants extended towards power purchase dues: ₹ 660.58 crore (2016-17: ₹ 100 crore and 2017-18: ₹ 560.58 crore) and creation of infrastructure: ₹ 510.38 crore (2016-17: ₹ 50 crore and 2017-18: ₹ 460.38 crore)

Table 1.10: Return on GoA investment as on 31 March 2018

(₹in crore)

Particulars	Total Earnings	GoA Investment at historical cost	Return on GoA investment at historical cost (*per cent*)	GoA investment at Present value	Return on GoA investment at present value (*per cent*)
Without UDAY	340.62	807.24	42.20	1,843.18	18.48
With UDAY	340.62	1,467.82	23.21	2,552.56	13.34

The returns based on present value were less than the returns based on historic cost as indicated by the comparison of returns during 2017-18. Return based on historic cost was 42.20 *per cent* during 2017-18 whereas return based on PV was only 18.48 *per cent*. However, if we consider the funding under UDAY also as investment, the returns gets further reduced from 42.20 *per cent* to 23.21 *per cent* on the basis of historic cost and from 18.48 *per cent* to 13.34 *per cent* at present value.

Erosion of Net Worth

1.14 Net Worth means the sum total of the paid-up capital and free reserves & surplus *minus* accumulated losses and deferred revenue expenditure. Essentially, it is a measure of what an entity is worth to the owners. A negative Net Worth indicates that the entire investment by the owners has been wiped out by accumulated losses and deferred revenue expenditure. The paid-up capital and accumulated losses of three PSUs as per their latest finalised accounts as on 30 September 2018 were ₹ 718.56 crore and ₹ 3,743.00 crore respectively (***Appendix 3***).

The ***Table 1.11*** below indicates paid-up capital, accumulated profit/loss and Net Worth of the three PSUs during the period 2013-14 to 2017-18 as per their latest finalised accounts as on 30 September of the respective year:

Table 1.11: Net Worth of power sector PSUs during 2013-14 to 2017-18

(₹in crore)

Year	Paid-up capital at end of the year	Accumulated loss (-) at end of the year	Deferred revenue expenditure	Net worth
2013-14	718.56	-2,049.83	0.00	-1,331.27
2014-15	718.56	-2,822.99	0.00	-2,104.43
2015-16	718.56	-3,400.76	0.00	-2,682.20
2016-17	718.56	-3,684.40	0.00	-2,965.84
2017-18	718.56	-3,743.00	0.00	-3,024.44

As can be noticed from the ***Table*** above, the Net Worth of power sector PSUs was negative throughout the period of five years (2013-18). The position of Net worth deteriorated during the five years because of increased accumulated losses.

Analysis of investment and accumulated losses of three PSUs further revealed that the accumulated losses (₹ 3,586.94 crore) of two[18] out of three PSUs had completely eroded their paid-up capital (₹ 262.70 crore). Accumulation of huge losses by these PSUs had eroded public wealth, which is a matter of serious concern.

Dividend Payout

1.15 There was no information available on record regarding the existence of any specific policy of the GoA on payment of minimum dividend by the PSUs. During the period of five years (2013-18), two PSUs[19] earned aggregate profit of ₹ 493.84 crore. None of these PSUs, however, paid any dividend during 2013-18.

Return on Equity

1.16 Return on Equity (RoE) is a measure of financial performance to assess how effectively management is using company's assets to create profits and is calculated by dividing net income (*i.e.* net profit after taxes) by Shareholders' Fund. It is expressed as a *percentage* and can be calculated for any entity if its net income and Shareholders' fund both are positive figures.

Shareholders fund of a Company is calculated by adding paid-up capital and free reserves net of accumulated losses and deferred revenue expenditure. The Shareholders fund of a Company indicated how much would be left for a company's shareholders if all assets were sold and all debts paid. A positive Shareholders fund reveals that the company has enough assets to cover its liabilities while negative Shareholders equity means that liabilities exceed the assets.

The summarized details of the Shareholders fund and RoE relating to these three PSUs during the period from 2013-14 to 2017-18 as per their latest finalised accounts as on 30 September of the respective year are given in ***Table 1.12.***

Table 1.12: Return on equity relating to power sector PSUs

Year	Net Income/Total Earnings for the year[20] (₹ in crore)	Shareholders' Fund (₹ in crore)	RoE (*per cent*)
2013-14	-305.74	-1,331.27	-
2014-15	-694.84	-2,104.43	-
2015-16	-657.12	-2,688.20	-
2016-17	-302.71	-2,965.84	-
2017-18	340.62	-3,024.44	-

[18] Serial No. A2 and A3 of ***Appendix 3.***

[19] One PSU (Serial No. A2 of ***Appendix 3)*** earned profit of ₹ 119.24 crore (2013-14) and ₹ 357.39 crore (2017-18) while another PSU (Serial No. A1 of ***Appendix 3***) earned profit of ₹ 17.21 crore (2017-18).

[20] Earnings after interest and taxes as per the latest finalised accounts of the PSUs as on 30 September of the respective year.

As can be seen from the ***Table 1.12***, during the last five years ended March 2018, the net income was positive only during 2017-18 because of the profits (₹ 357.39 crore) of one power sector PSU (Serial No. A2 of ***Appendix 2***) as discussed under ***paragraph 1.9*** *supra*. The Shareholders fund of the PSUs, however, remained negative during all the five years. Since the net income of these PSUs during 2013-14 to 2016-17 and the Shareholders' fund for all the years were negative, RoE in respect of these PSUs was not workable. The negative Shareholders' fund of three PSUs, however, indicated that the liabilities of these PSUs have exceeded the assets. Thus, the shareholders of these PSUs, instead of getting any returns against the investments, had owed money.

Return on Capital Employed

1.17 Return on Capital Employed (RoCE) is a ratio that measures a company's profitability and the efficiency with which its capital is deployed. RoCE is calculated by dividing a company's earnings before interest and taxes (EBIT) by the Capital Employed[21]. The details of RoCE of the three PSUs during the period from 2013-14 to 2017-18 as per their latest finalised accounts as on 30 September of the respective year are given in ***Table 1.13.***

Table 1.13: Return on Capital Employed

Year	EBIT (₹ in crore)	Capital Employed (₹ in crore)	RoCE (*per cent*)
2013-14	-110.52	205.04	-53.90
2014-15	-465.34	-584.14	-
2015-16	-399.80	-481.72	-
2016-17	42.77	-843.14	-
2017-18	793.60	-487.28	-

The RoCE of the three PSUs was negative at 53.90 *per cent* during the year 2013-14. The RoCE was, however, not workable for the year from 2014-15 to 2017-18 as the overall capital employed of power sector PSUs throughout the period was completely wiped off by the accumulated losses of these PSUs as at the end of the respective year. Further, despite the positive EBIT (₹ 793.60 crore) of power sector PSUs during 2017-18, the accumulated losses (₹ 843.14 crore) at the end of 2016-17 could not be set-off completely.

Analysis of Long term loans of the PSUs

1.18 The long term loans of the PSUs having leverage during 2013-14 to 2017-18 were analysed in audit with a view to assess the ability of the PSUs to service their debts owed to GoA, banks and other financial institutions. This was assessed through the Interest Coverage Ratio and Debt Turnover Ratio.

[21] Capital employed means Paid up capital *plus* free reserves and surplus *plus* long term loans *minus* accumulated losses/deferred revenue expenditure. Figures are as per the latest year for which accounts of the PSUs are finalised.

Interest Coverage Ratio

1.19 Interest Coverage Ratio is used to determine the ability of a company to pay interest on outstanding debt and is calculated by dividing a company's earnings before interest and taxes (EBIT) by interest expenses of the same period. The lower the ratio, the lessor the ability of the company to pay interest on debt. An interest coverage ratio of below one indicates that the company was not generating sufficient revenues to meet its expenses on interest. The details of interest coverage ratio in those PSUs which had interest burden during the period from 2013-14 to 2017-18 are given in ***Table 1.14.***

Table 1.14: Interest coverage ratio

Year	Interest (₹ in crore)	Earnings before interest and tax (EBIT) (₹ in crore)	Number of PSUs having liability of loans from Government and Banks and other financial institutions	Number of PSUs having interest coverage ratio more than 1	Number of PSUs having interest coverage ratio less than 1
2013-14	189.80	-110.52	3	1	2
2014-15	229.50	-465.34	3	-	3
2015-16	257.08	-399.80	3	1	2
2016-17	345.24	42.77	3	1	2
2017-18	353.51	793.60	3	2	1

It was observed that the number of PSUs with Interest Coverage Ratio of more than one increased from one PSU (2013-14) to two PSUs (2017-18) in five years, which was a positive indication.

Audit analysis further revealed increase of 86.25 *per cent* in the interest burden of the PSUs during 2013-18 from ₹ 189.80 crore (2013-14) to ₹ 353.51 crore (2017-18), which was caused due to gradual increase in the long-term debts of the PSUs from ₹ 1,536.31 crore (2013-14) to ₹ 2,537.16 crore (2017-18). The increase in the interest burden has correspondingly increased pressure on the profitability of three PSUs.

Debt-Turnover Ratio

1.20 A low Debt-to-Turnover ratio (DTR) demonstrates a good balance between debt and income. Conversely, a high DTR can signal of having too much of debts corresponding to the income earned by the power sector PSUs from core activities. Thus, the PSUs having lower DTR are more likely to successfully manage their debt servicing and repayments. The summarised details of the Debts and Turnover of the three PSUs during the five years ending 2017-18 as per their finalised accounts *vis-à-vis* the Debt-Turnover Ratio for the respective years has been given in ***Table 1.15.***

Table 1.15: Debt Turnover ratio relating to the power sector PSUs

(₹in crore)

Particulars	2013-14	2014-15	2015-16	2016-17	2017-18
Debt from Government/Banks and Financial Institutions	1,536.31	1,520.29	2,200.48	2,122.70	2,537.16
Turnover	3,297.92	3,671.56	4,332.42	4,900.03	5,899.50
Debt-Turnover Ratio (DTR)	0.47:1	0.41:1	0.51:1	0.43:1	0.43:1

Source: Compiled based on latest finalised accounts of the PSUs as on 30 September 2018.

As can be seen from the ***Table 1.15***, the DTR was at the worse (0.51:1) during 2015-16 but improved thereafter. During 2017-18, the DTR was at 0.43:1, which indicated the better position of power sector PSUs to service their long-term debts as compared to previous years. The improvement in DTR was mainly due to appreciation of 36.17 *per cent* in the PSU-turnover after 2015-16, which was encouraging in comparison to the increase of 15.30 *per cent* in the PSUs debts during the said period.

Assistance under Ujwal DISCOM Assurance Yojana (UDAY)

1.21 The Ministry of Power (MoP), Government of India launched (20 November 2015) Ujwal DISCOM Assurance Yojana (UDAY Scheme) for operational and financial turnaround of State owned Power Distribution Companies (DISCOMs). As per the provisions of UDAY Scheme, the participating States were required to undertake following measures for operational and financial turnaround of DISCOMs:

Scheme for improving operational efficiency

1.21.1 The participating States were required to undertake various targeted activities for improving the operational efficiencies like, compulsory metering of the feeder and distribution transformer (DT), consumer indexing and GIS mapping of losses, upgrading or changing transformers and meters, smart metering of all consumers consuming above 200 units per month, Demand Side Management (DSM) through energy efficient equipment, quarterly revision of tariff, checking of power theft, assure increased power supply in areas where the Aggregate Technical & Commercial (AT&C) losses have been reduced, *etc*.

The timeline prescribed for these targeted activities was also required to be followed to ensure achievement of the targeted benefits *viz.* ability to track losses at feeder and DT level, identification of loss making areas, reduce technical losses and minimise outages, reduce power theft and enhance public participation for reducing the theft, reduce peak load and energy consumption *etc*. The outcome of operational improvements was to be measured through the prescribed indicators *viz.* reduction of AT&C loss to 15 *per cent* by 2019-20 as per loss reduction trajectory finalised by the MoP and States, reduction in gap (between average cost of supply and average revenue realised) to zero by 2019-20.

Implementation of the UDAY Scheme

1.21.2 The status of implementation of the UDAY Scheme is detailed below:

A. Achievement of operational parameters

The details of the targets fixed under UDAY Scheme regarding different operational parameters *vis-a-vis* achievements of APDCL there against as on 31 March 2019 has been given in ***Table 1.16***.

Table 1.16: Parameter wise achievements of APDCL as on 31 March 2019 against the operational targets fixed under UDAY Scheme

Sl. No.	Parameter of UDAY Scheme	Target under UDAY Scheme as per MoU	Progress under UDAY Scheme	Achievement (in *per cent*)
1	Feeder metering (in Nos.)	1,600	1,443	90.19
2	Distribution Transformer Metering (in Nos.)	4,700	2,765	58.83
3	Feeder Segregation (in Nos.)	878	197	22.44
4	Rural Feeder Audit (in Nos.)	1,051	0	0
5	Electricity to unconnected household (in lakh Nos.)	21.74	21.74	100
6	Smart metering (in Nos.)	1,48,500	14,008	9.43
7	Distribution of LED UJALA (in lakh Nos.)	11.50	11.64	100
8	AT&C Losses (in *per cent*)	16.10	21.14	Negative
9	ACS-ARR[22] Gap (₹ per unit)	0.19	0.41	Negative
10	Net Income including subsidy (₹ in crore)	-273.54	-405.17	Negative

Source: Information furnished by APDCL.

APDCL has performed poorly in areas of Distribution Transformer metering, smart metering and feeder segregation, whereas the performance has been better in terms of feeder metering, providing electricity to unconnected households and distribution of LEDs. Further, going by the current trend of progress, the State would find it difficult to achieve the target of reduction in the AT&C loss to 15 *per cent* by 2019-20, which is one of the vital areas of operational performance. The higher AT&C loss was due to reduction in the billing and collection efficiency because of intensification of rural electrification as well as increase in the numbers of LT consumers after implementation of Saubhagya scheme[23]. As regards Rural Feeder Audit, APDCL stated that Geographical Information System process was going on after which the Rural Feeder Audit would be taken up.

[22] ACS represents 'Average Cost of Supply' while ARR means 'Average Revenue Requirement'

[23] Saubhagya scheme launched (September, 2017) by GoI aimed to provide free electricity connections to all households (both Above Poverty Line and poor families) in rural areas and poor families in urban areas.

B. Implementation of Financial Turnaround

1.21.3 A Memorandum of Understanding (MoU) entered into (4 January 2017) between GoI, GoA and APDCL under the UDAY Scheme. As per the MoU, GoA was committed to provide necessary funding to APDCL in the form of equity and grants to the extent of 75 *per cent* (₹ 1,132.53 crore) of its outstanding debts (loans of GoA) of ₹ 1,510.04 crore as on 30 September 2015. The GoA could also issue bonds, if necessary, for raising funds to meet the commitment made under the MoU.

Contrary to the commitments made under the MoU, however, the GoA had not provided any funding to APDCL as on 31 March 2018 to settle outstanding debts of the latter (APDCL).

As per the MoU, GoA was further to provide Operational Funding Requirement (OFR) support to APDCL till it achieves the financial turnaround. The OFR support committed by GoA, also included necessary funding to discharge outstanding power purchase liabilities (₹ 1,207.35 crore) of APDCL as on 31 March 2015. Against this commitment, APDCL had received ₹ 1,170.96 crore during 2016-18[24] in the form of grants (₹ 510.38 crore against strengthening and upgradation, installation of smart meters, GIS mapping, distribution of LED, *etc.* and ₹ 660.58 crore against the unpaid power purchase dues).

Comments on Accounts of power sector PSUs

1.22 During October 2017 to September 2018, 3 PSUs forwarded their 4 accounts to the PAG. Of these, 4 accounts of 3 PSUs were selected for supplementary audit. The comments in the Audit Reports of Statutory Auditors appointed by CAG and the supplementary audit of CAG highlighted significant observations on the financial statements. As a result of these audit observations, operational results (net profit or net loss) of the PSUs as depicted in their financial statements were found to be understated or overstated. Further, the said observations also highlighted non-disclosure of material facts and errors of classification. The said observations of Statutory Auditors and CAG indicated that the quality of maintenance of accounts needs to be improved. The details of aggregate money value of comments of Statutory Auditors and CAG for last three years from 2015-16 to 2017-18 are given in ***Table 1.17***.

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[24] In addition, grants amounting to ₹ 330.30 crore was received during 2018-19 towards payment of power purchase dues.

Table 1.17: Impact of audit comments on the accounts of the working PSUs

(₹in crore)

Sl. No.	Particulars	2015-16		2016-17		2017-18	
		No. of accounts	Amount	No. of accounts	Amount	No. of accounts	Amount
1.	Decrease in profit	0	0.00	0	0.00	1	16.59
2.	Increase in loss	2	36.14	2	112.79	2	72.76
3.	Non-disclosure of material facts	0	0.00	0	0.00	1	7.43
4.	Errors of classification	1	3.60	0	0.00	2	100.51

Source: Statutory Auditors' Report and comments of CAG

During the year, the Statutory Auditors had given qualified certificates to all the accounts finalised by the PSUs. The compliance of PSUs with the Accounting Standards (AS) remained poor, as there were 15 instances of non-compliance to AS in 3 accounts during the year. This indicated that the financial statements of the PSUs needed to be improved to ensure compliance to the AS.

Performance Audit and Compliance Audit Paragraphs

1.23 For Chapter II and III of the Report of the Comptroller and Auditor General of India for the year ended 31 March 2018, one performance audit and five audit paragraphs relating to Assam Power Distribution Company Limited were issued to the Additional Chief Secretary of the Power Department with the request to furnish replies within six weeks. Replies on the performance audit and the compliance audit paragraphs have been received from the GoA and suitably incorporated in this report.

Follow up action on Audit Reports

1.24 The CAG's Audit Reports represent culmination of the process of scrutiny starting with initial inspection of accounts and records maintained by various PSUs. It was, therefore, necessary that the Audit Reports elicit appropriate and timely response from the Executive. Finance (Audit & Fund) Department, Government of Assam issued (May 1994) instructions on preparing the explanatory notes in respect of performance audits and audit paragraphs by the administrative departments concerned.

As per the said instructions, the administrative departments concerned were required to prepare the explanatory notes on the paragraphs and performance audits included in the Audit Reports immediately on receipt of the said Audit Reports. The administrative departments were required to indicate the action taken or proposed to be taken in the explanatory notes. The explanatory notes shall also include the status of recovery of any amount due to Government as pointed out in the performance audits/ audit paragraphs included in the Audit Reports. The administrative departments were also required to submit the said explanatory notes to the Assam Legislative Assembly with a copy to the PAG within 20 days from the date of receipt of the Audit Reports.

As on 30 September 2018, 10 Audit Reports (1991-92 to 2016-17) containing 5 performance audits and 39 paragraphs were submitted to the State Legislature; of which, 5 performance audits and 37 audit paragraphs were pending for discussion by COPU. The explanatory notes relating to said 5 performance audits and 37 audit paragraphs pertaining to 10 Audit Reports were yet to be submitted by the administrative departments concerned to the State Legislature (April 2019).

Discussion on Audit Reports by COPU

1.25 The status of discussion on Audit Reports by COPU as on 30 September 2018 is given in ***Appendix 5***. It can be seen from ***Appendix 5*** that 10 Audit Reports containing 5 performance audits and 39 paragraphs were placed in the State Legislature. As on 30 September 2018, total 5 performance audits and 37 paragraphs pertaining to 10 Audit Reports relating to power sector PSUs were pending for discussion and necessary action by COPU.

Action Taken Notes (ATN) on 61 recommendations pertaining to 6 Reports of the COPU presented to the State Legislature between October 2002 and December 2011 had not been received (April 2019) as indicated in ***Table 1.18***.

Table 1.18: 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 were pending
2002-03	1	9	9
2003-04	1	8	8
2008-09	2	34	34
2010-11	1	6	6
2011-12	1	4	4
Total	**6**	**61**	**61**

Source: Records maintained by Audit

These reports of COPU contained recommendations in respect of 36 paragraphs and 3 performance audits, which appeared in the Audit Reports of the CAG of India for the years 1994-95 to 2005-06.