

PART-I

Chapter-I

Functioning of Power Sector Undertakings

Introduction

1.1 The power sector undertakings 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 GDP of the State. The ratio of power sector PSUs' turnover to Gross State Domestic Product (GSDP) shows the extent of activities of PSUs in the State economy. **Table 1.1** provides the details of turnover of the power sector undertakings and GSDP of Uttar Pradesh for a period of four years ending 31 March 2019¹.

Table 1.1: Details of turnover of Power Sector Undertakings vis-a-vis GSDP of Uttar Pradesh

Particulars	(₹ in crore)			
	2015-16	2016-17	2017-18	2018-19
Turnover	46,977	54,223	56,661	61,856
Percentage change in turnover as compared to turnover of preceding year	-	15.42	4.50	9.17
GSDP of Uttar Pradesh	11,37,210	12,48,374	13,76,324	15,42,432
Percentage change in GSDP as compared to GSDP of preceding year	-	9.78	10.25	12.07
Percentage of turnover to GSDP of Uttar Pradesh	4.13	4.34	4.12	4.01

Source: Compiled based on turnover figures of power sector PSUs and GSDP figures issued by Ministry of Statistics and Programme Implementation, Government of India dated 01 August 2019.

The turnover of power sector undertakings recorded a continuous increase during the years 2016-17 to 2018-19, with growth ranging between 4.50 per cent and 15.42 per cent. GSDP of Uttar Pradesh also recorded continuous increase during the same period ranging between 9.78 per cent and 12.07 per cent. Compounded annual growth is a useful method to measure growth rate over multiple time periods. Against the compounded annual growth² of 10.69 per cent of GSDP, the turnover of power sector undertakings recorded lower compounded annual growth of 9.61 per cent during the last three years. This resulted in decrease in share of turnover of these power sector undertakings to GSDP from 4.13 per cent in the year 2015-16 to 4.01 per cent in the year 2018-19.

Formation of Power Sector Undertakings

1.2 To make energy sector commercially viable, Government of Uttar Pradesh (GoUP) restructured (January 2000) erstwhile Uttar Pradesh State Electricity Board (UPSEB) and a new Company Uttar Pradesh Power Corporation Limited (UPPCL) was formed under the Companies Act, 1956.

¹ As per latest finalised accounts till 31 December 2019.

² Rate of Compounded Annual Growth $[(\text{Value of 2018-19}/\text{Value of 2015-16})^{1/3} - 1] * 100$.

The transmission and distribution functions³ of UPSEB were transferred to UPPCL. Thermal and hydro generation functions were continued to be vested to the existing PSUs namely, Uttar Pradesh Rajya Vidyut Utpadan Nigam Limited (UPRVUNL) and Uttar Pradesh Jal Vidyut Nigam Limited (UPJVNL). All the assets and liabilities of UPSEB (including equity of ₹ 5,554.96 crore⁴ and loan of ₹ 2,709.78 crore) were distributed among four power sector PSUs⁵. Further, in August 2003, the distribution business of UPPCL was transferred to subsidiary companies viz. Madhyanchal Vidyut Vitran Nigam Limited, Lucknow (MVVNL), Paschimanchal Vidyut Vitran Nigam Limited, Meerut (PVVNL), Purvanchal Vidyut Vitran Nigam Limited, Varanasi (PuVVNL) and Dakshinanchal Vidyut Vitran Nigam Limited, Agra (DVVNL) (known as DISCOMs-subsidiaries of UPPCL).

Further, Uttar Pradesh Power Transmission Corporation Limited (UPPTCL) was incorporated in July 2006. Subsequently, in December 2010, GoUP notified the Uttar Pradesh Electricity Reforms (Transfer of Transmission and related activities including the assets, liabilities) Scheme, 2010, for the purpose of transfer of the transmission activities from UPPCL to UPPTCL with effect from April 2007. From this date UPPCL and UPPTCL started working as separate entities for purchase/sale of bulk power and transmission work respectively.

In addition to above, four PSUs⁶ were formed for the purpose of generation of power. Similarly, Southern UP Power Transmission Company Limited (SUPPTCL) (incorporated on 08 August 2013), subsidiary of UPPCL was formed to carry out business of transmission. Besides, one more company namely UCM Coal Company Limited (incorporated on 16 October 2008), joint venture of UPRVUNL was formed for the purpose of extraction of coal and sale of coal to State Power Utilities.

Thus, there were 15 power sector undertakings⁷ in the State as on 31 March 2019. Of these 15 power sector undertakings, three PSUs⁸ were non-functional and three PSUs⁹ did not commence commercial activities till 2018-19¹⁰.

³ Distribution business of Kanpur Electricity Supply Authority (KESA) Zone of UPSEB was transferred to Kanpur Electricity Supply Company Limited (KESCO) formed as a wholly owned subsidiary company of UPPCL.

⁴ Accumulated loss was nil at the time of unbundling of UPSEB.

⁵ UPRVUNL, UPJVNL, KESCO and UPPCL.

⁶ UPSIDC Power Company Limited incorporated on 11 April 2000 as a subsidiary of Uttar Pradesh State Industrial Development Corporation Limited, Sonebhadra Power Generation Company Limited (SPGCL) incorporated on 14 February 2007 as a subsidiary of UPPCL, Jawaharpur Vidyut Utpadan Nigam Limited (JVUNL) incorporated on 04 September 2009 as a subsidiary of UPRVUNL and Yamuna Power Generation Company Limited (YPGCL) incorporated on 20 April 2010 as an associate of UPPCL.

⁷ Two companies namely Sonebhadra Power Generation Company Limited and Yamuna Power Generation Company Limited has been wound up by the decision taken in their BoD meetings dated 01 April 2019.

⁸ Sonebhadra Power Generation Company Limited (SPGCL), Yamuna Power Generation Company Limited (YPGCL) and Southern UP Power Transmission Company Limited (SUPPTCL).

⁹ Jawaharpur Vidyut Utpadan Nigam Limited, UCM Coal Company Limited and UPSIDC Power Generation Company Limited.

¹⁰ As per latest finalised accounts till 31 December 2019.

Disinvestment, restructuring and privatisation of Power Sector Undertakings

1.3 No disinvestment, restructuring and privatisation of power sector undertakings was done during 2018-19 in Uttar Pradesh.

Investment in Power Sector Undertakings

1.4 The activity-wise summary of investment in the power sector undertakings as on 31 March 2019 is given in **Table 1.2**.

Table 1.2: Activity-wise investment in Power Sector Undertakings

Activity	Number of Power Sector Undertakings	Investment (₹ in crore)		
		Equity	Long Term Loans	Total
PSUs covered in this Chapter				
Generation of Power	3	12,740.88	12,426.67	25,167.55
Transmission of Power	1	14,060.07	10,901.70	24,961.77
Distribution of Power	6 ¹¹	91,110.97	56,109.78	1,47,220.75
Others	1	0.16	2.50	2.66
Total PSUs covered in this Chapter	11	1,17,912.08	79,440.65	1,97,352.73
PSUs not covered in this Chapter ¹²	4	2.27	0.00	2.27
Grand Total	15	1,17,914.35	79,440.65	1,97,355.00

Source: Compiled figures based on Annual Accounts and information received from power sector PSUs.

As on 31 March 2019, the total investment (equity and long-term loans) in 11 power sector undertakings covered in this Chapter was ₹ 1,97,352.73 crore. The investment consisted of 59.75 per cent towards equity and 40.25 per cent in long-term loans.

The long-term loans advanced by the State Government (₹ 5,571.82 crore) constituted 7.01 per cent of the total long-term loans whereas 92.99 per cent (₹ 73,868.83 crore) of the total long-term loans was availed from financial institutions. Besides, during the years 2015-16 and 2016-17, the State Government had taken over ₹ 44,403.89 crore¹³ (75 per cent) of the outstanding debts (₹ 59,205.19 crore¹⁴) of the DISCOMs due to banks and financial institutions under Financial Restructuring Plan/Ujwal DISCOM Assurance Yojana (UDAY¹⁵) scheme.

¹¹ Including UPPCL (Holding Company).

¹² This Chapter does not include four PSUs, out of which three PSUs (SPGCL, YPGCL and SUPPTCL) were non-functional and accounts of one PSU (UPSIDC Power Company Limited) were in arrears for more than three years.

¹³ It includes ₹ 39,133.76 crore taken over by State Government in 2015-16 and 2016-17 under UDAY and ₹ 5,270.13 crore which has already been taken over by State Government under Financial Restructuring Plan (FRP)-2012 during 2015-16.

¹⁴ Total debts of DISCOMs were ₹ 59,205.19 crore which includes ₹ 53,935.06 crore outstanding as on 30 September 2015 and bonds of ₹ 5,270.13 crore already taken over under Financial Restructuring Plan (FRP)-2012 by State Government during 2015-16.

¹⁵ Scheme launched by Ministry of Power (MoP), Government of India (GoI) for financial and operational turnaround of DISCOMs.

Budgetary Support to Power Sector Undertakings

1.5 The Government of Uttar Pradesh (GoUP) provides financial support to power sector undertakings in various forms through the annual budget. The summarised details of budgetary outgo towards equity, loans, grants/subsidies, loans written off and loans converted into equity during the year in respect of power sector undertakings for the last three years ending 31 March 2019 are given in **Table 1.3**.

Table 1.3: Details of budgetary support to Power Sector Undertakings during the last three years ending 31 March 2019

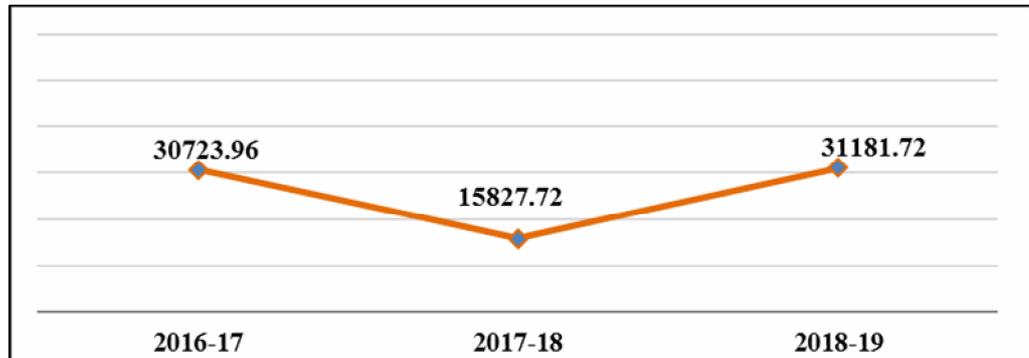
Particulars ¹⁶	2016-17		2017-18		2018-19	
	No of PSUs ¹⁷	Amount (₹ in crore)	No of PSU ¹⁷	Amount (₹ in crore)	No of PSUs ¹⁷	Amount (₹ in crore)
Equity Capital outgo (i)	3	12,205.98	4	8,234.53	3	13,409.18
Loans given (ii)	1	3,700.32	-	0.00	1	615.45
Grants/Subsidies provided (iii)	1	14,817.66	2	7,593.19	2	17,157.09
Total Outgo (i+ii+iii)	3¹⁸	30,723.96	4¹⁸	15,827.72	3¹⁸	31,181.72
Loan written off/ converted into Grant	-	-	-	-	1	4,891.72
Loans converted into Equity	-	-	-	-	-	-
Guarantees Outstanding	3	52,791.17	3	57,912.93	4	85,998.73
Guarantee Commitment	2	62,518.98	2	31,488.20	3	13,198.56

Source: Compiled figures based on Annual Accounts, Government orders and information received from PSUs.

The details of budgetary support towards equity, loans and grants/subsidies for the last three years ending March 2019 is given in **Chart 1.1**.

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

(₹ in crore)



The budgetary assistance received by the power sector PSUs during the year ranged between ₹ 15,827.72 crore and ₹ 31,181.72 crore during the period 2016-17 to 2018-19. The budgetary assistance of ₹ 31,181.72 crore received during 2018-19 included ₹ 13,409.18 crore, ₹ 615.45 crore and ₹ 17,157.09 crore in the form of equity, loans and grants/subsidy respectively.

¹⁶ Amount represents outgo from the State Budget only.

¹⁷ GoUP release equity to UPPCL and UPRVUNL on behalf of their subsidiaries. Therefore, for the purpose of infusion of Government's fund, only holding companies on behalf of their subsidiaries have been considered. Remaining two Power Sector PSUs are UPPTCL and UPJVNL. During 2016-17 and 2018-19, no budgetary support in the form of Equity, Loans and Grants/Subsidies was provided to UPJVNL by GoUP.

¹⁸ The figure represents number of PSUs which have received outgo from budget under one or more heads *i.e.* equity, loans and grants/subsidy.

Besides, the Ministry of Power (MoP), Government of India also launched (20 November 2015) UDAY Scheme for operational and financial turnaround of State owned Power Distribution Companies (DISCOMs). The provisions of UDAY and status of implementation of the scheme by five DISCOMs are discussed under **Paragraph 1.20** of this Chapter.

In order to enable PSUs to obtain financial assistance from banks and financial institutions, Government of Uttar Pradesh (GoUP) gives guarantee for which the guarantee commission is being charged at the rate of 0.25 *per cent* to one *per cent* depending upon the loanees as decided by GoUP (15 September 2000). Outstanding guarantee stood at ₹ 85,998.73 crore as on 31 March 2019. During the year 2018-19, guarantee commission of ₹ 0.25 crore was paid by two PSUs¹⁹.

Reconciliation with Finance Accounts of Government of Uttar Pradesh

1.6 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 Government of Uttar Pradesh. In case the figures do not agree, the concerned PSUs and the Finance Department should carry out reconciliation of the differences. The position in this regard as on 31 March 2019 is given in **Table 1.4**.

Table 1.4: Equity, Loans and Guarantee outstanding as per Finance Accounts vis-à-vis records of Power Sector Undertakings

Name of Power Sector Undertaking	Equity		Difference	Loans		Difference	Guarantees		Difference
	As per Finance Accounts	As per records of PSU		As per Finance Accounts	As per records of PSU		As per Finance Accounts	As per records of PSU	
Kanpur Electricity Supply Company Limited	0.07	0.00	0.07	-	-	-	-	-	-
Uttar Pradesh Rajya Vidyut Utpadan Nigam Limited	10,796.79	12,305.55	1,508.76	-	-	-	-	-	-
Uttar Pradesh Power Transmission Corporation Limited	11,382.00	11,846.80	464.80	-	-	-	-	-	-
Uttar Pradesh Power Corporation Limited	-	-	-	10,398.89	5,507.17	4,891.72	-	-	-
Uttar Pradesh Jal Vidyut Nigam Limited	-	-	-	0.00	64.65	64.65	-	-	-
Total Difference			1,973.63			4,956.37			

Source: Compiled based on information received from PSUs and Finance Accounts.

Audit observed that such difference occurred in respect of five power sector PSUs as shown in the table above. The reasons for differences in equity of Uttar Pradesh Rajya Vidyut Utpadan Nigam Limited and Uttar Pradesh Transmission Corporation Limited are (as seen from the accounts of these PSUs) non/short accounting of equity in the Finance Accounts of 2018-19 released by the Government during the year 2018-19. Moreover, reason for

¹⁹ UPRVUNL and UPPTCL.

difference in loan of Uttar Pradesh Power Corporation Limited is that conversion of loan of ₹ 4,891.72 crore into grant by the Government during the year 2018-19 has not been accounted in the Finance Accounts for the year. The difference in figures of Kanpur Electricity Supply Company Limited and Uttar Pradesh Jal Vidyut Nigam Limited are persisting since the last many years.

The issue of reconciliation of differences was taken up by audit with the PSUs and the Department from time to time. **Audit, therefore, recommends that the State Government and the respective PSUs should reconcile the differences in a time-bound manner.**

Submission of accounts by Power Sector Undertakings

Timeliness in preparation of accounts by Power Sector Undertakings

1.7.1 There were 15 power sector undertakings²⁰ under the audit purview of CAG as of 31 December 2019. Accounts for the year 2018-19 were submitted by 11 PSUs by 31 December 2019. Details of arrears in submission of accounts of power sector undertakings as on 31 December²¹ of each financial year for the last three years ending 31 March 2019 are given in **Table 1.5**.

Table 1.5: Status of submission of accounts of Power Sector Undertakings

Sl. No.	Particulars	2016-17	2017-18	2018-19
1.	Number of PSUs	15	15	15
2.	Number of accounts due	48	43	37
3.	Number of accounts submitted during the current year	20	21	28
4.	Number of PSUs which finalised accounts for the current year	1	2	11
5.	Number of previous year accounts finalised during the current year	19	19	17
6.	Number of PSUs with arrears in accounts	14	13	4
7.	Number of accounts in arrears	28	22	9
8.	Extent of arrears	One to Three Years	One to Four Years	One to Five Years

Source: Compiled based on accounts of PSUs received upto December 2019.

Of these 15 power sector PSUs, 14 PSUs had finalised 28 annual accounts during the period 01 October 2018 to 31 December 2019 which included 11 annual accounts for the year 2018-19 and 17 annual accounts for previous years. Further, nine annual accounts of four PSUs were in arrears.

The GoUP had provided ₹ 28,012.33 crore (Equity: ₹ 10,335.58 crore, Loan: ₹ 615.45 crore, Grant: ₹ 6,032.59 crore and Subsidy: ₹ 11,028.71 crore) during 2017-18 and 2018-19 to two of the four power sector PSUs, accounts of which were in arrears as of 31 December 2019, whereas no investment was made by GoUP in the remaining two PSUs during the period for which accounts were in arrears as detailed in **Appendix-1.3**.

²⁰ Two companies namely Sonebhadra Power Generation Company Limited and Yamuna Power Generation Company Limited have been wound up by the decision taken in their BoD meetings dated 01 April 2019. Further, names of both companies have also been struck off the register of companies in August 2020.

²¹ For the years 2016-17 and 2017-18, accounts received till 30 September 2017 and 30 September 2018 respectively were considered.

The administrative departments have the responsibility to oversee the activities of these PSUs and to ensure that the accounts are finalised and adopted by these PSUs within the stipulated period. The concerned departments were informed regularly regarding arrears in accounts.

Impact of non-finalisation of accounts of State Power Sector PSUs

1.7.2 Delay in finalisation of accounts may also result in risk of fraud and leakage of public money apart from violation of the provisions of the Companies Act, 2013. In view of the above status of arrears of accounts, the actual performance including loss incurred/profit earned and contribution of these four State power sector PSUs to State GDP during the period of arrear accounts could not be ascertained/reported to the State Legislature. In the absence of finalisation of accounts by these PSUs and their subsequent audit, it could not be ensured whether the investments and expenditure incurred had been properly accounted for and the funds were utilised for the purpose for which these were provided by the State Government.

It is, therefore, recommended that the administrative departments should strictly monitor and issue necessary directions to liquidate the arrears in accounts. The Government may also look into the constraints in preparing the accounts of the PSUs and take necessary steps to liquidate the arrears in accounts.

Winding up of non-functional State Power Sector PSUs

1.8 As on 31 March 2019, three power sector PSUs namely Yamuna Power Generation Company Limited, Sonebhadra Power Generation Company Limited and Southern UP Power Transmission Company Limited were non-functional companies. Decision of winding up of two power sector PSUs namely Yamuna Power Generation Company Limited and Sonebhadra Power Generation Company Limited was taken by the GoUP on 05 May 2015 and 02 July 2018 respectively. Subsequently, both the companies have been wound up by their respective Board of Directors in April 2019.

Further, in respect of the remaining power sector PSU i.e. Southern UP Power Transmission Company Limited, the Government may take appropriate decision regarding winding up of the same.

Performance of Power Sector Undertakings

1.9 The financial position and working results of 11 power sector undertakings as per their latest finalised accounts as of 31 December 2019 are detailed in *Appendix-1.1*.

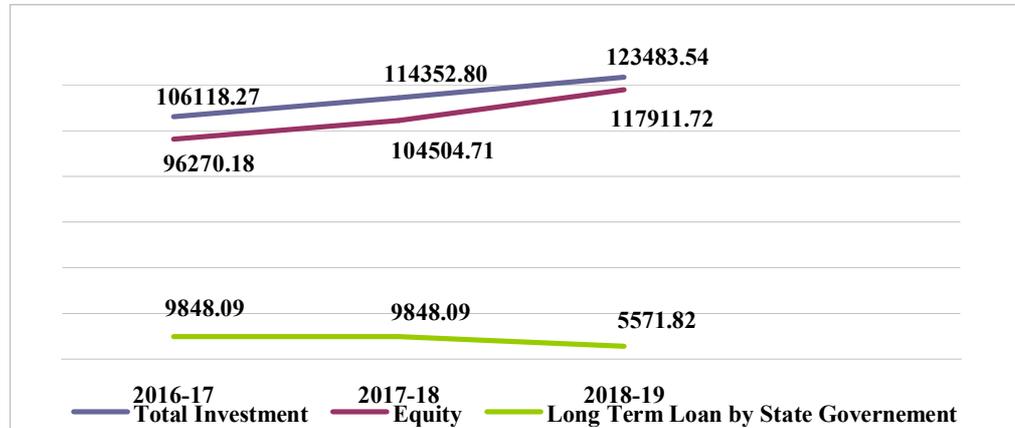
The Public Sector Undertakings are expected to yield reasonable return on investment made by Government in the undertakings. The total investment of the State Government and others in the power sector PSUs as on 31 March 2019 was ₹ 1,97,352.73 crore consisting of ₹ 1,17,912.08 crore as equity and ₹ 79,440.65 crore as long-term loans as detailed in *Appendix-1.2*. Out of this, GoUP has investment of ₹ 1,23,483.54 crore in four power sector PSUs²² consisting of equity of ₹ 1,17,911.72 crore and long-term loans of

²² GoUP released equity to UPPCL and UPRVUNL on behalf of their subsidiaries. Therefore, for the purpose of infusion of Government's fund, only holding companies on behalf of their subsidiaries have been considered. Remaining two Power Sector PSUs are UPPTCL and UPJVNL.

₹ 5,571.82 crore. The cumulative status of investment of GoUP in the form of equity and long-term loans in the power sector PSUs at the end of the period 2016-17 to 2018-19 is depicted in **Chart 1.2**.

Chart 1.2: Total investment of GoUP in Power Sector Undertakings

(₹ in crore)



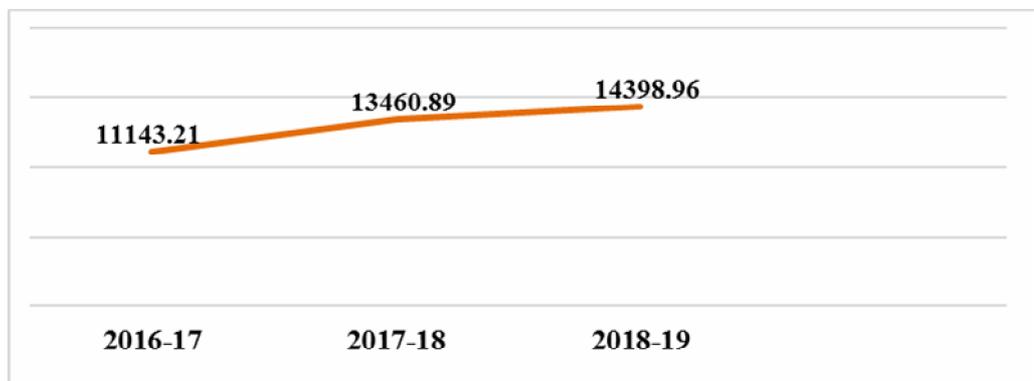
The profitability of a company is traditionally assessed through return on investment, return on equity and return on capital employed. Return on investment measures the profit or loss made in a fixed year relating to the amount of money invested in the form of equity and long-term loans and is expressed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

Return on Investment

1.10 Return on investment is the percentage of profit or loss to the total investment. The overall loss²³ incurred by 11 power sector undertakings during 2016-17 to 2018-19 is depicted in **Chart 1.3**.

Chart 1.3: Loss incurred by Power Sector Undertakings

(₹ in crore)



²³ Figures are as per the latest finalised accounts upto 31 December 2019.

The loss incurred by these 11 power sector PSUs was ₹ 14,398.96 crore (*Appendix-1.1*) in the year 2018-19 against losses of ₹ 11,143.21 crore and ₹ 13,460.89 crore incurred in the years 2016-17 and 2017-18 respectively. According to the latest finalised accounts of PSUs, two PSUs earned profit of ₹ 126.39 crore and nine PSUs incurred loss of ₹ 14,525.35 crore as detailed in *Appendix-1.4*.

The position of power sector undertakings which earned profit/incurred loss during the period 2016-17 to 2018-19 is given in **Table 1.6**.

Table 1.6: Power Sector Undertakings which earned profit /incurred loss

During the year	Total PSUs in Power Sector covered in this chapter	Number of PSUs which earned profits during the year	Number of PSUs which incurred loss during the year	Number of PSUs which had no profit/loss during the year
2016-17	11	2	8	1
2017-18	11	3	8	-
2018-19	11	2	9	-

Real Return on the basis of Present Value of Investment

1.11 In view of the significant investment by the State Government in all power sector undertakings, return on such investment is essential from the perspective of the Government. The return on investment has been calculated after considering the present value of money to arrive at the real return on investment made by GoUP in the 11 power sector undertakings. Present value of the State Government investment was computed where funds had been infused by the State Government in the form of equity, interest-free long-term loans and grants/subsidies given for operational and management expenses since finalisation of the balance sheets of these power sector undertakings after unbundling of erstwhile Electricity Board (2000-01) till 31 March 2019.

The present value (PV) of the State Government investment in power sector undertakings was computed on the basis of the following assumptions:

- Interest-free long-term loans and grants/subsidies given for operational and management expenses have been considered as investment infusion by the State Government. Further, in those cases where interest-free loans given to the PSUs were later converted into equity, the amount of loan converted into equity has been deducted from the amount of interest free loans and added to the equity of that year.
- The average rate of interest on government borrowings for the concerned financial year²⁴ was adopted as compounded rate for arriving at present value since they represent the cost incurred by the Government towards investment of funds for the year and therefore considered as the minimum expected rate of return on investment made by the Government.

For the period 2016-17 to 2018-19 when eight to nine PSUs incurred losses, a more appropriate measure of performance is the erosion of net worth due to the losses. The erosion of net worth of the companies is commented upon in *Paragraph 1.13*.

²⁴ The average rate of interest on government borrowings for the concerned year = Interest Payment/ [(Amount of previous year's Fiscal Liabilities + Current year's Fiscal Liabilities)/2]*100.

1.12 The position of State Government investment in the power sector undertakings in the form of equity, loans and grants/subsidies since inception of these PSUs till 31 March 2019 is indicated in *Appendix-1.5* and the consolidated position of PV of the State Government investment relating to them since 2000-01 till 31 March 2019 is indicated in **Table 1.7**.

Table 1.7: Year wise details of investment by the State Government and present value (PV) of Government funds from 2000-01 to 2018-19.

(₹ in crore)

Financial year	Present value of total investment at the beginning of the year	Equity infused by GoUP during the year	Interest free loan given by GoUP	Grant/ Subsidies given by GoUP	Total investment during the year	Total investment at the end of the year	Average rate of interest on Govt. 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 as per Profit & Loss Statement
i	ii	iii	iv	v	vi= iii+iv+v	vii=ii+vi	viii	ix= vii* (1+viii/100)	x= vii* viii/100	xi
up to 2000-01		6,336.47	3.55	294.23	6,634.25	6,634.25	9.58	7,269.81	635.56	-2,760.04
2001-02	7,269.81	315.03	0.00	1,060.39	1,375.42	8,645.23	9.49	9,465.66	820.43	-1,562.66
2002-03	9,465.66	225.90	0.00	972.15	1,198.05	10,663.71	7.22	11,433.63	769.92	-1,453.67
2003-04	11,433.63	6,051.30	0.00	1,171.14	7,222.44	18,656.07	9.13	20,359.37	1,703.30	-1,420.28
2004-05	20,359.37	906.80	0.00	1,229.06	2,135.86	22,495.23	9.47	24,625.53	2,130.30	-2,404.25
2005-06	24,625.53	794.60	0.00	1,372.33	2,166.93	26,792.46	6.49	28,531.29	1,738.83	-3,146.92
2006-07	28,531.29	3,113.53	0.00	1,588.90	4,702.43	33,233.72	6.74	35,473.68	2,239.95	-4,288.59
2007-08	35,473.68	5,046.98	0.00	1,984.15	7,031.13	42,504.81	6.43	45,237.86	2,733.06	-7,930.94
2008-09	45,237.86	6,222.34	0.00	1,920.15	8,142.49	53,380.35	6.29	56,737.98	3,357.62	-10,585.24
2009-10	56,737.98	5,322.37	0.00	1,909.04	7,231.41	63,969.39	6.16	67,909.90	3,940.51	-8,915.78
2010-11	67,909.90	4,383.52	0.00	2,169.41	6,552.93	74,462.83	6.67	79,429.50	4,966.67	-8,678.69
2011-12	79,429.50	4,314.36	0.00	3,811.85	8,126.21	87,555.71	6.62	93,351.90	5,796.19	-11,912.16
2012-13	93,351.90	3,825.53	0.00	5,010.13	8,835.66	1,02,187.56	6.73	1,09,064.79	6,877.22	-13,149.52
2013-14	1,09,064.79	6,580.90	0.00	5,315.37	11,896.27	1,20,961.06	6.43	1,28,738.85	7,777.80	-17,718.16
2014-15	1,28,738.85	11,546.16	0.00	12,647.70	24,193.86	1,52,932.71	6.40	1,62,720.40	9,787.69	-19,110.93
2015-16	1,62,720.40	19,078.43	6,083.12	22,385.92	47,547.47	2,10,267.87	6.35	2,23,619.88	13,352.01	-18,126.21
2016-17	2,23,619.88	12,205.97	3,700.32	14,817.66	30,723.95	2,54,343.83	6.82	2,71,690.08	17,346.25	-11,143.21
2017-18	2,71,690.08	8,234.52	0.00	7,593.19	15,827.71	2,87,517.79	6.54	3,06,321.46	18,803.66	-13,460.89
2018-19	3,06,321.46	13,407.01	-4,891.72	17,157.09	25,672.38	3,31,993.84	6.50	3,53,573.44	21,579.60	-14,398.96
Total for the period		1,17,911.72	4,895.27	1,04,409.86	2,27,216.85					

The investment of the State Government in these 11 PSUs at the end of the year increased to ₹ 2,27,216.85 crore in 2018-19 from ₹ 6,634.25 crore in 2000-01 as the State Government made further investments in shape of equity (₹ 1,11,575.25 crore) and interest-free loans and grants/subsidies (₹ 1,09,007.35 crore). The present value of investments of the State Government upto 31 March 2019 worked out to ₹ 3,53,573.44 crore.

It could be seen that total earnings for the year relating to these PSUs remained negative during the period 2000-01 to 2018-19 which indicates that these PSUs did not recover the cost of funds to the Government.

Erosion of Net Worth

1.13 Net worth means the sum total of the paid-up capital and free reserves and 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 of the owners has been wiped out by accumulated losses and deferred revenue expenditure.

As on 31 March 2019, overall accumulated loss of 11 PSUs covered in this Chapter was ₹ 1,62,180.07 crore. Of these 11 PSUs, nine PSUs incurred losses

in the year 2018-19 amounting to ₹ 14,525.35 crore. Further, two PSUs earned profit in the year 2018-19 and were having accumulated profit of ₹ 1,176.05 crore.

Net worth of six out of 11 PSUs had been completely eroded by accumulated loss. The net worth of these six PSUs was negative (-₹ 74,102.48 crore) against equity investment of ₹ 72,338.46 crore in these PSUs as on 31 March 2019 (*Appendix-1.1*).

Net worth was less than half of the paid-up capital in respect of two²⁵ out of five²⁶ PSUs, whose net worth was positive at the end of March 2019, indicating their potential financial sickness.

Table 1.8 indicates paid-up capital, accumulated profit/loss and net worth of the 11 power sector undertakings (where funds were infused²⁷ by GoUP) during the period 2016-17 to 2018-19 as per latest finalised accounts till 31 December 2019.

Table 1.8: Net worth of Power Sector Undertakings during 2016-17 to 2018-19

(₹ in crore)				
During the year	Paid up Capital at the end of the year	Accumulated Loss at the end of the year	Deferred revenue Expenditure	Net worth
2016-17	96,089.59	1,42,612.30	4.13	-46,526.84
2017-18	1,04,323.31	1,56,236.42	3.95	-51,917.06
2018-19	1,16,578.99	1,62,180.07	0.18	-45,601.26

Dividend Payout

1.14 The State Government had formulated (October 2002) a dividend policy under which PSUs running in profit are required to pay a minimum dividend of five *per cent* on the share capital contributed by the State Government.

Dividend payout relating to power sector undertakings where equity was infused by GoUP during the period 2016-17 to 2018-19 is shown in **Table 1.9**.

Table 1.9: Dividend Payout of Power Sector Undertakings during 2016-17 to 2018-19

During the year	Total PSUs where equity infused by GoUP		PSUs running in profit during the year		PSUs which declared/paid dividend during the year		Dividend Payout Ratio (in per cent)
	Number of PSUs	Equity infused by GoUP (₹ in crore)	Number of PSUs	Equity infused by GoUP (₹ in crore)	Number of PSUs	Dividend declared/paid by PSUs (₹ in crore)	
1	2	3	4	5	6	7	8 (7/5*100)
2016-17	4	96,270.18	1	10,110.40	-	-	-
2017-18	4	1,04,504.71	1	10,796.79	-	-	-
2018-19	4	1,17,911.72	1	12,305.55			

Uttar Pradesh Rajya Vidyut Utpadan Nigam Limited had earned profit of ₹ 123.75 crore in 2018-19 and also had accumulated profits of ₹ 1,173.67 crore as of 31 March 2019. However, the Company neither paid any dividend to the Government nor made any provision in the accounts for the same which

²⁵ MVVNL and UPJVNL.

²⁶ MVVNL, JVUNL, UPRVUNL, UPJVNL and UPPTCL.

²⁷ In case of subsidiary companies (Sl. No. 3, 5 to 9 and 11 of the *Appendix-1.1*) equity was infused through their respective holding companies.

is contrary to the State Government's policy regarding payment of minimum dividend.

Return on Equity

1.15 Return on Equity (ROE)²⁸ is a measure of financial performance of a company 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 company if shareholders' fund is positive.

RoE has been computed in respect of 11 power sector undertakings where funds have been infused by the State Government either directly or through the holding company (UPPCL and UPRVUNL in case of their subsidiaries). The details of shareholders' fund and ROE relating to these 11 power sector undertakings during the period from 2016-17 to 2018-19 are given in **Table 1.10**.

Table 1.10: Return on Equity relating to 11 Power Sector Undertakings

Year	Net Income/ total Earnings for the year (₹ in crore)	Shareholders' Fund (₹ in crore)	ROE (per cent)
2016-17	-11,143.21	-46,526.84	-
2017-18	-13,460.89	-51,917.06	-
2018-19	-14,398.96	-45,601.26	-

Source: Figures compiled based on latest finalised accounts till 31 December 2019.

As can be seen from the above table, during the last three years ending March 2019, the net income and shareholders' fund were negative throughout the period. RoE in respect of 2016-17 to 2018-19 could not be worked out as shareholders' fund was negative which indicates that the liabilities of these PSUs have exceeded the assets and instead of paying returns on the share capital, the accumulated losses have wiped out the entire share capital.

Return on Capital Employed

1.16 Return on Capital Employed (ROCE) is a ratio that measures a company's profitability and the efficiency with which its capital is employed.

ROCE is calculated by dividing a company's earnings before interest and taxes (EBIT) by the capital employed²⁹. The details of ROCE of 11 power sector PSUs during the period from 2016-17 to 2018-19 are given in **Table 1.11**.

Table 1.11: Return on Capital Employed

During the year	EBIT (₹ in crore)	Capital Employed (₹ in crore)	ROCE (per cent)
2016-17	-7,749.34	13,442.86	-57.65
2017-18	-8,360.97	24,569.59	-34.03
2018-19	-7,955.17	33,841.62	-23.51

Source: Figures compiled based on latest finalised accounts till 31 December 2019.

The ROCE of the power sector undertakings ranged between (-) 23.51 per cent and (-) 57.65 per cent during the period 2016-17 to 2018-19.

²⁸ Return on Equity = (Net Profit after Tax and preference Dividend/Equity)*100 where equity = paid up capital + free reserves – accumulated losses – deferred revenue expenditure.

²⁹ Capital employed = Paid up share capital + free reserves and surplus + long term loans – accumulated losses - deferred revenue expenditure.

Analysis of Long term loans of Power Sector Undertakings

1.17 The analysis of the long-term loans of the companies which had leverage during 2016-17 to 2018-19 was carried out to assess the ability of the companies to service the debt owed by the companies to Government, banks and other financial institutions. This is assessed through the Interest Coverage Ratio.

Interest Coverage Ratio

1.18 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 less is 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 of PSUs which had outstanding loans during the period from 2016-17 to 2018-19 are given in **Table 1.12**.

Table 1.12: Interest coverage ratio of the Power Sector PSUs having liability of interest on Long Term Loans

During the year	Interest (₹ in crore)	Earnings before interest and tax (₹ in crore)	Number of PSUs having liability of interest on 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
2016-17	3,200.22	822.67	8	2	6
2017-18	5,064.12	-241.87	8	2	6
2018-19	6,405.53	161.08	8	1	7

It was observed that of the eight PSUs having liability of interest-bearing loan during the period 2016-17 to 2018-19, two PSUs³⁰ during 2016-17 and 2017-18 and one PSU³¹ during 2018-19 had interest coverage ratio of more than one whereas the remaining six PSUs had negative/less than one interest coverage ratio. This indicates that these PSUs could not generate sufficient revenues to meet their expenses on interest during the period.

Age-wise analysis of interest outstanding on State Government Loans

1.19 As on 31 March 2019, interest amounting to ₹ 247.93 crore in respect of two PSUs was outstanding on the long-term loans provided by GoUP. The age-wise analysis of interest outstanding is depicted in **Table 1.13**.

Table 1.13: Age wise analysis of interest outstanding on State Government Loans (₹ in crore)

Name of PSU	Outstanding interest on loans	Outstanding for less than 1 year	Outstanding for 1 to 3 years	Outstanding for more than 3 years
UP Jal Vidyut Nigam Limited	214.77	10.59	21.19	182.99
UP Power Corporation Limited ³²	33.16	33.16	0.00	0.00
Total	247.93	43.75	21.19	182.99

³⁰ KESCO and UPRVUNL.

³¹ UPRVUNL.

³² Outstanding interest was towards GoUP loan received by UPPCL during 2018-19 on behalf of its five subsidiary DISCOMs.

Assistance under Ujwal DISCOM Assurance Yojana (UDAY)

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

Scheme for improving operational efficiency

1.20.1 The participating States were required to undertake various targeted activities like compulsory feeder and Distribution Transformer (DT) metering, 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, comprehensive Information, Education and Communication (IEC) campaign to check theft of power and assured increased power supply in areas where Aggregate Technical and Commercial (AT&C) losses have been reduced for improving the operational efficiencies. The timeline prescribed for these targeted activities were also required to be followed so as 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 outcomes of operational improvements were to be measured through indicators *viz.* reduction in gap between average cost of supply and average revenue realised to zero by 2018-19 and reduction of AT&C losses to 15 *per cent* in 2018-19 as per loss reduction trajectory finalised by the MoP and States. Further, in the Tripartite Memorandum of Understanding which was executed (30 January 2016) amongst MoP, Government of India, GoUP and UPPCL, target for reduction of AT&C losses to 14.86 *per cent* by financial year 2019-20 was fixed.

Scheme for financial turnaround

1.20.2 The participating States were required to take over 75 *per cent* of the DISCOMs debt as on 30 September 2015 over two years *i.e.* 50 *per cent* in 2015-16 and 25 *per cent* in 2016-17. The scheme for financial turnaround *inter alia* provided that:

- The State will issue ‘Non Statutory Liquidity Ratio (Non-SLR) bonds’ and the proceeds realised from issue of such bonds shall be transferred to the DISCOMs which in turn shall discharge the corresponding amount of Banks/FIs debt. The bonds so issued will have a maturity period of 10-15 years with a moratorium on repayment of principal upto five years.
- Debt of DISCOMs will be taken over in the priority of debt already due, followed by debt with higher cost.
- The transfer to the DISCOMs by the State in 2015-16 and 2016-17 will be as a grant which can be spread over three years with the remaining transfer through State loan to DISCOMs. In exceptional cases, 25 *per cent* of grant can be given as equity.

Implementation of the UDAY Scheme

1.20.3 The status of implementation of the UDAY scheme is as follows:

A. Achievement of operational parameters

The achievements *vis-a-vis* targets under the UDAY scheme regarding different operational parameters relating to the five State DISCOMs are given in **Table 1.14**.

Table 1.14: Parameter-wise achievements *vis-a-vis* targets of operational performance upto March 2020

Parameter of UDAY Scheme	Target under UDAY Scheme	Status under UDAY Scheme	Achievement (in per cent)
Feeder metering (in Nos.) (100 per cent by 30 September 2016)	16,072	20,559	127.92
Metering at DTs (in Nos.) (100 per cent by 30 September 2017)	3,82,460	1,66,030	43.41
Feeder Segregation (in Nos.) ³³	10,564	3,484	32.98
Rural Feeder Audit (in Nos.) ³³	9,722	30,162	310.24
Electricity to unconnected household (in lakh Nos.) ³³	184.56	83.06	45.00
Smart metering above 200 and up to 500 kWh (Nos. in lakh)	23.94	10.07	42.06
Distribution of LED UJALA (in lakh Nos.) ³³	264.53	269.42	101.85
AT&C losses (in per cent) (as on 31 March 2020)	14.86	30.30	Not achieved
ACS-ARR gap ³⁴ (₹ per unit)	-0.05	0.07	Not achieved

Source: Information provided by the PSUs.

On the basis of the above data, it is evident that the performance of DISCOMs was not up to the mark in areas of metering at DTs, feeder segregation, electricity to unconnected households, smart metering, AT&C losses and ACS-ARR gap. As a result, all the five DISCOMs in the State were in the red incurring total loss of ₹ 6,031.89 crore as per their latest finalised accounts for the year 2018-19. However, according to data available on the UDAY dashboard of MoP, GoI, the State of Uttar Pradesh stood at second position³⁵ amongst all the States on the basis of overall achievements made by State DISCOMs under the UDAY scheme upto 30 June 2020.

B. Implementation of Financial Turnaround

1.20.4 Memorandum of Understanding (MoU) was signed (30 January 2016) among MoP, GoUP and UPPCL on behalf of DISCOMs. As per provisions of the UDAY scheme and MoU, out of the total outstanding debt (₹ 53,935.06 crore) pertaining to DISCOMs as on 30 September 2015, GoUP took over total debt of ₹ 39,133.76 crore during the period 2015-16 and 2016-17 by providing equity of ₹ 9,783.44 crore, grant of ₹ 19,566.88 crore and loan of ₹ 9,783.44 crore as detailed in **Table 1.15**.

³³ UDAY MoU does not have any target for the financial year 2019-20 against the said parameters. The targets indicated there against are up to 2018-19.

³⁴ Average Cost of Supply (ACS) – Average Revenue Realisation (ARR) gap.

³⁵ As per latest quarterly ranking of States depicted on website of UDAY for the quarter ended 30 June 2020.

Table 1.15: Implementation of UDAY Scheme

(₹ in crore)

Year	Equity Investment	Grant	Loan	Total
2015-16	6,083.12	12,166.24	6,083.12	24,332.48
2016-17	3,700.32	7,400.64	3,700.32	14,801.28
Total	9,783.44	19,566.88	9,783.44	39,133.76

Source: Information provided by the PSUs.

Besides, the GoUP provided subsidy of ₹ 669 crore (5 per cent of the loss of 2016-17) in the year 2017-18 and ₹ 1,417 crore (10 per cent of the loss of 2017-18) in the year 2018-19. Further, against subsidy of ₹ 4,267 crore (25 per cent of the loss of 2018-19) to be provided in the year 2019-20, an amount of ₹ 1,485 crore was given in the year 2019-20 and against the remaining amount of ₹ 2,782 crore, provision of ₹ 2,200 crore was made in the budget of 2020-21 and the balance amount of ₹ 582 crore shall be given in the supplementary budget for meeting future financial losses.

Comments on Accounts of Power Sector Undertakings

1.21 Fourteen power sector undertakings³⁶ forwarded their 28 audited accounts to the Principal Accountant General during the period 1 October 2018 to 31 December 2019. Of these, 23 accounts were selected for Supplementary Audit. The Audit Reports of Statutory Auditors and Supplementary Audit conducted by the CAG indicated that the quality of accounts need to be improved substantially. The details of aggregate money value of the comments of Statutory Auditors and the CAG for the accounts of 2016-19 are given in Table 1.16.

Table 1.16: Impact of audit comments on Power Sector Undertakings

Sl. No.	Particulars	2016-17		2017-18		2018-19	
		No. of accounts	Amount (₹ in crore)	No. of accounts	Amount (₹ in crore)	No. of accounts	Amount (₹ in crore)
1.	Decrease in profit	2	4.21	1	3.99	-	-
2.	Increase in profit	-	-	-	-	1	0.91
3.	Increase in loss	5	292.89	4	956.51	8	451.44
4.	Decrease in loss	2	13.37	1	2.97	5	49.02
5.	Non-disclosure of material facts	2	693.34	3	9.65	1	0.15
6.	Errors of classification	6	256.52	4	37.47	10	1602.56

Source: Compiled from comments of the Statutory Auditors and the C&AG in respect of Government PSUs.

During the year 2018-19, the Statutory Auditors had issued qualified opinion on 19 accounts. Compliance to the Accounting Standards by the PSUs remained poor as the Statutory Auditors pointed out 70 instances of non-compliance to the Accounting Standards in 16 Accounts.

Compliance Audit Paragraphs

1.22 For Part-I of the Report of the Comptroller and Auditor General of India on Economic Sector and Public Sector Undertakings for the year ended 31 March 2019, two compliance audit paragraphs relating to power sector undertakings were issued to the Principal Secretary of Energy Department, GoUP with request to furnish replies. Reply in respect of one compliance audit

³⁶ One PSU namely UPSIDC Power Company Limited has not submitted its annual accounts after 2013-14.

paragraph has been received from the State Government and suitably incorporated in the respective audit paragraph in the succeeding chapter II of this Report. The total financial impact of two compliance audit paragraphs is ₹ 3.07 crore.

Follow-up action on Audit Reports

Replies outstanding

1.23 The Reports of the Comptroller and Auditor General of India represent the culmination of the process of audit scrutiny. It is, therefore, necessary that they elicit appropriate and timely response from the Executive. The Finance Department, Government of Uttar Pradesh issued (June 1987) instructions to all Administrative Departments to submit replies/explanatory notes to Paragraphs/Performance Audits included in the Audit Reports of the CAG of India within a period of two to three months of their presentation to the State Legislature, in the prescribed format, without waiting for any questionnaires from the Committee on Public Undertakings (COPU). The position of explanatory notes not received is given in **Table 1.17**.

Table 1.17: Explanatory notes not received (as on 30 September 2020)

Year of the Audit Report (Commercial/PSUs)	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	
		PA	Paragraphs	PA	Paragraphs
2011-12	16 September 2013	1	8	1	2
2012-13	20 June 2014	0	8	0	1
2013-14	17 August 2015	1	6	1	3
2014-15	8 March 2016	4	8	0	4
2015-16	18 May 2017	2	5	1	1
2016-17	7 February 2019	1	4	1	4
2017-18	21 August 2020	1	4	1	4
Total		10	43	5	19

Source: Information compiled by Audit.

From the above, it could be seen that out of 43 Paragraphs and 10 Performance Audits, explanatory notes to 19 Paragraphs and five Performance Audits in respect of Energy Department were awaited (September 2020).

Discussion of Audit Reports by COPU

1.24 The status as on 30 September 2020 of Performance Audits and Paragraphs that appeared in Audit Reports (Commercial/PSUs) and on which discussion was completed by COPU is given in **Table 1.18**.

Table 1.18: Performance Audits/Paragraphs appeared in Audit Reports vis-a-vis discussed as on 30 September 2020

Period of Audit Report	Number of Performance Audits (PAs)/Paragraphs			
	Appeared in Audit Report		PAs and Paragraphs on which discussion completed	
	PAs	Paragraphs	PAs	Paragraphs
1982-83 to 2010-11	62	439	25	216
2011-12	1	8	0	3
2012-13	0	8	0	2
2013-14	1	6	0	1
2014-15	4	8	1	3
2015-16	2	5	0	2
2016-17	1	4	0	0
2017-18	1	4	0	0
Total	72	482	26	227

Source: Information compiled by Audit.

Compliance to Reports of the Committee on Public Undertakings

1.25 The internal working rules of COPU do not provide for vetting of Action Taken Notes (ATNs) by the Principal Accountant General. Hence, the ATNs on the recommendations of COPU are furnished by the Departments to the Principal Accountant General only at the time of discussion of ATNs by COPU. Therefore, the status of ATNs is not discussed here.

Recoveries at the instance of Audit

1.26 During the course of audit, recoveries of ₹ 20.40 crore pointed out in three cases in various power sector undertakings, were accepted. Against this, 142.20 *per cent* recoveries (₹ 29.01 crore in three cases) were effected during 1 October 2017 to 31 March 2020 as per the details given in **Table 1.19**.

Table 1.19: Recoveries pointed out by audit and accepted/recovered by the public sector undertakings

Department	Particulars of recoveries	Nature of audit observation	Recoveries pointed out in Audit and accepted by the Department during 1 October 2017 to 31 March 2020		Recoveries effected during 1 October 2017 to 31 March 2020	
			Number of cases	Amount involved (₹ in crore)	Number of cases	Amount involved (₹ in crore)
Energy Department	Purvanchal Vidyut Vitran Nigam Limited	Loss of revenue due to application of incorrect tariff	1	5.80	1	5.80
	Dakshinanchal Vidyut Vitran Nigam Limited	Non-recovery of penalty	1	11.72	1	20.19
	Uttar Pradesh Power Transmission Corporation Limited	Short levy of supervision charges	1	2.88	1	3.02
Total			3	20.40	3	29.01

Source: Information compiled by Audit.