

Part-I

Chapter-I

Functioning of State Power Sector Undertakings

Introduction

1.1 The power sector companies play an important role in the economy of the State. Apart from providing a critical infrastructure required for development of the State's economy, the power sector also adds significantly to the GDP of the State. A *ratio* of power sector PSUs' turnover to State Gross Domestic Product (GDP) shows the extent of activities of PSUs in the economy of the State. The table below provides the details of turnover of the power sector undertakings and GDP of Maharashtra for a period of five years ending March 2018.

**Table 1.1: Details of turnover of power sector undertakings
vis-a-vis GDP of Maharashtra**

Particulars	(₹ in crore)				
	2013-14	2014-15	2015-16	2016-17	2017-18
Turnover	67,390.78	74,759.11	79,995.61	75,186.17	79,543.51
Percentage change in turnover as compared to turnover of preceding year	13.52	10.93	7.00	(6.01)	5.80
GDP of Maharashtra	16,47,506	17,92,122	20,01,223	22,57,032 ¹	24,96,505 ²
Percentage change in State GDP as compared to State GDP of preceding year	13.74	8.78	11.67	12.78	10.61
Percentage of Turnover to GDP of Maharashtra	4.09	4.17	4.00	3.33	3.19

(**Source:** The figures of turnover have been compiled based on the latest finalised financial statements of the respective Power Sector Companies and GDP figures are taken from the State Finances Audit Report of Maharashtra)

The turnover of power sector undertakings has recorded continuous increase except for the year 2016-17 and it ranged between 5.80 *per cent* and 13.52 *per cent* during the period 2013-18, whereas the increase in GDP of Maharashtra ranged between 8.78 *per cent* and 13.74 *per cent* during the same period. The compounded annual growth is a useful method to measure growth rate over multiple time periods. During last five years, the compounded annual growth³ of State GDP was 11.50 *per cent* and the turnover of power sector undertakings recorded lower compounded annual growth of 6.02 *per cent*. This resulted in decrease in the share of turnover of these power sector undertakings to the State GDP from 4.09 *per cent* in 2013-14 to 3.19 *per cent* in 2017-18.

¹ Actuals.

² Advance estimates.

³ Rate of Compounded Annual Growth $[\{(Value\ of\ 2017-18 / Value\ of\ 2012-13) ^{(1/5\ years)} - 1\} * 100]$ where turnover and State GDP for the year 2012-13 were ₹ 59,365.84 crore and ₹ 14,48,466 crore respectively.

Formation of Power Sector Undertakings

1.2 The State Government in exercise of the power conferred by the Electricity Act, 2003 notified (June 2005) the Maharashtra Electricity Reforms Transfer Scheme, 2005 providing and giving effect to the transfer of properties, interests, rights, liabilities, obligations, proceeding and personnel of Maharashtra State Electricity Board to the Transferees. The Transfer Scheme resulted in the creation of the following four successor Companies out of the erstwhile Maharashtra State Electricity Board (MSEB), namely, MSEB Holding Company Limited; Maharashtra State Power Generation Company Limited (MSPGCL); Maharashtra State Electricity Transmission Company Limited (MSETCL); and Maharashtra State Electricity Distribution Company Limited (MSEDCL). These four power sector companies came into existence with effect from 06 June 2005 and all the assets and liabilities of MSEB (including Net Fixed Assets of ₹ 11,703 crore⁴ which were revalued to ₹ 74,303 crore and loan/liabilities of erstwhile MSEB of ₹ 5,632 crore were taken over by Government of Maharashtra (GoM) against equity share capital of the MSEB Holding Company Limited) were distributed among these companies according to the provisions of the Transfer Scheme. MSEB Holding Company Limited was notified to be the holding company of MSPGCL, MSETCL and MSEDCL as per the GoM's decision to reorganize the Board under the provisions of Part XIII of the Electricity Act, 2003. Besides these four companies, there are four other power sector companies⁵ which are subsidiary companies of MSPGCL, MSEDCL and the residuary Board as per Schedule E to the Transfer Scheme. Thus, there were eight power sector companies in the State as on 31 March 2018.

Investment in State Power Sector Undertakings

1.3 The activity-wise summary of investment in the power sector (refer Annexure 1) undertakings as on **31 March 2018** is given below:

Table 1.2: Activity-wise investment in power sector undertakings

Name of the Company	Activity	Number of Government undertakings	Investment (₹ in crore)		
			Equity	Long term loans	Total
MSEB Holding Company Limited	Investment company	1	88,086.54	-	88,086.54
MSPGCL	Generation of Power	1	25,284.13	26,763.68	52,047.81
MSETCL	Transmission of Power	1	8,984.97	6,405.61	15,390.58
MSEDCL	Distribution of Power	1	47,245.25	14,945.76	62,191.01
Others	Power related	4	0.60	1,032.86	1,033.46
Total		8	1,69,601.49	49,147.91	2,18,749.40

(Source: Compiled based on information received from PSUs)

⁴ MSPGCL: ₹ 3,566 crore, MSETCL: ₹ 4,504 crore, MSEDCL: ₹ 3,585 crore and MSEB Holding Company Limited: ₹ 48 crore.

⁵ Aurangabad Power Company Limited (subsidiary of MSEDCL), Dhopave Coastal Power Limited and Mahagenco Ash Management Services Limited (subsidiaries of MSPGCL) and Maharashtra Power Development Corporation Limited (subsidiary of erstwhile MSEB).

As on 31 March 2018, the total investment (equity and long term loans) in eight power sector undertakings was ₹ 2,18,749.40 crore. The investment consisted of 77.53 per cent towards equity and 22.47 per cent in long-term loans.

The State Government, as on 31 March 2018, had advanced ₹ 33.59 crore towards the long term loans, which constituted 0.07 per cent of the total long term loans (₹ 49,147.91 crore). These power sector undertakings had availed ₹ 49,114.32 crore (99.93 per cent) of the total long term loans from other financial institutions. During 2016-17, the State Government has taken over ₹ 4,959.75 crore (75 per cent) of the outstanding short and medium term debts (₹ 6,613 crore) of MSEDCL as on 30 September 2015 under Ujwal DISCOM Assurance Yojana⁶ (UDAY) scheme.

Budgetary Support to Power Sector Undertakings

1.4 The Government of Maharashtra (GoM) provides financial support to State PSUs in various forms through 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 March 2018 are as follows:

Table 1.3: Details of budgetary support to power sector undertakings during the years
(₹ in crore)

Particulars ⁷	2015-16		2016-17		2017-18	
	Number of PSUs	Amount	Number of PSUs	Amount	Number of PSUs	Amount
Equity Capital (i)	2	1,092.98	2	1,086.57	1	37.00
Loans given (ii)	1	206.82	-	-	-	-
Grants/Subsidy provided (iii)	1	1,269.26	1	5.35	2	7,816.62
Total Outgo⁸ (i + ii + iii)	2	2,569.06	3	1,091.92	3	7,853.62
Loan repayment written off	-	-	-	-	-	-
Loans converted into equity	1	5,632.00	-	-	-	-
Guarantees issued	-	-	-	-	-	-
Guarantee Commitment	3	212.3	2	3.95	1	0.13

(Source: Compiled based on information received from PSUs)

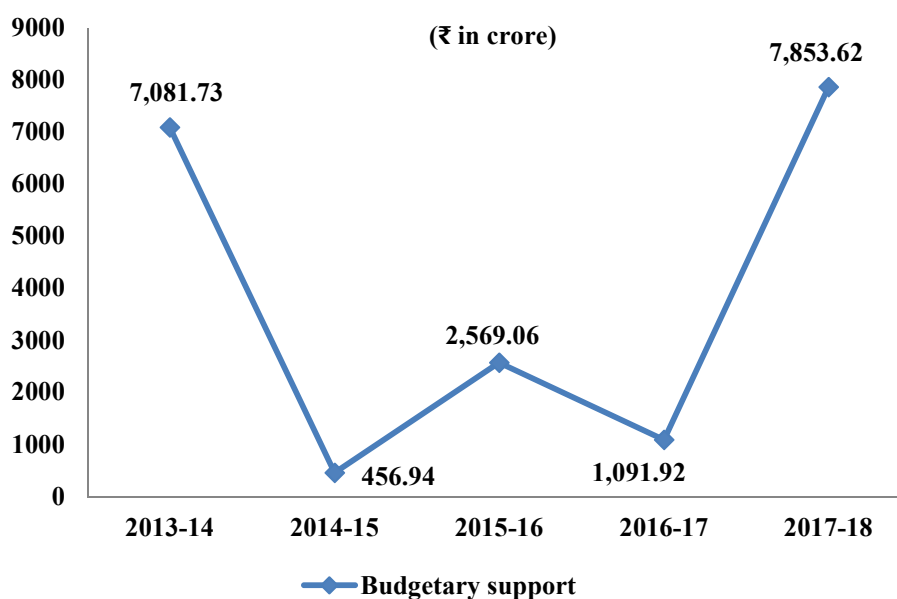
⁶ Scheme launched by Ministry of Power and GoI for financial and operational turnaround of DISCOMs.

⁷ Amount represents outgo from State Budget only.

⁸ The figure represents number of PSUs which have received outgo from budget under one or more heads *i.e.* equity, loans, grants/subsidy.

The details of budgetary support towards equity, loans and grants/subsidies for the last five years ending March 2018 are given in a graph below:

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



The budgetary assistance extended to these power sector undertakings ranged between ₹ 456.94 crore and ₹ 7,853.62 crore during the period 2013-14 to 2017-18. The budgetary assistance of ₹ 7,853.62 crore received during the year 2017-18 included ₹ 37 crore to MSPGCL in the form of equity and grants/subsidy of ₹ 7,816.62 crore to MSEDCL (₹ 7,802.05 crore) and MSETCL (₹ 14.57 crore) respectively for carrying out various projects.

Besides, the Ministry of Power (MoP), Government of India also launched (20 November 2015) a Scheme (Ujwal Discom Assurance Yojana-UDAY) for operational and financial turnaround of State owned Power Distribution Companies (DISCOMs). The provisions of UDAY and status of implementation of the scheme by MSEDCL are discussed under **Para 1.19** of this Chapter.

In order to enable PSUs to obtain financial assistance from banks and financial institutions, State Government gives guarantee for which the guarantee fee is being charged. This fee varies from 0.50 *per cent* to two *per cent*, as decided by the State Government, depending upon the loanees. The guarantee commitment of State Government decreased to ₹ 0.13 crore during 2017-18 from ₹ 3.95 crore in 2016-17. Further, two power sector companies (MSEDCL and MSETCL) paid guarantee fees to the tune of ₹ 0.59 crore during 2017-18, whereas MSPGCL did not pay guarantee fees/commission during the year. The accumulated/outstanding guarantee fees/commission there against was ₹ 0.54 crore as on 31 March 2018.

Reconciliation with Finance Accounts of Government of Maharashtra

1.5 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 Maharashtra. 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 2018 with respect to four PSUs is stated below:

Table 1.4: Equity, loans, guarantees outstanding as per Finance Accounts *vis-a-vis* records of power sector PSUs

(₹ in crore)

Sl. No.	Name of the Company	Equity			Loan			Guarantee outstanding		
		Finance account	As furnished by PSU	Difference	Finance account	As furnished by PSU	Difference	Finance account	As furnished by PSU	Difference
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1	M.S.E.B. Holding Company Limited	-	88,086.54	(88,086.54)	-	-	-	-	-	-
2	Maharashtra State Electricity Distribution Company Limited	-	-	-	3,511.94	33.59	3,478.35	-	-	-
3	Maharashtra State Electricity Transmission Company Limited	-	-	-	-	-	-	0.12	0.13	(0.01)
4	Maharashtra State Power Generation Company Limited	2,480.80	-	2,480.80	194.76	-	194.76	-	-	-
Total		2,480.80	88,086.54	(85,605.74)	3,706.70	33.59	3,673.11	0.12	0.13	(0.01)

(Source: Compiled based on information received from PSUs and Finance Accounts of Government of Maharashtra)

The matter is regularly taken up with the Chief Secretary/Additional Chief Secretary (Finance) the latest being in January 2019. During the year, three meetings have also been held with the officials of GoM and PSUs. The Government and the PSUs should take concrete steps to reconcile the differences in a time-bound manner.

Submission of accounts by Power Sector Undertakings

Timeliness in preparation of accounts by Power Sector Undertakings

1.6 The accounts of eight power sector undertakings are being audited by the CAG. As of 30 September 2018, four of these power sector PSUs submitted their accounts for the year 2017-18. Details of arrears in submission of accounts

of power sector undertakings as on 30th September of each financial year for the last five years ending 31 March 2018 are given below:

Table 1.5: Position relating to submission of accounts of Power Sector Undertakings

Sl. No.	Particulars	2013-14	2014-15	2015-16	2016-17	2017-18
1	Number of working PSUs	10	9	8	8	8
2	Number of accounts finalised during the year	13	9	5	10	9
3	Number of accounts in arrears	5	5	7	5	4
4	Number of working PSUs with arrears in accounts	5	5	7	5	4
5	Extent of arrears (numbers in years)	1	1	1	1	1

(Source: Compiled based on accounts of working PSUs received during the period October 2017 to September 2018)

Of these eight power sector PSUs, four PSUs had finalised nine annual accounts during the period 1 October 2017 to 30 September 2018 which included four annual accounts for the year 2017-18 and five annual accounts for previous years. Further, four annual accounts were in arrears which pertain to four PSUs. However, all four PSUs finalised and submitted these four accounts by March 2019.

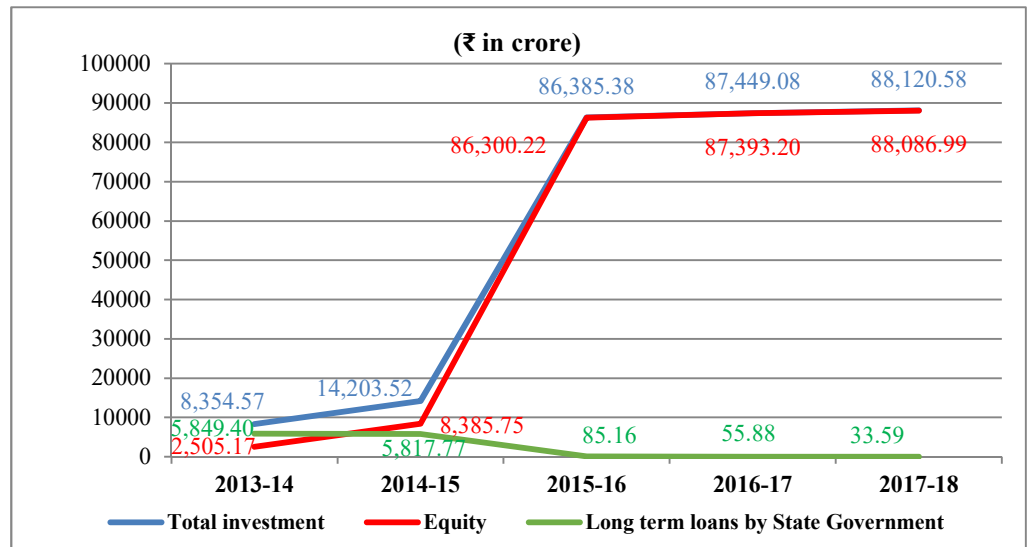
Performance of Power Sector Undertakings

1.7 The financial position and working results of eight power sector companies are detailed in **Annexure 2** as per their latest finalised accounts as of 30 September 2018.

The Public Sector Undertakings are expected to yield reasonable return on investment made by Government in the undertakings. As on 31 March 2018, the total investment of State Government and others in the power sector PSUs was ₹ 2,18,749.40 crore consisting of ₹ 1,69,601.49 crore as equity and ₹ 49,147.91 crore as long term loans (**refer Annexure 1**). Of this, GoM has investment of ₹ 88,120.58 crore consisting of equity ₹ 88,086.99 crore in MSEB Holding Company Limited and Maharashtra Power Development Corporation Limited and long term loans of ₹ 33.59 crore in MSEDCL (**refer Annexure 1**).

The year wise status of investment of GoM in the form of equity and long term loans in the power sector undertakings during the five years 2013-14 to 2017-18 is as follows:

Chart 1.2: Total investment of GoM in power sector undertakings

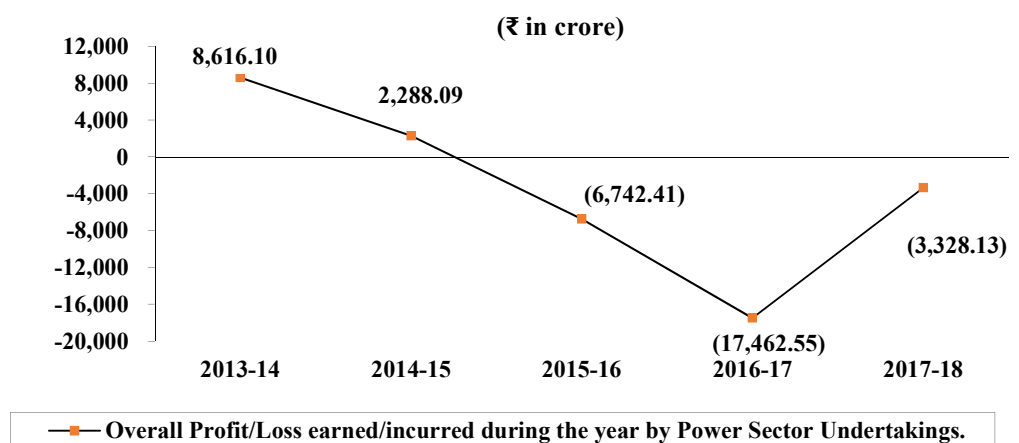


The profitability of a company is traditionally assessed through return on investment and return on capital employed. Return on investment measures the profit or loss made in a fixed year relating to the amount of money invested and is expressed as a percentage of net profit to total investment. Return on capital employed is a financial *ratio* that measures the company’s profitability and the efficiency with which its capital is used.

Return on Investment

1.8 Return on investment is the percentage of profit/loss to the total investment. The overall position of profit/loss⁹ earned/incurred as per the finalised accounts as of 30 September 2018 by all the power sector undertakings during 2013-14 to 2017-18 is depicted below in a chart.

Chart 1.3: Profit/Loss earned/incurred by Power Sector Undertakings



⁹ Figures are as per the latest finalised accounts during the respective years.

The loss incurred by these power sector undertakings was ₹ 3,328.13 crore in 2017-18 against loss of ₹ 17,462.55 crore incurred in 2016-17. As per the latest finalised financial statements of eight PSUs, one PSU earned profit of ₹ 814.51 crore, five PSUs incurred loss of ₹ 4,142.64 crore and two PSUs earned marginal profit/loss (**Annexure 2**). Major losses were incurred by MSEDCL (₹ 3,176.49 crore) and MSPGCL (₹ 929.71 crore).

Position of power sector undertakings which earned/incurred profit/loss during 2013-14 to 2017-18 is given below:

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

Financial 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	10	5	2	3
2014-15	9	4	4	1
2015-16	8	3	5	-
2016-17	8	3	4	1
2017-18	8	1	5	2

(Source: Compiled based on information received from PSUs)

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

1.9 Out of eight power sector undertakings of the State, the State Government infused funds in the form of equity, loans and grants/subsidies only in three power sector undertakings¹⁰ during the year 2017-18. The State Government did not infuse any direct funds in the other five power sector companies. Out of the eight power sector undertakings of the State, the State Government has infused funds in the form of equity share capital only in two PSUs (MSEB Holding Company Limited and MPDCL) while the equity of the remaining six companies was contributed by the concerned holding companies.

Out of the total long term loans, only interest free loans have been considered as investment of the Government in these PSUs as the interest free loans given to the PSUs are akin to equity since they have not been repaid and parts of the loans have been converted into equity subsequent to sanctions of the loans. Further, the funds made available in the form of the grants/subsidy have not been reckoned as investment since they do not qualify to be considered as investment.

The investment of State Government in these two power sector undertakings, as on 31 March 2018 was ₹ 88,086.99 crore consisting entirely of equity. Out of the released long term loans, ₹ 5,632 crore (2005-06) (**Annexure-3**) were interest free loans to MSEB Holding Company Limited which were later (2015-16) converted into equity. Thus, the investment of the Government of Maharashtra on the basis of historical cost stood at ₹ 88,086.99 crore.

¹⁰ MSEB Holding Company Limited, MPDCL and MSEDCL.

The return on investment on historical cost basis for the period 2013-14 to 2017-18 is as given below:

Table 1.7: Return on State Government Investment on historical cost basis

Financial year	Equity and Interest Free Loans on historical cost basis (₹ in crore)	Total Earnings/ Losses (₹ in crore)	Return on Investment (in per cent)
2013-14	8,137.17	8,616.10	105.89
2014-15	14,017.75	2,288.09	16.32
2015-16	86,300.22	(6,742.41)	Σ ¹¹
2016-17	87,393.20	(17,462.55)	Σ
2017-18	88,086.99	(3,328.13)	Σ

(Source: Compiled based on information received from PSUs)

The return on investment of the power sector PSUs was positive in the years 2013-14 and 2014-15. Subsequently, there was a negative return on investment in the years 2015-16, 2016-17 and 2017-18.

(b) On the basis of Present Value of Investment

1.10 In view of the significant investment by Government in the power sector companies, return on such investment is essential from the perspective of State 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 (PV) of money. Therefore in addition to the calculation of return on funds invested by GoM in power sector companies on historical cost basis, the return on investment has also been calculated after considering the PV of money. PV of the State Government investment was computed where funds had been infused by the State Government in the form of equity and interest free loans since inception of these companies till 31 March 2018. The subsidy under UDAY scheme has been granted to MSEDCL in which there is no direct infusion of funds by the State Government in the form of equity share capital or interest free loans. Hence, the information pertaining to UDAY scheme has been given separately in **Para 1.19**.

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

- Interest free loans have been considered as investment infusion by the State Government as no amount of interest free loans have been repaid by the power sector undertakings. 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 funds made available in the form of grant/subsidies have not been reckoned as investment.

¹¹ The return is denoted by Σ since there is a negative return on investment.

- The average rate of interest on Government borrowings for the concerned financial year¹² was adopted as discount rate for arriving at PV since they represent the cost incurred by the Government towards investment of funds for the year and, therefore, considered as minimum expected rate of return on investments made by Government.

For the years 2015-16, 2016-17 and 2017-18 when the power sector companies incurred net losses, a more appropriate measure of performance is the erosion of net worth due to the losses which is commented upon in **Para 1.12**.

1.11 The Company wise position of State Government investment in the two power sector companies viz. MSEB Holding Company Limited and Maharashtra Power Development Corporation Limited wherein the State Government had direct investment in the form of equity and interest free loans since inception till 31 March 2018 is indicated in **Annexure 3**.

The consolidated position of the PV of the State Government investment relating to these two power sector companies since inception till 31 March 2018 is indicated in table below:

Table 1.8: Year wise details of investment by the State Government and present value (PV) of Government funds since inception to 2017-18

(₹ in crore)

Financial year	Present value of total investment at the beginning of the year	Equity infused by the State Government during the year	Interest free loans given by the State Government during the year	Interest free loans converted during the year ¹³	Total investment during the year	Average rate of interest on Government borrowings (in per cent)	Total investment at the end of the year	Present value of total investment at the end of the year
(a)	(b)	(c)	(d)	(e)	(f) = c + d - e	(g)	(h) = (b+f)	(i) = {h x (100+g)/100}
Since inception to 2000	0.00	0.45	0.00	0.00	0.45	10.30	0.45	0.50
2000-01	0.50	0.00	0.00	0.00	0.00	9.10	0.50	0.54
2001-02	0.54	0.00	0.00	0.00	0.00	9.40	0.54	0.59
2002-03	0.59	0.00	0.00	0.00	0.00	8.90	0.59	0.65
2003-04	0.65	0.00	0.00	0.00	0.00	8.80	0.65	0.70
2004-05	0.70	0.00	0.00	0.00	0.00	8.00	0.70	0.76
2005-06	0.76	2.00	5,632.00	0.00	5,634.00	7.10	5,634.76	6,034.83
2006-07	6,034.83	0.00	0.00	0.00	0.00	7.80	6,034.83	6,505.54
2007-08	6,505.54	0.00	0.00	0.00	0.00	7.70	6,505.54	7,006.47
2008-09	7,006.47	0.00	0.00	0.00	0.00	7.30	7,006.47	7,517.94
2009-10	7,517.94	0.00	0.00	0.00	0.00	7.40	7,517.94	8,074.27
2010-11	8,074.27	0.00	0.00	0.00	0.00	7.40	8,074.27	8,671.76
2011-12	8,671.76	0.00	0.00	0.00	0.00	7.50	8,671.76	9,322.15
2012-13	9,322.15	0.00	0.00	0.00	0.00	7.40	9,322.15	10,011.99
2013-14	10,011.99	2,502.72	0.00	0.00	2,502.72	7.50	12,514.71	13,453.31
2014-15	13,453.31	5,880.58	0.00	0.00	5,880.58	7.80	19,333.89	20,841.93
2015-16	20,841.93	77,914.47	0.00	5,632.00	72,282.47	7.70	93,124.40	1,00,294.98
2016-17	1,00,294.98	1,092.98	0.00	0.00	1,092.98	7.60	1,01,387.96	1,09,093.45
2017-18	1,09,093.45	693.79	0.00	0.00	693.79	8.00	1,09,787.24	1,18,570.22
Total		88,086.99	5,632.00	5,632.00	88,086.99			

(Source: Compiled based on information received from PSUs)

¹² The average rate of interest on Government borrowings was adopted from the Audit Reports of the C&AG of India on State Finances (Government of Maharashtra) for the concerned year wherein the calculation for the average rate for interest paid = Interest Payment/[(Amount of previous year's Fiscal Liabilities + Current year's Fiscal Liabilities)/2]*100.

¹³ Interest free loans of ₹ 5,632 crore received in 2005-06 converted into equity in 2015-16.

The balance of investment of the State Government in the power sector companies at the end of the year 2017-18 increased to ₹ 88,086.99 crore from ₹ 0.45 crore in 1999-2000. The State Government re-organised (June 2005) the erstwhile MSEB by transferring its assets and liabilities to four power sector companies of which one (MSEB Holding Company Limited) was the holding company and three (MSPGCL, MSETCL and MSEDCL) were its subsidiaries. After re-organisation, the State Government made further investments in the form of equity share capital of ₹ 88,084.54 crore. The PV of investments of the State Government upto 31 March 2018 worked out to ₹ 1,18,570.22 crore.

Further, the position of total earnings relating to these PSUs as against the minimum expected return to recover the cost of funds for the years 2013-14 to 2017-18 is indicated in the table below:

Table 1.9: Position of total earnings relating as against the minimum expected return
(₹ in crore)

Financial year	Total investment at the end of the year	Present value of total investment at the end of the year	Minimum expected return to recover the cost of funds for the year	Total earnings for the year
2013-14	12,514.71	13,453.31	938.60	8,616.10
2014-15	19,333.89	20,841.93	1,508.04	2,288.09
2015-16	93,124.40	1,00,294.98	7,170.58	(6,742.41)
2016-17	1,01,387.96	1,09,093.45	7,705.49	(17,462.55)
2017-18	1,09,787.24	1,18,570.22	8,782.98	(3,328.13)

(Source: Compiled based on information received from PSUs)

During 2015-16 to 2017-18, total earnings for the year remained below the minimum expected return to recover cost of funds infused in these PSUs due to heavy losses being incurred by MSEDCL and MSETCL in those years. As has been stated, the reason attributed for the same was the revaluation of assets and consequent effect on depreciation considering the Transfer Scheme in 2015-16.

Besides, the GoM, under UDAY scheme, has also given loan of ₹ 4,959.75 crore in 2016-17 to MSEDCL which is to be converted into grant in five annual instalments. If we consider this loan also as investment of the State Government, the return on investment as per Historic cost and Present Value (PV) of such investment during 2017-18 after considering such funds given under UDAY scheme and without considering such funds is given below:

Table 1.10: Return on State Government Funds

Particulars	Total Earnings/ Loss (-)	Investment by the GoM in form of Equity and Interest free Loans	Return on State Government investment on the basis of historical value (per cent)	Present value of the State Government investment at end of the year	Return on State Government investment considering the present value of the investments (per cent)
Without UDAY	(3,328.13)	88,086.99	Σ	1,18,570.22	Σ ¹⁴
With UDAY	(3,328.13)	93,046.74	Σ	1,24,333.84	Σ

(Source: Compiled based on information received from PSUs)

¹⁴ The return is denoted by Σ since there is a negative return on investment.

The returns based on PV as well as the returns based on historic cost were negative.

Erosion of Net worth

1.12 Net worth of a Company indicates a measure of what an entity is worth to the owners. Net worth means the sum total of the paid-up capital and free reserves and surplus *minus* accumulated losses and deferred revenue expenditure. A negative net worth indicates that the entire investment by the owners has been wiped out by accumulated losses and deferred revenue expenditure. As per latest finalised accounts as of 30 September 2018 of power sector undertakings, the net accumulated losses of the eight power sector undertakings were ₹ 38,751.96 crore as against the share capital¹⁵ of ₹ 88,086.99 crore of the State Government resulting in positive net worth of ₹ 49,335.03 crore. However, the net worth was eroded completely in Maharashtra Power Development Corporation Limited (MPDCL) (- ₹ 1,012.80 crore).

The following table indicates paid up capital, accumulated profit/loss and net worth of MPDCL during the period 2013-14 to 2017-18:

Table 1.11: Net worth of MPDCL during 2013-14 to 2017-18

(₹ in crore)

Year	Paid up capital at end of the year	Accumulated Profit (+)/(Loss) (-) at end of the year	Deferred revenue Expenditure	Net worth
2013-14	0.45	(1,012.41)	-	(1,011.96)
2014-15	0.45	(1,012.47)	-	(1,012.02)
2015-16	0.45	(1,012.73)	-	(1,012.28)
2016-17	0.45	(1,013.04)	-	(1,012.59)
2017-18	0.45	(1,013.25)	-	(1,012.80)

(Source: Compiled based on latest finalised financial statements of MPDCL)

Dividend Payout

1.13 The State Government had formulated (October 2003) a dividend policy under which all profit making PSUs are required to pay a minimum return of five *per cent* on the paid up share capital contributed by the State Government. None of the power sector undertakings where equity was directly infused by GoM declared a dividend during 2013-14 to 2017-18.

Return on Equity

1.14 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 company if net income and shareholders' fund are both positive numbers.

¹⁵ Includes Share application money pending allotment of the State Government.

Shareholders' fund of a Company is calculated by adding paid up capital and free reserves net of accumulated losses and deferred revenue expenditure and reveals how much would be left for a company's stakeholders 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 shareholder equity means that liabilities exceed assets.

There were two power sector undertakings (MSEB Holding Company Limited and Maharashtra Power Development Corporation Limited) where equity share capital had been infused directly by the State Government. The details of ROE in these two power sector undertakings for the years 2016-17 and 2017-18 are given in table below:

Table 1.12: Return on Equity

Year	NPAT (₹ in crore)	Shareholders' fund (₹ in crore)	ROE (per cent)
2016-17	2,571.86	84,846.64	3.03
2017-18	(32.22)	84,972.03	Σ ¹⁶

(Source: Compiled based on latest finalised financial statements)

The ROE of these PSUs for 2016-17 was 3.03 *per cent* whereas it was negative in 2017-18.

Return on Capital Employed

1.15 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 employed¹⁷. The details of ROCE of all the eight power sector undertakings during the period from 2013-14 to 2017-18 are given in table below:

Table 1.13: Return on Capital Employed

Year	EBIT (₹ in crore)	Capital Employed (₹ in crore)	ROCE (per cent)
2013-14	8,616.10	80,146.87	10.75
2014-15	7,877.12	82,953.85	9.50
2015-16	(1,257.67)	3,12,530.06	Σ ¹⁸
2016-17	(10,848.75)	1,82,466.68	Σ
2017-18	3,500.92	1,80,062.03	1.94

(Source: Compiled based on latest finalised financial statements)

The ROCE of the power sector undertakings was 10.75 *per cent* and 9.50 *per cent* during the years 2013-14 and 2014-15. However, there was a negative ROCE during the years 2015-16 and 2016-17. The ROCE turned positive during 2017-18 and was at 1.94 *per cent*.

¹⁶ The return is denoted by Σ since there is a negative return on equity.

¹⁷ Capital employed = Paid up share capital + free reserves and surplus + long term loans – accumulated losses - deferred revenue expenditure. Figures are as per the latest year for which accounts of the PSUs are finalised.

¹⁸ The return is denoted by Σ since there is a negative return on capital employed.

Analysis of Long term loans of the Companies

1.16 The analysis of the long term loans of the companies which had leverage during 2013-14 to 2017-18 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* and Debt Turnover *ratio*.

Interest Coverage Ratio

1.17 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 power sector companies which had interest burden during the period from 2013-14 to 2017-18 are given in table below:

Table 1.14: Interest coverage ratio

Year	Interest (₹ in crore)	Net earnings before interest and tax (₹ in crore)	Number of PSUs having liability of loans from Government and Banks and other financial institutions	Number of companies having interest coverage <i>ratio</i> more than 1	Number of companies having interest coverage <i>ratio</i> less than 1
2013-14	6,491.95	8,615.15	4	2	2
2014-15	5,589.03	7,876.00	4	2	2
2015-16	5,484.72	(1,257.44)	4	1	3
2016-17	6,613.80	(13,419.08)	3	0	3
2017-18	6,829.05	3,537.36	3	1	2

(Source: Compiled based on latest finalised financial statements)

It was observed that interest coverage *ratio* was more than one in only two power sector companies (MSETCL and MSPGCL) during 2013-14 and 2014-15 and in only one company (MSETCL) in 2015-16 and 2017-18.

Debt-Turnover Ratio

1.18 During the last five years, the turnover of power sector undertakings recorded compounded annual growth of 6.02 *per cent*. The debt reduced at a compounded annual rate of (-)3.05 *per cent* due to which the Debt-Turnover

Ratio improved from 0.81 in 2013-14 to 0.62 in 2017-18 as given in table below:

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

<i>(₹ in crore)</i>					
Particulars	2013-14	2014-15	2015-16	2016-17	2017-18
Debt from Government and others (Banks and Financial Institutions)	54,487.70	51,489.24	50,341.50	45,072.48	49,697.12
Turnover	67,390.78	74,759.11	79,995.61	75,186.17	79,543.51
Debt-Turnover Ratio	0.81:1	0.69:1	0.63:1	0.60:1	0.62:1

(Source: Compiled based on latest audited financial statements)

Assistance under Ujwal DISCOM Assurance Yojana (UDAY)

1.19 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 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

1.19.1 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 equipments, quarterly revision of tariff, comprehensive IEC campaign to check theft of power, assure increased power supply in areas where the 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 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 of AT&C loss to 14.98 *per cent* in 2018-19 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 2018-19.

Scheme for financial turnaround

1.19.2 The GoM was required to take over 75 *per cent* of MSEDCL short and medium term debts as on 30 September 2015. The scheme for financial turnaround *inter alia* provided that:

- State will issue non-SLR bonds and the proceeds realised from issue of such bonds shall be transferred to the DISCOM which in turn shall discharge the

corresponding amount of Banks/FIs short and medium term 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 DISCOM will be taken over in the priority of debt already due, followed by debt with higher cost.
- The transfer to MSEDCL by the State Government in 2016-17 will be as a loan.

Implementation of the UDAY Scheme

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

A. Achievement of operational parameters

The achievements *vis-a-vis* targets under UDAY Scheme regarding different operational parameters relating to the State DISCOM were as under:

Table 1.16: Parameter wise achievements *vis-a-vis* targets of operational performance upto March 2019

Parameter of UDAY Scheme	Target under UDAY Scheme	Progress under UDAY Scheme	Achievement (in per cent)
Feeder metering (in Nos.)	80	2,819	100
Metering at Distribution Transformers (in Nos.)			
Urban	16,748	3,577	21.36
Rural	10,341	1,612	15.59
Feeder Segregation (in Nos.)	612	3,155	100
Rural Feeder Audit (in Nos.)	189	1,590	100
Electricity to unconnected household (in lakh Nos.)	9.49	27.38	100
Smart metering (in Nos.)	80,065	-	-
Distribution of LED UJALA (in lakh Nos.)	83	102.18	100
AT&C Losses (in per cent)	14.98	17.34	-
ACS-ARR Gap (₹ per unit)	(0.39)	(0.04)	
Net Income or Profit/Loss including subsidy (₹ in crore)	6,109	472.04	7.73

(Source: State Health Card under UDAY Scheme as per website of the MoP, GoI)

The State has not initiated action for the Smart metering, it has performed poorly in the area of metering at Distribution Transformers, whereas the performance has been excellent in terms of feeder metering, feeder segregation, rural feeder audit, providing electricity to unconnected households and distribution of LEDs. Further, the State has not achieved the most important target of reduction of AT&C loss to 15 per cent by 2018-19. According to the Ministry of Power, the Government of India, the State of Maharashtra stood fifth amongst all the states on the basis of overall achievements made by the State DISCOM under UDAY Scheme upto 31 March 2019.

B. Implementation of Financial Turnaround

1.19.4 The Government of Maharashtra (GoM) conveyed (14 September 2016) its '*in principle*' consent to MSEDCL to take benefit of the UDAY Scheme. Thereafter, tripartite Memorandum of Understanding (MoU) was signed (7 October 2016 between the MoP, the GoM and MSEDCL. As per provisions of the UDAY Scheme and tripartite MoU, out of total outstanding debts

(₹ 22,097 crore) pertaining to MSEDCL as on 30 September 2015, the GoM took over 75 per cent (₹ 4,959.75 crore) of the total short and medium term debts of ₹ 6,613 crore in 2016-17 by raising Non-SLR/SDL bonds.

The amount of loan under UDAY Scheme was to be converted into grant over a period of five years *i.e.* 2016-17, 2017-18, 2018-19, 2019-20 and 2020-21. The GoM also charged interest of ₹ 301.77 crore during the years 2016-17 and 2017-18 on the loan given to MSEDCL under the scheme.

Comments on Accounts of State Power Sector Undertakings

1.20 Seven power sector companies forwarded their nine audited accounts to the Principal Accountant General during the period from 1 October 2017 to 30 September 2018. Of these, five 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 needs to be improved. The details of aggregate money value of the comments of Statutory Auditors and the CAG for the accounts of 2015-18 are as follows:

Table 1.17: Impact of audit comments on power sector companies

(₹ 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	-	-	-	-	1	858.80
2.	Increase in profit	-	-	-	-	1	154.99
3.	Increase in loss	2	2,000.61	3	11,732.30	1	13,940.63
4.	Decrease in loss	1	75.89	3	707.80	1	5.77
5.	Non-disclosure of material facts	2	7,297.29	-	-	1	45.24
6.	Errors of classification	1	37.73	2	92.20	-	-

(Source: Compiled from comments of the Statutory Auditors/C&AG in respect of power sector companies)

During the year 2017-18, the Statutory Auditors had issued qualified certificates on five accounts. Compliance to the Indian Accounting Standards (Ind-AS) by the PSUs remained average as the Statutory Auditors pointed out 10 instances of non-compliance to the Ind-AS in two accounts.

Compliance Audit Paragraphs

1.21 For Part-I of the Report of the Comptroller and Auditor General of India for the year ended 31 March 2018, two compliance audit paragraphs relating to power sector undertakings were issued to the Principal Secretary of Energy Department, GoM with request to furnish replies within six weeks. Replies on one compliance audit paragraph has been received (February 2019) and suitably incorporated in this report and reply to one compliance audit paragraph was awaited from the State Government (March 2019). The total financial impact of the compliance audit paragraphs is ₹ 111.01 crore.

Follow up action on Audit Reports

Replies Outstanding

1.22 The Report of the Comptroller and Auditor General of India is the product of audit scrutiny. It is, therefore, necessary that they elicit appropriate and timely response from the executive. The Finance Department, Government of Maharashtra issued (January 2001) instructions to all Administrative Departments to submit replies/explanatory notes to paragraphs/performance audits included in the Reports of the CAG of India within a period of three months after their presentation to the Legislature, in the prescribed format, without waiting for any questionnaires from the Committee on Public Undertakings (COPU).

Table 1.18: Explanatory notes not received (as on 30 June 2019)

Year of the Audit Report PSUs	Date of placement of Audit Report in the State Legislature	Total Performance Audit and Paragraphs in the Audit Report		Number of Performance Audit/Paragraphs for which explanatory notes were not received	
		Performance Audit	Paragraphs	Performance Audit	Paragraphs
2016-17	20 July 2018	1	6	1	6
Total		1	6	1	6

As on 30 June 2019, explanatory notes to one performance audit and six paragraphs of Audit Report 2016-17 in respect of PSUs on Power Sector were awaited (June 2019).

Discussion of Audit Reports by COPU

1.23 The status of discussion of Performance Audits and paragraphs that appeared in Audit Reports (PSUs) by the COPU as on 30 June 2019 was as under:

Table 1.19: Performance Audits/Paragraphs appeared in Audit Reports *vis-a-vi* discussed as on 30 June 2019

Period of Audit Report	Number of Performance Audits/Paragraphs			
	Appeared in Audit Report		Paragraphs discussed	
	Performance Audit	Paragraphs	Performance Audit	Paragraphs
2008-09	-	4	-	4
2009-10	1	5	1	5
2010-11	1	1	-	1
2011-12	1	3	-	3
2012-13	2	10	-	3
2013-14	-	4	-	4
2014-15	2	3	-	1
2015-16	-	5	-	-
2016-17	1	6	-	-
Total	8	41	1	21

(Source: Compiled based on the discussions of COPU on the Audit Reports)

The discussion on Audit Reports (PSUs) upto 2009-10 has been completed.

Compliance to Reports of COPU

1.24 Action Taken Notes (ATN) on 10 Reports of the COPU presented to the State Legislature between 2005-06 and 2017-18 had not been received (as on 30 June 2019) relating to the State PSUs in Power Sector as indicated in the following table:

Table 1.20: Compliance to COPU Reports

Year of the COPU Report	Total number of Reports of COPU	Total no. of recommendations in COPU Reports	No. of recommendations where ATNs not received
2005-06	1	5	5
2007-08	1	8	8
2010-11	1	6	6
2012-13	2	28	21
2015-16	3	11	11
2017-18	2	2	2
Total	10	60	53

(Source: Compiled based on ATNs received on recommendations of COPU from the respective Departments of GoM.

These Reports of COPU contained recommendations which appeared in the Reports of the Comptroller and Auditor General of India for the years 2001-02 to 2014-15.