

# “Profitability analysis of Selected Power Generating Firms in India”

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**Abstract:-** With a production of 1,423 BU in FY 2016, india was the third largest producer and third largest consumer of electricity in world. The research paper aims to study the profitability of selected firms of power generating in india in term of profitability ratios such as Net Profit Ratio, Gross Profit Ratio, Operating Profit Ratio, Return on Net Worth ratio. In this study three power generating firms were selected and data are collected for three year i.e. 2016-2017 to 2018-2019. Various tools were used for analysis like Mean, variance, correlation, standard deviation and t-test. At end this study found that profitability of firms and the impact of various factor on profitability of firm

**Keywords:-** Profitability, Analysis, Power Generating firm, Ratios.

## Introduction:-

In present era of mankind, Power is unavoidable needs. In every sector like manufacturing, services, agriculture etc. even in household work require power, So one can not avoid it. Day by day population will increase, by increasing population growth the consumption will also increase. But India has always been a power- deficient country. The demand for power is huge in India and supply of power has not been able to meet its demand. The Indian power industry is one of the largest and most important industries in India as it fulfils the energy requirements of various other industries. India has the world's 5<sup>th</sup> largest electricity generation capacity and it is the 6<sup>th</sup> largest energy consumer.

Profitability analysis involves careful selection of data from financial statements for the primary purpose of forecasting the financial health of company. The economic development of any country irrespective of its size mainly depends upon the development of power sector. How important is power consumption in the economic development a country, apart from other factors, may be taken known by taking into consideration its power consumption. Usually the correlation between consumption of power and the growth of economy is taken as a measure of progress.

## Review of literature

**Kuldeep Chaudhary and Surbhi Gupta (2016)** “A study on the profitability analysis of power grid corporation of india ltd” the net profit ratio is around 30% and the expenses ratio is around 17%. This is highly satisfactory. ROE has gradually increased from 7% to 14%. Dividend per share and net worth per share also increasing which is a good indication for company's shareholders and owners. During recession 2007-08, had no effect on PGCIL.

**Andrius Kazukauskas and Jurate Jaraite (2011)** “The Profitability of Power Generating Firms and Policies Promoting Renewable Energy” the estimation results show that power generators with larger assests had higher profitability. Also, the higher growth in renewable energy production led to higher profits.

**Pranati misra(2017)** “An Empirical Analysis of Financial Performance of Leading Power Sector organisation - NTPC” The profitability ratio show that overall profitability on NTPC has been positive during the study period. Finding of the study brought the conclusion that overall financial performance of NTPC was satisfactory during initial years of the study but deteriorated in later years.

## Statement of the problem

The primary objective of a business undertaking is to earn profits. Profits earning is considered essential for the survival of the business. A business needs profits not only for its existence, but also for expansion and diversification the investors want an adequate return on their investment as well as workers, creditors. And a business enterprise can discharge its obligation to various segments of the society only through earning of profit.

**Objective**

1. To study find profitability of selected power generating firm.
2. To evaluate and analysis the growth of power sector with respect to selected company.

**Accounting tools and techniques**

Ratio analysis

The profitability ratios used were Gross Profit Ratio, Net Profit Ratio, Operating Profit Ratio, Rate of Return on Capital employed.

**Methodology of study**

Data collection:

For this analysis, secondary data has been used. The data collected from the official website of BSE and selected power generating firms financial reports. 3 companies are selected for study which are NTPC, PGCIL and BHEL. The data are collected for three year 2016-17 to 2018-19.

**Data analysis and Interpretation**

Profitability ratios:

**Table 1- Profitability ratios for NTPC**

Year	Gross Profit Ratio (%)	Net Profit Ratio (%)	Operating profit Ratio (%)	Return on earning (%)
2017	19.62	11.99	27.19	8.35
2018	17.45	12.39	25.96	7.52
2019	17.18	13.01	25.21	7.16

Gross profit ratio of different power generating firm has been in fluctuating trend during the study period. Gross Profit ratio of NTPC for 2017 was 19.62%, 2018 was 17.45%, and 2019 was 17.18%. Net Profit ratio calculation was 11.99%, 12.39%, and 13.01% for the year 2017,2018 and 2019 respectively. Operating profit ratio calculation was 27.19%, 25.96% and 25.21% for period of 2017, 2018 and 2018 respectively. Return on capital employed calculation was 8.35%, 7.52%, and 7.16% for the period of 2017, 2018 and 2019 respectively.

Gross profit ratio and Operating profit ratio was highest in 2017, but it constantly decline. Net Profit ratio indicate actual profitability of the firm. Highest net profit recorded 13.01% in 2019. Net profit ratio increase year by year. Return on capital employed reveals the relationship between profit earned and capital employed to earn it. For NTPC in high retrun on capital employed recorded in 2017 then it was decline constantly.

**Table 2- Profitability ratios for BHEL**

Power Generating Firm	Gross Profit Ratio (%)	Net Profit Ratio (%)	Operating profit Ratio (%)	Return on earning (%)
2017	0.74	1.74	3.73	3.02
2018	3.96	2.78	6.68	5.63
2019	5.49	4.00	7.05	6.90

Gross profit ratio of different power generating firm has been in fluctuating trend during the study period. Gross Profit ratio of BHEL for 2017 was 0.74%, 2018 was 3.96%, and 2019 was 5.49%. Net Profit ratio calculation was 1.74%, 2.78%, and 4.00% for the year 2017,2018 and 2019 respectively. Operating profit ratio calculation was 3.73%, 6.68% and 7.05% for period of 2017, 2018 and 2018 respectively. Return on capital employed calculation was 3.02%, 5.63%, and 6.90% for the period of 2017, 2018 and 2019 respectively.

Gross profit ratio and Operating profit ratio was highest in 2019, but it constantly increase. Net Profit ratio indicate actual profitability of the firm. Highest net profit recorded 4.00% in 2019. Net profit ratio increase year by year. Return on capital employed reveals the relationship between profit earned and capital employed to earn it. For BHEL, high retrun on capital employed recorded in 2019. Return on capital employed increase every year.

**Table 3 Profitability Ratio for PGCIL**

Power Generating Firm	Gross Profit Ratio (%)	Net Profit Ratio (%)	Operating profit Ratio (%)	Return on earning (%)
2017	58.09	29.24	87.90	7.52
2018	56.62	27.69	87.17	10.04
2019	55.92	29.12	85.82	10.58

Gross profit ratio of different power generating firm has been in fluctuating trend during the study period. Gross Profit ratio of PGCIL for 2017 was 58.09%, 2018 was 56.62%, and 2019 was 55.92%. Net Profit ratio calculation was 29.24%, 27.69%, and 29.12% for the year 2017,2018 and 2019 respectively. Operating profit ratio calculation was 87.90%, 87.17% and 85.82% for period of 2017, 2018 and 2018 respectively. Return on capital employed calculation was 7.52%, 10.04%, and 10.58% for the period of 2017, 2018 and 2019 respectively.

Gross profit ratio and Operating profit ratio was highest in 2017, but it constantly decline. Net Profit ratio indicate actual profitability of the firm. Highest net profit recorded 29.24% in 2017. Net profit fluctuating all over the study period. Net profit ratio increase year by year. Return on capital employed reveals the relationship between profit earned and capital employed to earn it. For PGCIL in high retrun on capital employed recorded in 2019 than it was increase day by day.

**SUGGESTION:-**

- For NTPC, the profitability of the company is not good, it means resources are not use efficiently by the management, gross profit and operating profit ratios continue decrease but net profit ratios of company is increase every year. Study suggest that the company should take necessary steps to take control on decreasing trend and also decrease operating expenses.
- For BHEL, the Profitability of the company is good. Gross profit, net profit and operating profit ratios are constantly increase. It means resources are used efficiently by management. Capital employed is also increase. Study suggest that the company should maintain same policies for the betterment of profitability in future.
- For PGCIL, The profitability of the company is not good, but the net profit ratio was high in 2017 but it decline in 2018 than it increase 2019 again. Gross profit ratios and Operating profit ratios are decline year to year. And capital employed also decline. Thus study suggest that reduction in operating expenses and should take necessary steps to take control on decreasing trend.

**CONCLUSION**

It was an established fact that the demand for power is much higher than the supply. In such market conditions any project under taken has to be successful. But in such delicate situation of a catering to the public interest, the political environment rather than the cost plus basis determine the price at which power has to be supplied. This study title Profitability analysis of power generating firm identifies the revenue and expenses of firm. And how they used that resource efficiently.

Overall performance of all company are not sound good in matter of profitability. But among three company BHEL profitability is very low but company profitability increase year by year. PGCIL profitability highest among them but the trend is decline. Study found the profitability and growth of power generating firm.

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