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Review Paper

Study of Power Sector Companies and scope of Private Sector in Power Sector Industry

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Abstract

The power sector is the foremost vital sector for the event of any economy. India consumes concerning 3.4% of worldwide energy consumption thereby standing at sixth largest energy shopper within the world. Over the past thirty years the demand for energy has mature at a mean of 3.6% every year as a result of India's economic development. The demand of power due to economic growth and its supply do not match due to which India faces a serious shortage. The demand of power because of economic progress and its demand don't match because of that India faces a heavy shortage. Throughout the tenth five-year the country could arrange only 23GW of capability as against the target of 41GW. The focus in the eleventh Five-year plan a target of 78 GW has been set. This report is predicated on the intensive study of the Power sectors in India. The important objective of this study is absolute and apparent knowledge of power sector of power sector by considering and analyzing numerous aspects of the power sector. This study analyses both technical and fundamental aspects of the companies in power sectors. For fundamental analysis, the performance report is analysed like annual report, ratio analysis and also DCF valuation for predicting the future performance for next 10 years. The technical analysis is finished for brief term commercialism investors by victimization numerous technical tools like Candlesticks, MACD, And Relative Strength Index. the businesses taken for analysis purpose square measure the businesses that square measure on high growth stage like NTPC, TATA POWER, NEYVELI coal, NHPC, the businesses that square measure at aborning stage like TORRENT POWER, JSW ENERGY, JP HYDRO and corporations that square measure start during this sectors and square measure tiny players like ADANI POWER, RELIANCE POWER that square measure adopting fashionable ways and social control practices for getting into during this profitable and competitive market and scale back the gap of demand and provide.

Keywords: Power sector, Economic development, DCF Valuation, Policies.

Introduction

An economy's advancement, development and the capacity to accomplish upper hand generally relies on its infrastructure, fundamentals and available, reliable and quality resources, Power supply being one of them. The liberalization of Indian Economy in 1991, cleared route for industrial development which brought about enormous demand of electrical power which focused on the economy to create more power. As the Indian economy keeps on creating advancement and development, requirement of power administrations are likewise broadening to support the development way and along these lines extent of development in this area is enormous. The Power sector in India is growing from an "nascent" stage to "developing" stage. The demand of power at the base level is foreseen to ascend by 2017 at a relentless 7% - 8% CAGR[1]. The power business sector will need to develop to such a level along these lines, to the point that its per capita utilization can accomplish similar levels with a portion of the other creating nations like China and Brazil.

The aggregate energy utilization from around the globe is foreseen to extend by 50% from 2005 to 2030 in the IEO 2008 reference case projection[2]. The continually expanding costs of oil and natural gas may lessen the development of energy demand in long haul, yet the world energy utilization is relied upon to increment as an aftereffect of hearty financial development and extending populace in the developing nations of the world. The demand of Energy in Organisation for Economic Cooperation and Development (OECD) economies is anticipated to gradually grow over the projection period, at a normal yearly rate of 0.7%, though power utilization in the rising and developing economies of other than OECD nations is expected to ascend at a normal rate of 2.5% for each annum.

Objective: The Objective of the Study can be identified as: i. To conduct basic and essential assessment of the companies in power sector and analyse the stock price variation of power companies. ii. To examine the performance and analyse the future growth of new entrant companies in power sector. iii. To examine the impact of power sector in the growth and development of economy.

Data Collection: This study report uses the secondary data for analysis purpose. The sources of data are as follows: i. National

and government statistics available on internet. ii. Secondary data through open access database like moneycontrol, and company specific websites.

Hypothesis: i. H_0: The benchmark market return and the company return do not have a linear relationship. ii. H_a: The benchmark market return and the company return have linear relationship.

For this S & P CNX 500 is taken as market and the daily returns of market and the companies under consideration are taken for last one year and regression analysis is done.

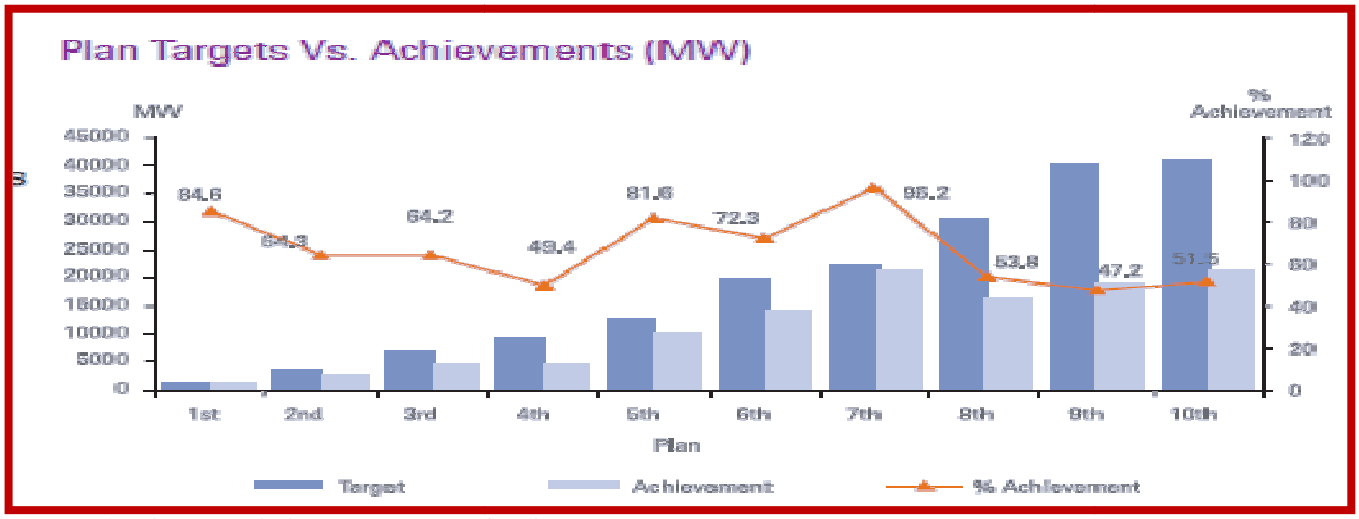
Literature Review

Omer A, Ghosh S, and Kaushik R in their paper "Indian power system: Issues and Opportunities", the Indian power Situation is talked about[3]. India's developing economy has constrained the nation to increase the capacity of power ability to 200 GW this year. Regardless of this development in supply, the nation is as yet confronting real difficulties in giving power access to every one of the family units furthermore enhancing unwavering quality and reliability of power supply. Its energy frameworks are attempting to conquer power deficiencies and poor energy quality. The significant requirement in accomplishing the objective is lack of capital assets. Deficiencies are exacerbated by inefficiencies in power generation, appropriation and end use framework.

KPMG- India in the article title "Power Sector in India" The research report highlights the present situation, difficulties and open doors for competitors in lucrative power sector in India[4]. The findings are that the present status of India is with 152 GW of capacity generation as on Sept'09. In India, the Per capita utilization is near about just 700 units as of 2008-09 while that in USA, 15k units,China 1.8k units and world average is 2.3k units of electricty utilization. India needs to produce extra capacity of around 100 GW to meet the target of thousand units per capita utilization of power. At presesnt the transmission limit of India is just 13% of aggregate generation flagging a tremendous hole amongst generation and transmission capacity.

A few qualities make the Indian power sector altogether different from those in the other three regions analysed down in ETP 2010 (China, Europe and the Unified States)[5]. To start with, the demand growth rate terms is expected to be much higher. This implies that for all intents and purposes the entire power system framework must be re-planned from zero, preparation, which opens up fascinating chances to really change the power requirement. Second, while coal is an essential indigenous energy requirement, the coal quality is much lower than other nations. Therefore, Indian coal is not as such the most economic supply choice: coal imports or other power supply choices are frequently more cost-effective. Third, renewable assets, except for solar powered, are restricted in India, especially when considered in connection to the demand development estimate for the coming decades.

Kumar N. and Sivaraja P. in the paper title "Energy conservation policies in India" concentrates on the electric power requirement prerequisite for the growth and report also concentrates on the energy protection approaches in India. Findings demonstrate that the power shortage is relied upon growth at fast rate[6]. The economic growth and development during the time span of 1997 to 2020 is evaluated to rise by 3.2% while power prerequisite development proportion is anticipated at 2.1% for each year. To satisfy this shortage the power capacity must be upgraded by setting up more power plant and in the meantime the power protection strategies are to be incorporated[7].



Source: Planning commission, government of India

Figure-1
Plan vs target achievement

Nair P. in his article "Tarriff policy of Electricty Act: 2003, A commentary" focused on the Electricity Act, 2003, and definition of "National Electricity Policy" system in 2005[8]. The study clarifies the administration's activity towards executing the Electricity Act 2003, with a specific end goal is to organize its present execution to accomplish its objective towards Tenth and eleventh plan of having power utilization of 1000 units for each individual every year. For this private segments are additionally welcomed to upgrade the competion in force division so that the shortage of force supply and also the issues in regards to transmission and dissemination misfortunes could be met and controlled. The fundamental conveyance misfortune is because of power burglary, non installment of bills and political issues. It is assessed that the aggregate force misfortune in India is around 28 percentage while normal loss to the economy across world is expected to be 12 - 14%. Along these lines there's monstrous extent of withdrawal of the crevice of interest and meeting the demand by having productive force dissemination and framework which should be lawfull[9].The approach likewise impress the rules for profit for value, obligation to value proportion like 70:30, deterioration rate for creating station, expense of obligation, expense of administration of outside trade hazard, working standards, tarrif rules.

Analysis

With current market price of shares as on 9th Aug'16 the Earning per Share (EPS) is growing, the trend of most of the companies is bullish (Table-1) with the objective of these companies is wealth maximisation. Except Reliance power (which shows the bearish trend for last two years in terms of EPS), other companies have positive growth in earnings and thus increase in share prices. EPS is calculated for last four years, and the newly listed companies have EPS after their listing in the respective stock exchange.

Table-1
Ratio Analysis

Earnings Per Share (EPS)				
Companies	**FY12**	**FY13**	**FY14**	**FY15**
NTPC Ltd	11.19	15.3	13.31	12.48
TATA Power	4.93	3.44	3.5	3.3
NEYVELI LIGNITE	8.41	8.7	8.95	9.42
Torrent Power	8.15	2.01	15.71	16.98
Reliance Power	1.11	1.83	0.2	0.09
NHPC LTD	2.25	1.91	0.82	1.92

www.moneycontrol.com

Table-2
Price -Book Value (PBV)

Price -Book Value (PBV)				
Companies	**FY12**	**FY13**	**FY14**	**FY15**
NTPC Ltd	1.83	1.46	1.15	1.49
TATA Power	2.22	2.07	1.69	1.44
NEYVELI LIGNITE	1.19	0.85	0.74	0.79
Torrent Power	1.08	0.72	1.11	1.48
Reliance Power	2.04	1.03	1.17	0.93
NHPC LTD	0.92	0.88	0.81	0.78

www.moneycontrol.com

With current market price of shares as on 9th Aug'16 the Price to Book value (PBV) is growing, the trend of most of the companies is bullish (Table-2) with the objective of these companies is wealth maximisation. The growth in PBV is direct indicator of Price to earning Ration (PE) the companies have positive growth in earnings in terms of book value and thus increase in PE. PBV is calculated for last four years, and the newly listed companies have PBV after their listing in the respective stock exchange.

Table-3
Return on Capital Employed (ROCE)

Companies	**FY12**	**FY13**	**FY14**	**FY15**
NTPC Ltd	7.46	9.11	7.11	6.17
TATA Power	5.48	4.35	4.15	3.7
NEYVELI LIGNITE	8.67	8.5	8.32	8.27
Torrent Power	3.22	0.69	5.33	4.61
Reliance Power	1.91	3.05	0.33	0.14
NHPC LTD	6.02	4.87	2.04	4.29

www.moneycontrol.com

With current market price of shares as on 9th Aug'16 the Return on Capital Employed (ROCE) is growing and for some years it is fluctuating, the trend of most of the companies is with positive slope (Table-3) with the objective of these companies is wealth maximisation. This increase in ROCE of each company shows that the capital is properly used and return is increasing as the performance is improving and demand for the power is increasing. ROCE is calculated for last four years, and the newly listed companies have ROCE after their listing in the respective stock exchange.

Table-4
Return on Equity (ROE)

Companies	FY12	FY13	FY14	FY15
NTPC Ltd	12.58	15.69	12.78	12.6
TATA Power	10.86	9.28	8.02	6.98
NEYVELI LIGNITE	11.72	11.27	10.8	10.62
Torrent Power	6.32	1.53	10.74	10.92
Reliance Power	1.93	3.05	0.33	0.14
NHPC LTD	10.51	8.43	3.75	7.51

www.moneycontrol.com

With current market price of shares as on 9th Aug'16 the Return on Equity (ROE) is growing and for some years it is fluctuating, the trend of most of the companies is with positive slope (Table-4) with the objective of these companies is wealth maximisation. This increase in ROCE of each company shows that the capital is properly used and return is increasing as the performance is improving and demand for the power is increasing. ROCE is calculated for last four years, and the newly listed companies have ROCE after their listing in the respective stock exchange.

Conclusion

The conclusion part of the analysis and findings are summarized using SWOT analysis. The strengths, weakness, threat and opportunities are analysed from company's perspective as well as the investment opportunity available for new players in this sector. Below are some of the findings summarized using SWOT analyses.

Strengths: i. The country has huge source of coal for thermal power plant, water for hydel power plant and ample availability of solar power, which makes India 5th largest power generation country in the world. ii. India is third largest country in the world which has 6600 km of Transmission and distribution system. iii. Installed capacity of solar power is 8 gigawatt and that of wind power is 27 gigawatt with potential of 2000 gigawatt.

Weaknesses: i. Though there is huge growth potential but the number of players both public and private players are very limited in this sector[9]. ii. Limited experience of private as well as public companies in this segment to handle foreign contracts in terms of import of machinery or raw materials and more important the foreign coal blocks. iii. Lack of experience and inefficiency of State Electricity Boards to handle fluctuating business environment notwithstanding their frail and their finance related conditions. iv. The quality of fuels like coal is not up to date for efficient thermal power plants as well as scarcity of nuclear fuels and the unwillingness of fuel as well as other raw material suppliers to go into commercialized contracts. v. Scarcity of warehouse for the storage of fuels, and other raw materials as well as the lack of framework for transportation and distribution systems.

Opportunities: i. With more than 20% of population of world residing in India having very low per capita power consumption provides huge market and demand for electric power. ii. India has huge potential of non-renewable sources of energy (like hydel power, wind power, tidel power, solar power etc) which is untapped, provides huge opportunity for both public and private players. iii. As most of the power plants, both old hydel and old power plants are required renovation, modernization, up-rating with updated and efficient generators and other machinery. iv. Rich sources of natural resources like tidal wave, solar power and wind energy are other sources for power generation.

Threats: i. Increase in cost of manpower and raw materials as well as machinery brought about increase in expenses of power generation, transmission and distribution. ii. The Competition in generation, transmission and dispersion of power is intensifying for domestic players as 100% foreign direct investment (FDI) has been allowed in this sector. iii. Electricity bill tariff rates are controlled by states and thus companies have limited scope cover the cost. iv. Securing fuel from imported coal sector is turning out to be progressively costly and dubious. v. From investor point of view this sector is not as much lucrative as other sector because of low ROE and large gestation period.

Recommendations: It is found that the speculation movement of the corporate has been influenced to an expansive degree because of recession in the economy. Yet, it is the fact that it has not subsidence to influence the demand for power but rather has affected on the sources of funds for new projects. Furthermore, since the incubation time frame for power plants are huge, the speculators are presently more careful than some time recently. They explore completely before investing to know the free cash flow in this sector. More and more firms are exploring for supernormal returns by entering in this profitable sector of power generation, transmission or distribution and are willing to acknowledge the fluctuations in the estimation of their portfolio which is part of this sector while near about the same rate the companies are willing to put resources into less risky ventures where fluctuations are limited.

Structural changes: With changes picking up pace, numerous changes and up gradation in structural framework are occurring both in terms of approach and specialized technical expertise. Generation, transmission and distribution divisions have been tossed open with the enactment of Electricity Act 2003, to completion alongside the introducing de-regulated administration in this sector. The administration proposes to improve source and process of open financing in the power sector and additionally support public sector company's endeavors to take up undertakings in joint venture with private

players and collaboration as well cooperation with the state government. There is more concentrated objective of starting appropriate arrangements and measures to quicken the pace of installation of hydro power projects, wind power projects and other renewable energy source advancements and to make atomic power generation to bridge the gap of demand and supply.

The Indian power segment market is experiencing a significant period of movement. Both the local and state governments are effectively occupied with finding reasonable answers for accomplishing, supportable advancement in the area of power sector. The important areas of reform in power sector in current scenario is stringent regulation, rapid capacity increment, State Electricity board (SEB) reforms, improving efficiency of distribution system and revenue generation and same is with the case of transmission system.

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