

Fundamental analysis of power sector



FUNDAMENTAL ANALYSIS – POWER SECTOR SECURITY ANALYSIS AND
PORTFOLIO MANAGEMENT SUBMITTED TO: PROF. HEMA BINDU KOTA

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27134 VINIT GOGRI 27057 ECONOMIC ANALYSIS Introduction Economics

experts and various studies conducted across the globe envisage India and China to rule the world in the 21st century.

For over a century the United States has been the largest economy in the world but major developments have taken place in the world economy since then, leading to the shift of focus from the US and the rich countries of Europe to the two Asian giants- India and China. According to some experts, the share of the US in world GDP is expected to fall (from 21 per cent to 18 per cent) and that of India to rise (from 6 per cent to 11 per cent in 2025), and hence the latter will emerge as the third pole in the global economy after the US and China. Indian Economy experienced a GDP growth of 9.4 percent during 2007-08. By 2025 the India's economy is projected to be about 60 per cent the size of the US economy.

The transformation into a tri-polar economy will be complete by 2035, with the Indian economy only a little smaller than the US economy but larger than that of Western Europe. By 2035, India is likely to be a larger growth driver than the six largest countries in the EU, though its impact will be a little over half that of the US. India, which is now the fourth largest economy in terms of purchasing power parity, will overtake Japan and become third major economic power within 10 years. Macro Economic Developments Industrial

Growth and GDP: Industrial growth released by CSO for the month of May 2008 stood at 3.

8% (lowest in 6 years) compared to 11.6% growth recorded in the previous fiscal. The slowdown was mainly on account of manufacturing sector that recorded a 3.9% growth in May 2008 in contrast to 11.

3% recorded in the corresponding month of the previous year. The industrial growth for April 2008 was revised from 7% to 6.2%. In the light of development taken place in the recent past, particularly the tightening of monetary policy by the RBI and incessant increase in the raw material prices including the prices of oil and oil products GDP growth is likely to moderate in the present fiscal. The GDP growth in the year 2008-09 was expected to be in the range of 7.5-8%. In May 2008, growth in 4 of the 16 specific industry sectors was higher than the growth recorded in the same month of 2007.

These 4 sectors included beverages & tobacco, wool, silk and man made fibre, paper and chemical products. Production of food, jute, wood, paper, rubber and metals products slipped in May this year compared to the same month of previous year. Inflation Trends: Average inflation recorded during 2007-08 was 4.66% lower than the average inflation rate computed for 2006-07.

In the year 2007-08 dearer food articles mainly contributed to high inflation. The government later imposed ban on few essential commodities and employed fiscal measures to check high inflation (caused due to manufactured items). Following the recent increase in the price of petroleum

products, inflation crossed the double-digit level and is presently ruling at a high of 11.9 % for the week ending June 28 2008.

Inflation at double-digit levels is likely to continue for the next few months before it starts receding following the recent fiscal and administrative measures taken by the government. The bumper agri production in 2007-08 and its repeat performance in 2008-09 will have a salutary impact on the food grain prices. As the year progresses we expect that average inflation for the year 2008-09 would be in the range of 8-8.5%. Inflation recorded from April-June (3rd week) 2007-08 averaged at 8.

9% compared to 5.4% in the corresponding period of last fiscal. Monetary Indicators: The recent policy measures taken by the RBI to control the excess money supply and arrest consumption and investment led demand include increasing the CRR and repo rate (rate at which commercial banks borrow from the central bank). The step has been taken due to worries over high inflation. The increase in the repo rate was seen from 8% to 8.5% and CRR increased by 50 basis points, 8.

50 % from July 5th and 8.75 % from July 19th this year. The resetting in CRR may lead to an upward revision in PLR (making borrowings costly) and also increase the rate of interest of deposits. Growth in money supply has picked up recording 21.

2 % increase in the last week of April 2008 on y-o-y basis, it touched 22.5% in May end and slowed to 20.7% by the end of June 2008. Growth in M3 on 20th June 2008 remains lower when compared with the growth in the corresponding month of the previous year.

Marginal slowdown in the government borrowings was found in June 2008 whereas picked in the case of commercial sector borrowings. The burden of non monetary liabilities rose sharply during the month by 82.8% over a negative 5% in the same period of previous year (on a y-o-y basis). Fiscal Trends: Government provisional accounts for the last fiscal show total expenditure slightly in excess of the targeted amount, mainly due to the non-plan category.

However, total receipts surpassed the targeted receipts for 2007-08 keeping the fiscal deficit at 90.4% of the targeted figure for the year and thereby showing an improvement in the fiscal situations in 2007-08 over the previous year. Collection from direct tax sources accounted for 50% to the tax kitty in 2007-08. Growth in the gross tax collections fell to 24% in 2007-08 from 29% recorded in the previous year. Increase was mainly seen in the tax collected from the income sources. 17% of the gross tax came from the customs and 20% were brought in from the union excise sources.

Stock Market Trends: FII have limited their role in the Indian stock market, observed in since February 2008. The meltdown in indices is seen across the stock markets. The representative 30-stock index Sensex climbed 20K in January 2008 before descending to 14K in June this year. Series of factors from sub prime to recession in US to the ongoing issue of oil price increase have kept the investors at bay. Downplay of the domestic economic indicators like slowdown in country's industrial growth due to oil price rise, inflation etc. were the additional factors forcing the investors to stay away from the Indian stock market.

Foreign Trade: Merchandise exports of USD 200 billion for the 2008-09 has been targeted. Last year mainly saw Rupee's battle against the USD, where Rupee turned in a manner that was disadvantageous to the exporters. Since April 2008 Rupee against USD recoiled in favor of exports however it also raised the import bill concerns at a time when oil prices are at its peak. During the April – May period of this fiscal merchandise exports recorded a growth of 21.7% in USD terms over the 20.3% rise recorded in the same period of previous year.

Imports however slowed to 31.7% during the two-month period against the 33.0% growth recorded in the previous year. Foreign Exchange Reserves: Total foreign exchange reserves have declined since May 2008 by about USD 3 billion. In May countries forex stood at USD 312 billion. The alterations observed in reserves are due to dollar selling by the central bank and revaluation in the currencies.

However no change was observed in the GDR/ SDR, value of gold and reserve tranche position in the IMF. Capital Inflows: Total foreign investment received in April 2008-09 was USD 2869 million, of which USD 3749 million was received as foreign direct investment diluted by negative portfolio investments (outflow) of USD 880 million, leaving the total investments at modest level. Trends in the Exchange Rates: The equation between Rupee and USD for June 2008 brought relief to Indian exports. From June 2nd to June 27th 2008 Rupee traded against the USD at 42.8- averaged monthly and recorded a low of 42.97 and a high of 42.

24 during the month. INR vis-A -vis Euro during the above given period averaged at 66. 5. INDUSTRY ANALYSIS INDUSTRY OVERVIEW The power sector has registered significant progress since the process of planned development of the economy began in 1950. Hydro -power and coal based thermal power have been the main sources of generating electricity. Nuclear power development is at slower pace, which was introduced, in late sixties.

The concept of operating power systems on a regional basis crossing the political boundaries of states was introduced in the early sixties. In spite of the overall development that has taken place, the power supply industry has been under constant pressure to bridge the gap between supply and demand. The Per Capita Consumption of Electricity of India can be viewed in the following chart. Growth of Indian power sector Power development is the key to the economic development. The power Sector has been receiving adequate priority ever since the process of planned development began in 1950.

The Power Sector has been getting 18-20% of the total Public Sector outlay in initial plan periods. Remarkable growth and progress have led to extensive use of electricity in all the sectors of economy in the successive five years plans. Over the years (since 1950) the installed capacity of Power Plants (Utilities) has increased to 89090 MW (31. 3. 98) from meagre 1713 MW in 1950, registering a 52d fold increase in 48 years.

Similarly, the electricity generation increased from about 5. 1 billion units to 420 Billion units – 82 fold increase. The per capita consumption of electricity in the country also increased from 15 kWh in 1950 to about 338 kWh in

1997-98, which is about 23 times. In the field of Rural Electrification and pump set energisation, country has made a tremendous progress.

About 85% of the villages have been electrified except far-flung areas in North Eastern states, where it is difficult to extend the grid supply. The decline in interest rates and consistent upward movement of the domestic currency will have a long term positive impact on the capital cost of the power sector, both from the financing and investment angle. We expect the Government and private players would give due and urgent attention through policy and strategic growth initiatives to exploit fully the current investment opportunity for the sector. We believe, the consistent rise of rupee coupled with the significant investment attention for the power assets in the country will have a long term positive impact on the valuation of the existing and operating power assets in the country. Current Scenario of the Power Sector in India With the growing demand of power, there is huge potential of investment in the power sector of India.

Power sector is in the concurrent list of the Indian Constitution. So it is under the purview of both the central government and the state government. The power sector of India is mainly dominated by the public sector undertakings, though slowly the private sector players are also coming up. The state and the central government generate nearly 90% of power. The private sector is accountable for only 10% generation. The funds of the power sector are fulfilled through budgets and other external borrowings.

There has been a significant growth in the power sector of India in the last few years. During 2006-07, the growth rate was only 3.1%. But in the year 2007-08 (up to September 07) the growth rate was 7.

6%. During the quarter ended June 2008, companies comprising the electricity industry registered a slower growth in net sales of 16.4 per cent. A more than proportionate increase in costs vis-a-vis total income resulted in a fall in profits both at the PBDIT and the net level.

NTPC, the largest electricity company pulled down the aggregate financial results of the industry. The industry recorded a fall in profits for the first time in at least the last eight quarters. Power generation in India during the June 2008 quarter was 4.8 per cent below its planned target. Total electricity generation recorded a moderate two per cent increase to 1,79,377 million kwh during the said period. This is mainly on account of slow growth in thermal power generation as it accounts for 80 per cent of the total power generated.

While hydel power generation was marginally up by 90 basis points on account of lower reservoir levels, nuclear power output dipped by 23 per cent over the year-ago level due to raw material supply constraints. Thermal power generation grew by three per cent in the June 2008 quarter compared to 7.1 per cent growth recorded in the first quarter of the previous year. Thermal power generation this year has suffered because of two reasons.

First, several of them have been shut for maintenance. Secondly, there has been some shortage in the availability of coal. Coal despatches have been low as coal has been wet because of pre-monsoon rains in several parts.

Inadequate coal at 30 plants resulted in critical stock position (of less than seven days). There have also been cases of shortage of lignite and gas in some places. These factors have adversely affected thermal power generation in the first quarter of 2008-09.

Electricity generation in India (millions kwh) Completion of plant maintenance coupled with higher availability of coal (the issue of wet coal received by plants being solved post monsoon) will bolster growth in thermal power generation. On signing of the nuclear deal with the US, supply of raw materials to existing nuclear power plants will increase resulting in higher nuclear power output. Water levels in major reservoirs in India recorded a 38.2 per cent decline to 48.

5 thousand million cubic metres as on 31 July 2008 vis-a-vis a year-ago. However, the situation improved considerably compared to the previous week. While reservoir levels were higher vis-a-vis week-ago levels in most of the states, Andhra Pradesh witnessed a fall of 71.7 per cent. Karnataka which accounts for 18.6 per cent of live water storage, registered a 49.

7 per cent decline compared to its year-ago level. This may be attributed to lower than normal rainfall witnessed in Kerala, Karnataka, Madhya Pradesh and Andhra Pradesh in particular. Despite this, hydro power generation was higher than its target of 27,874 million kwh for April-June 2008. We expect a good rainfall in the coming months to result in higher hydel output.

Thus, total power generation is expected to grow by 6.3 per cent during 2008-09. Structure of power supply industry In December 1950 about 63% of the installed capacity in the Utilities was in the private sector and about <https://assignbuster.com/fundamental-analysis-of-power-sector/>

37% was in the public sector. The Industrial Policy Resolution of 1956 envisaged the generation, transmission and distribution of power almost exclusively in the public sector. As a result of this Resolution and facilitated by the Electricity (Supply) Act, 1948, the electricity industry developed rapidly in the State Sector.

In the Constitution of India “ Electricity” is a subject that falls within the concurrent jurisdiction of the Centre and the States. The Electricity (Supply) Act, 1948, provides an elaborate institutional frame work and financing norms of the performance of the electricity industry in the country. The Act envisaged creation of State Electricity Boards (SEBs) for planning and implementing the power development programmes in their respective States. The Act also provided for creation of central generation companies for setting up and operating generating facilities in the Central Sector. The Central Electricity Authority constituted under the Act is responsible for power planning at the national level.

In addition the Electricity (Supply) Act also allowed from the beginning the private licensees to distribute and/or generate electricity in the specified areas designated by the concerned State Government/SEB. During the post independence period, the various States played a predominant role in the power development. Most of the States have established State Electricity Boards. In some of these States separate corporations have also been established to install and operate generation facilities. In the rest of the smaller States and UTs the power systems are managed and operated by the respective electricity departments.

In a few States private licencees are also operating in certain urban areas. From, the Fifth Plan onwards i. e. 1974-79, the Government of India got itself involved in a big way in the generation and bulk transmission of power to supplement the efforts at the State level and took upon itself the responsibility of setting up large power projects to develop the coal and hydroelectric resources in the country as a supplementary effort in meeting the country's power requirements.

The National thermal Power Corporation (NTPC) and National Hydro-electric Power Corporation (NHPC) were set up for these purposes in 1975. North-Eastern Electric Power Corporation (NEEPCO) was set up in 1976 to implement the regional power projects in the North-East. Subsequently two more power generation corporations were set up in 1988 viz. Tehri Hydro Development Corporation (THDC) and Nathpa Jhakri Power Corporation (NJPC). To construct, operate and maintain the inter-State and interregional transmission systems the National Power Transmission Corporation (NPTC) was set up in 1989.

The corporation was renamed as POWER GRID in 1992. Government regulation The policy of liberalisation the Government of India announced in 1991 and consequent amendments in Electricity (Supply) Act have opened new vistas to involve private efforts and investments in electricity industry. Considerable emphasis has been placed on attracting private investment and the major policy changes have been announced by the Government in this regard which are enumerated below: The Electricity (Supply) Act, 1948 was amended in 1991 to provide for creation of private generating companies for setting up power generating facilities and selling the power in

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bulk to the grid or other persons. Financial Environment for private sector units modified to allow liberal capital structuring and an attractive return on investment.

Up to hundred percent (100%) foreign equity participation can be permitted for projects set up by foreign private investors in the Indian Electricity Sector. Administrative & Legal environment modified to simplify the procedures for clearances of the projects. Policy guidelines for private sector participation in the renovation & modernisation of power plants issued in 1995. In 1995, the policy for Mega power projects of capacity 1000 MW or more and supplying power to more than one state introduced. The Mega projects to be set up in the regions having coal and hydel potential or in the coastal regions based on imported fuel.

The Mega policy has since been refined and Power Trading Corporation (PTC) incorporated recently to promote and monitor the Mega Power Projects. PTC would purchase power from the Mega Private Projects and sell it to the identified SEBs. In 1995 GOI came out with liquid fuel policy permitting liquid fuel based power plants to achieve the quick capacity addition so as to avert a severe power crisis. Liquid fuel linkages (Naphtha) were approved for about 12000 MW Power plant capacity. The non-traditional fuels like condensate and orimulsion have also been permitted for power generation. GOI has promulgated Electricity Regulatory Commission Act, 1998 for setting up of Independent Regulatory bodies both at the Central level and at the State level viz.

The Central Electricity Regulatory Commission (CERC) and the State Electricity Regulatory Commission (SERCs) at the Central and the State levels respectively. The main function of the CERC are to regulate the tariff of generating companies owned or controlled by the Central Government, to regulate the tariff of generating companies, other than those owned or controlled by the Central Government, if such generating companies enter into or otherwise have a composite scheme for generation and sale of electricity in more than one State to regulate the inter-state transmission of energy including tariff of the transmission utilities, to regulate inter-state bulk sale of power and to aid & advise the Central Government in formulation of tariff policy. The CERC has been constituted on 24. 7. 1998.

The main functions of the SERC would be to determine the tariff for electricity wholesale bulk, grid or retail, to determine the tariff payable for use by the transmission facilities to regulate power purchase and procurement process of transmission utilities and distribution utilities, to promote competition, efficiency and economy in the activities of the electricity industries etc. Subsequently, as and when each State Government notifies, other regulatory functions would also be assigned to SERCs. The Electricity Laws (Amendment) Act, 1998 passed with a view to make transmission as a separate activity for inviting greater participation in investment from public and private sectors. The participation by private sector in the area of transmission is proposed to be limited to construction and maintenance of transmission lines for operation under the supervision and control of Central Transmission Utility (CTU)/State Transmission Utility (STU).

On selection of the private company, the CTU/STU would recommend to the CERC/SERC for issue of transmission licence to the private company. The Electricity Laws (Amendment) Act, 1998 provides for creation of Central and State Transmission utilities. The function of the Central Transmission Utility shall be to undertake transmission of energy through inter-state transmission system and discharge all functions of planning and coordination relating to inter-state transmission system with State Transmission Utilities, Central Government, State Governments, generating companies etc. Power Grid Corporation of India Limited will be Central Transmission Utility. The function of the State Transmission Utility shall be to undertake transmission of energy through intra-state transmission system and discharge all functions of planning and coordination relating to intra-state transmission system with Central Transmission Utility, State Governments, generating companies etc. Competitors in the power sector with their market capital and returns Supply-Demand Relationships Supply Many projects have been planned but due to slow regulatory processes, especially in the distribution segment, the supply is far lesser than demand.

Currently, India needs to double its generation capacity in the next 7 to 10 years to meet the potential demand. Demand The long-term average demand growth rate is 6% to 7% per annum and is expected to grow at faster rate in the future. Barriers to entry Barriers to entry are high, especially in the transmission and distribution segments, which are largely state monopolies. Also, entering the power generation business requires heavy investment initially.

The other barriers are fuel linkages, payment guarantees from state governments that buy power and retail distribution license. Bargaining power of suppliers Not very high as government controls tariff structure. However, this may change in the future. Bargaining power of customers Bargaining power of retail customers is low, as power is in short supply.

However government is a big buyer and payment by government can be erratic, as has been seen in the past. Competition Not high currently. The Electricity Act 2003 aims to encourage investments, thereby increasing competition. Electric power transmission Electric power transmission, a process in the delivery of electricity to consumers, is the bulk transfer of electrical power. Typically, power transmission is between the power plant and a substation near a populated area.

Electricity distribution is the delivery from the substation to the consumers. Electric power transmission allows distant energy sources (such as hydroelectric power plants) to be connected to consumers in population centers, and may allow exploitation of low-grade fuel resources that would otherwise be too costly to transport to generating facilities. Due to the large amount of power involved, transmission normally takes place at high voltage (110 kV or above). Electricity is usually transmitted over long distance through overhead power transmission lines. Underground power transmission is used only in densely populated areas because of its high cost of installation and maintenance, and because the high reactive power produces large charging currents and difficulties in voltage management. Transmitting electricity at high voltage reduces the fraction of energy lost to Joule heating.

For a given amount of power, a higher voltage reduces the current and thus the resistive losses in the conductor. For example, raising the voltage by a factor of 10 reduces the current by a corresponding factor of 10 and therefore the losses by a factor of 100, provided the same sized conductors are used in both cases. Even if the conductor size is reduced x10 to match the lower current the losses are still reduced x10. Long distance transmission is typically done with overhead lines at voltages of 115 to 1, 200 kV. However, at extremely high voltages, more than 2, 000 kV between conductor and ground, corona discharge losses are so large that they can offset the lower resistance loss in the line conductors.

In an important information provided under RTI Act by Central Electricity Authority regarding transmission loss it was reported that in 2004-05 the transmission loss was to the tune of 175534. 96 million units. If we multiply the cost per unit as Rs 2 then the total loss in financial term will Rs 35000 crore (Approx.).

This is only one year figure. If we add 10 years transmission loss it will be around 3 to 4 lac crore rupees, enough money to build Delhi like metros in all major cities of India, enough money to build roads to take village kids to nearby town schools, enough money to build hospitals to take care our elderly people. The Indo-US Nuclear Deal Nuclear. Until now, nuclear power has been controlled by the central government, mainly for non-energy purposes (namely weapons), and has not been exposed to commercial accountability.

In addition, India's domestic uranium reserves are quite meager – the Atomic Energy Commission estimates that domestic resources could support only 10 GW of installed nuclear capacity. Thus, not surprisingly, nuclear energy has played only a small role in the power sector. Whether and how that could change is at stake in this deal. The India nuclear deal would provide for “full” civil nuclear cooperation between the U. S.

and India. By enabling India to import modern nuclear energy technology, as well as uranium, a properly regulated deal would in effect alleviate the historical restrictions placed on civilian Indian nuclear power. How true is it? The Prime Minister says the Indo-US nuclear deal will help strengthen India's energy security. Government agencies are busy bringing out information bulletins that after the deal India will have electricity in every home! What is the reality? It is true that India has huge shortages of electricity.

There are extensive powercuts all over the country, with the rural areas suffering the most. The farmers have to go to the fields at 3 AM in the morning, as power is available only then for running their pump sets to water their fields. Industry is facing severe power cuts and has to make do with costly captive diesel generators. This crisis of the power sector has not happened by itself; it is the result of a systematic attempt by successive Governments to starve the sector of public funds hoping to make high-cost private power more acceptable to the people. Instead the Government has gone in for privatisation of the power sector with higher prices of electricity. The net result has been the increasing bankruptcy of State Electricity Boards and converting what was a shortage of the early 90's to a full-blown crisis today.

The immediate need for adding to our existing capacity is obvious. The question here is whether nuclear energy is the only way to add to our existing installed capacity? At present, we have an installed capacity of about 143, 000 MW, with a mixture of coal, hydro, gas and nuclear power. One MW of power can supply electricity equal to the needs of about 8, 000-10, 000 households. Out of the 143, 000 MW that we have installed, electricity based on nuclear power plants is only 4, 120 MW, which is less than 3% of our total installed capacity. The major share is coal, which has about 55% of installed capacity followed by Hydro, which is about 25%.

By all accounts, we are short of power and this is acting as a brake on our development and causing enormous hardships to the people. India has large reserves of coal, which will last us for at least 100 years. India has also large untapped hydroelectric power sources and can also co-operate with Nepal to develop hydroelectric power. Recent discoveries of gas in the Kaveri Godaveri Basin also will help in diversifying our energy sources.

So using nuclear energy to generate electricity is only one of our options and not the only one. What option we choose and in what proportion depends on the money required for setting up these plants and the cost of electricity from these sources. The Government claims that the recent India US Nuclear Deal will lead to a huge addition to our power generating capacity as it will add a large amount of nuclear power from nuclear reactors imported from the US, France and Russia. What the Government is not telling us is what is the cost at which this power is going to be made available and how much money we will have to put in for nuclear power plants? Our calculations show that the cost of power from imported reactors will cost at least twice that

from coal based power stations. Coal-based power stations can produce power at about Rs. 2.

50 per unit at the power plant end; nuclear energy will cost between Rs. 5. 10 to Rs. 5. 50 per unit. Not only will it cost twice as much, it will cost three times as much money to build a plant with imported nuclear reactor, as it would to build a coal based power plant.

If we want to add about 100, 000 MW, which the Ministry of Power is saying that we are required to add, then we will be able to build all the 100, 000 MW with the same amount of money that we would require building about 30, 000 MW of nuclear power with imported reactors . For those who might remember the Enron case, there is a sense of history of repeating itself. At that time India was pushed to accept expensive private power only to help Enron. Once Enron started to produce power, its cost of Rs. 5-7 per unit sank the Maharashtra Electricity Board.

Now also, a nuclear energy route based on imported reactors is being foisted on the country in the name of energy security. If a 2, 000 MW Enron plant sank the largest State Electricity Board in the country – the impact of pushing a high cost 40, 000 MW of nuclear energy in the country may well be imagined. We agree that India should invest some money in nuclear power plants. Even though nuclear power may not be economical today, it is possible that in the long-term, as coal and oil reserves run out, nuclear energy will become more and more important. But to argue that we should put in the major part of our available money in to nuclear energy right now, that too with imported reactors, seems to be very short sighted.

It can only happen if we cut down our investments in either other forms of power such as coal and hydro, or if we decide to divert money from other areas such as roads, railways, education, health, etc. Imported reactors have another problem. Unlike the Indian 3-phase program started under Homi Bhabha, which considered only indigenous fuel, imported reactors will require large imports of uranium. The 3-phase cycle envisages using Fast Breeder Reactors that can recycle the fuel and can produce 50 times more energy from the same amount of uranium. India is world leader in Fast Breeder technology and is very near to commercialising it. The question is even if we divert money from other sectors to nuclear energy, how much will it be in our total energy scenario? Even by the most optimistic of Government projections, it will not be more than 9% of our total installed capacity in electricity generation.

The Government of India for the last 15 years has not been able to find money to invest in the power sector. In the 7th Plan, we had added about 21,000 MW. The last three plans have seen capacity additions of below 20,000 MW on the plea that the Government has no money. Suddenly, it appears we now have money for not only the power sector, but the most expensive route for electricity generation. It appears that this newfound love for nuclear energy has little to do with electricity but only a justification for an India US nuclear deal.

Electricity is however only a part of our energy usage. We also need oil and gas for running our transport sector and making fertilisers, plastics and petrochemicals. Requirements for oil and gas are growing. If we consider not electricity alone but also all other forms of primary energy, we will find that

oil and gas are about 40% of our total energy needs as against nuclear being only 3- 5%.

Obviously, getting oil and gas is much more important for India's security than buying imported reactors from General Electric and Westinghouse. Yet, what is our Government's priority? Is it seeing that we have a more stable situation in West Asia or is it becoming an ally the US, the key warmonger, who is busy planning more wars and de-stabilising West Asia? Is it ensuring our future energy supplies from Iran and other countries in West and Central Asia or helping a moribund US nuclear industry to sell us billions of dollars of reactors, which nobody is buying in the US? In a general way, we would expect the power supply industry to flourish in a country like India which has so much demand for power and which is a growing economy. However, from the above figures and statements about the power supply industry, we can see that the projected growth rate for 2008-2009 is only 6. %, and the growth rate for 2007-2008 was 7. 6%.

the low estimates have been made for various reasons such as plant maintenance in case of thermal projects, low rainfall for hydro reservoirs, shortage of fuel for nuclear plants as well as high transmission losses to the tune of lakhs of crores. There have also been extensive delays in the project completion of several key plants. However, the government has an encouraging attitude towards investment in this sector which would promote competition and high growth in the future. Investment in this industry in the coming years would give good returns, which may be the reasons for the entry of private players such as Reliance Infrastructure and Tata Power.

COMPANY ANALYSIS NTPC INTRODUCTION NTPC, the largest power Company in India, was setup in 1975 to accelerate power development in the country. It is among the world's largest and most efficient power generation companies. In Forbes list of World's 2000 Largest Companies for the year 2007, NTPC occupies 411th place. NTPC has installed capacity of 29, 394 MW. It has 15 coal based power stations (23, 395 MW), 7 gas based power stations (3, 955 MW) and 4 power stations in Joint Ventures (1, 794 MW).

The company has power generating facilities in all major regions of the country. It plans to be a 75, 000 MW company by 2017. NTPC has gone beyond the thermal power generation. It has diversified into hydro power, coal mining, power equipment manufacturing, oil & gas exploration, power trading & distribution. NTPC is now in the entire power value chain and is poised to become an Integrated Power Major.

NTPC's share on 31 Mar 2008 in the total installed capacity of the country was 19. % and it contributed 28. 50% of the total power generation of the country during 2007-08. NTPC has set new benchmarks for the power industry both in the area of power plant construction and operations.

ANALYSIS Recognizing its excellent performance and vast potential, Government of the India has identified NTPC as one of the jewels of Public Sector ' Navratnas'- a potential global giant. Inspired by its glorious past and vibrant present, NTPC is well on its way to realise its vision of being " A world class integrated power major, powering India's growth, with increasing global presence".

NTPC has tremendously improved its plant utilization from 1986-1987 to 2007-2008. The power generation was far short of installed capacity in the years from 1990 to 1997. However, the power generation and installed capacity have been almost equal from 1992 to 2007. This indicates that NTPC has improved its efficiency in power generation through the years. This would explain the fact that it provides a quarter of the country's power supply with only 1/5 of installed plant capacity.

ORGANIZATION STRUCTURE
Financial analysis of the company

BALANCE SHEET (Rs crore) Mar ' 07 Mar ' 06 Mar ' 05 Mar ' 04 Mar ' 03 Sources of funds Owner's fund Equity share capital 8, 245.

508, 245. 508, 245. 507, 812. 507, 812. 50 Share application money --- Preference share capital --- Reserves & surplus 40, 351.

3036, 713. 2033, 530. 8028, 116. 0023, 700. 20 Loan funds Secured loans 7, 479.

606, 173. 504, 778. 104, 743. 504, 149. 70 Unsecured loans 17, 661. 5014, 464.

6012, 647. 1010, 868. 409, 093. 10 Total 73, 737. 9065, 596.

8059, 201. 5051, 540. 044, 755. 50 Uses of funds Fixed assets Gross block 50, 604. 2045, 917.

6042, 996. 1039, 933. 7036, 610. 60 Less : revaluation reserve --- Less : accumulated depreciation 25, 079. 2022, 950. 1020, 791.

4018, 773. 6016, 745. 60 Net block 25, 525. 0022, 967. 5022, 204.

7021, 160. 1019, 865. 00 Capital work-in-progress 16, 962. 3013, 756.

0010, 038. 607, 589. 706, 386. 30 Investments 16, 094.

3019, 289. 1020, 797. 7017, 338. 003, 667.

40 Net current assets Current assets, loans & advances 25, 858. 8018, 234.

8014, 721. 8014, 642.

4019, 413. 20 Less : current liabilities & provisions 10, 702. 508, 650. 608, 561. 309, 189.

804, 585. 0 Total net current assets 15, 156. 309, 584. 206, 160. 505, 452.

6014, 828.

10 Miscellaneous expenses not written —8. 70 Total 73, 737. 9065, 596.

8059, 201.

5051, 540. 4044, 755. 50 Notes: Book value of unquoted investments 18,

008. 2018, 409. 6017, 684.

9017, 318. 80- Market value of quoted investments 316. 40951. 603, 524.

9019.

20- Contingent liabilities 25, 218. 8016, 429. 8014, 814. 008, 746. 50-

Number of equity shares outstanding (Lacs) 82454. 6482454.

6482454. 6478125. 4978125. 49 INCOME STATEMENT CASH FLOW ANALYSIS

NTPC issued an IPO, following which its equity base has increased from Rs. 7,

812 crore to Rs. , 245 crore.

It has shown a vast increase in reserves and surplus from March 2003 to March 2007 of more than 70% on the back of consistent retained earnings. There is a 94% increase in the amount of unsecured loan funds utilized by the company. The net current assets have been fairly constant for the past 5 years. Its operating income has increased sharply as can be seen from the above graph through the years, although its retained earnings have been constant.

SHAREHOLDING PATTERN DIVIDEND PATTERN ANALYSIS In November 2004, NTPC came out with its Initial Public Offering (IPO) consisting of 5.5% as fresh issue and 5.25% as offer for sale by Government of India. NTPC thus became a listed company with Government holding 89.5% of the equity share capital and rest held by Institutional Investors and Public.

The issue was a resounding success. NTPC is among the largest five companies in India in terms of market capitalization. NTPC has been paying fairly consistent dividends. It seems to follow a practice of declaring a dividend of 8% in May of each year followed by a substantial dividend of more than 20% in January. **SIGNIFICANT RATIOS**

| Ratios (Rs crore) | Mar '08 | Mar '07 | Mar '06 | Mar '05 | Mar '04 |
|------------------------|---------|---------|---------|---------|---------|
| Per share ratios | | | | | |
| Adjusted EPS (Rs) | 8.938 | 8.938 | 8.938 | 8.938 | 8.938 |
| Adjusted cash EPS (Rs) | 11.5310 | 11.5310 | 11.5310 | 11.5310 | 11.5310 |
| Reported EPS (Rs) | 8.998 | 8.998 | 8.998 | 8.998 | 8.998 |
| Reported cash EPS (Rs) | 11.5910 | 11.5910 | 11.5910 | 11.5910 | 11.5910 |
| Dividend per share | 3.20 | 3.20 | 3.20 | 3.20 | 3.20 |

026.016.375.47 Adjusted cash EPS (Rs) 11.5310.

558.508.758.07 Reported EPS (Rs) 8.998.337.

067.046.73 Reported cash EPS (Rs) 11.5910.

859.549.429.34 Dividend per share 3.50 3.20 2.

80 2. 40 1. 39 Operating profit per share (Rs) 14. 03 12. 32 9. 00 8.

84 6. 66 Book value (excl rev res) per share (Rs) 63. 8458. 9454.

5350. 6745. 99 Book value (incl rev res) per share (Rs.) 63. 84 58. 94 54.

53 50. 67 45. 99 Net operating income per share (Rs) 44. 9839. 5831. 7127.

3724. 15 Free reserves per share (Rs) 52. 03 47. 8 43.

24 39. 73 34. 82 Profitability ratios Operating margin (%) 31. 19 31.

13 28. 40 32. 30 27. 56 Gross profit margin (%) 25. 43 24.

77 20. 56 23. 62 16. 84 Net profit margin (%) 18.

51 19. 39 20. 20 23. 20 21. 04 Adjusted cash margin (%) 23. 74 24. 58 24.

31 28. 82 25. 21 Adjusted return on net worth (%) 13. 99 13. 61 11. 02 12.

57 11. 88 Reported return on net worth (%) 14. 08 14. 12 12. 94 13. 90 14.

64 Return on long term funds (%) 15. 25 14. 69 12. 26 13. 15 18. 04

Leverage ratios Long term debt / Equity 0. 54 0. 51 0. 45 0. 41 0. 43 Total debt/equity 0. 54 0. 51 0. 45 0. 41 0. 43 Owners fund as % of total source 64.

82 65. 90 68. 53 70. 56 69. 70 Fixed assets turnover ratio 0. 69 0. 64 0. 56 0.

52 0. 47 Liquidity ratios Current ratio 2. 32 2. 42 2. 11 1. 72 1. 59 Current ratio (inc. st loans) 2. 32 2. 42 2. 11 1. 72 1. 59 Quick ratio 2. 12 2. 18 1. 84

1. 44 1. 30 Inventory turnover ratio 33. 59 30. 50 25. 14 43. 42 38. 27

Payout ratios Dividend payout ratio (net profit) 45. 53 44. 11 45. 23 38. 69

23. 20 Dividend payout ratio (cash profit) 35. 33 33. 83 33. 45 28. 93 16. 4

Earning retention ratio 54. 17 54. 23 46. 91 57. 23 71. 41 Cash earnings

retention ratio 64. 49 65. 20 62. 44 68. 85 80. 63 Coverage ratios Adjusted

cash flow time total debt 3. 00 2. 89 2. 95 2. 42 2. 48 Financial charges
 coverage ratio 7. 17 6. 29 5. 04 5. 73 3. 36 Fin. charges cov. ratio (post tax)
 5. 72 5. 35 4. 93 5. 56 3. 16 Component ratios Material cost component (%
 earnings) 0. 07 0. 07 0. 09 0. 07 0. 08 Selling cost Component 0. 12 0. 17 0.
 15 0. 20 0. 22 Exports as percent of total sales – – – – Import comp. in raw
 mat. consumed – – – – Long term assets / total Assets 0. 67 0. 69 0. 75 0. 78
 0. 75 RATIOS PER SHARE PROFITABILITY RATIOS FUTURE PROSPECTS

Reliance Infrastructure Limited (formerly Reliance Energy Limited) Reliance Infrastructure Limited (formerly Reliance Energy Limited) is a part of the Reliance Anil Dhirubhai Ambani Group, India's second largest business house. Incorporated in 1929, Reliance Infrastructure is one of India's fastest growing companies in the power sector. It ranks among India's top listed private companies on all major financial parameters, including assets, sales, profits and market capitalization. Reliance Infrastructure companies distribute more than 25 billion units of electricity to over 25 million consumers across an area that spans over 1, 24, 300 sq kms and includes India's two premier cities, Mumbai and Delhi. The Company generates over 940 MW of electricity through its power stations located in Maharashtra, Andhra Pradesh, Kerala, Karnataka and Goa. Reliance Infrastructure has emerged as the leading player in India in the Engineering, Procurement and Construction (EPC) segment of the power sector. In the last few years, Reliance Infrastructure has expanded its foot-print much beyond the power sector. Currently, Reliance Infrastructure group is engaged in the implementation of projects not only in the field of generation, transmission, distribution and trading of power but also in other key infrastructural areas such as highways, roads, bridges, metro rail and other mass rapid transit

systems, special economic zones, real estate, etc. In order to appropriately reflect the diverse businesses being carried on by it, Reliance Infrastructure Limited changed its name, effective April 28, 2008, from Reliance Energy Limited to Reliance Infrastructure Limited. Reliance Energy engaged in the generation, transmission and distribution of electricity. A key constituent of the Reliance – Anil Dhirubhai Ambani Group, India's third largest business house, Reliance Energy is India's foremost private sector utility with aggregate group revenues of Rs. 13, 017 crore (US\$ 3 billion) and total assets of Rs. 12, 166 crore (US\$ 2. 80 billion). Reliance Energy companies distribute more than 28 billion units of electricity to cover 25 million consumers across different parts of the country including Mumbai and Delhi in an area that spans over 1, 24, 300 sq. kms. It generates 941 MW of electricity, through its power stations located in Maharashtra, Andhra Pradesh, Kerala, Karnataka and Goa. Reliance Energy has emerged as one of the leading players in India in the Engineering, Procurement and Construction (EPC) segment of the power sector. Reliance Energy companies currently pursue several gas, coal, wind and hydro-based power generation projects in Maharashtra, Uttar Pradesh, Arunachal Pradesh and Uttaranchal with aggregate capacity of over 13, 510 MW. These projects are at various stages of development. Reliance Energy is also active in the trading and transmission of power, making it a fully integrated player in the power sector. Reliance Energy has also forayed as an equity investor in to the infrastructure business, including in the prestigious Mumbai metro rail project and various road projects of the National Highways Authority of India. Company's performance during the year 2007-08. Last year witnessed the transformation of Reliance Energy into one of the foremost infrastructure

companies of India. This transformation came about through a conscious strategic choice on the company's part to seek a larger canvas, and to deliver superior returns to RIL's stakeholders. In keeping with the broader vision and ethos of the Reliance Anil Dhirubhai Ambani Group, India's third largest business house, RIL(REL) has set out to create greater value and build quality assets for the nation. RIL's transition from energy to infrastructure is guided by this vision. To formally signify this metamorphosis, RIL's Company has changed its name to Reliance Infrastructure Limited. Reliance Infrastructure is now one of India's leading and fastest growing companies in the infrastructure sector, with estimated group revenues of Rs 16, 690 crore (US \$ 4. 16 billion) and gross fixed assets of Rs 13, 300 crore (US \$ 3. 1billion). RIL'ss was the best performing stock in the BSE Sensex, having appreciated over 152 per cent in the calendar year 2007. Reliance Infrastructure is today one of India's most valuable private sector infrastructure companies.

Financial Analysis Balance sheet(Rs crore)

| | Mar ' 08 | Mar ' 07 | Mar ' 06 | Mar ' 05 | Mar ' 04 |
|---------------------------------|-------------|-------------|-------------|------------|------------|
| Sources of funds | | | | | |
| Owner's fund | | | | | |
| Equity share capital | 235. 62 | 228. 57 | 12. 36 | 185. 61 | 175. 26 |
| Share application money | 783. 49 | 88. 24 | 568. 01 | - | - |
| Preference share capital | --- | --- | --- | --- | --- |
| Reserves & surplus | 10, 667. 85 | 8, 412. 74 | 6, 820. 51 | 4, 834. 10 | 4, 183. 54 |
| Loan funds | | | | | |
| Secured loans | 1, 125. 00 | 1, 435. 00 | 1, 919. 17 | 85. 00 | 685. 00 |
| Unsecured loans | 3, 884. 04 | 4, 423. 32 | 2, 347. 12 | 2, 953. 67 | 1, 345. 81 |
| Total | 16, 696. 00 | 14, 499. 63 | 11, 388. 04 | 9, 326. 39 | 6, 389. 63 |
| Uses of funds | | | | | |
| Fixed assets | | | | | |
| Gross block | 3, 067. 58 | 5, 898. 36 | 4, 470. 61 | 5, 172. 97 | 5, 011. 22 |
| Less : revaluation reserve | - 697. 93 | 752. 17 | 752. 17 | 752. 17 | 752. 17 |
| Less : accumulated depreciation | -3, 082. 49 | 2, 814. 55 | 2, 452. 85 | 2, 001. 80 | 1, 967. 89 |
| Net block | 3, 067. 58 | 2, 117. 58 | 2, 117. 94 | 2, 117. 94 | 2, 117. 94 |
| Capital work-in-progress | 568. 92 | 288. 49 | 217. 65 | 192. 19 | 81. 68 |

Investments 7, 664. 362, 511. 881, 192. 74696. 222, 875. 04 Net current assets Current assets, loans & advances 9, 021. 4612, 849. 0410, 559. 798, 668. 82, 893. 26 Less : current liabilities & provisions 3, 626. 323, 267. 722, 486. 032, 198. 151, 717. 60 Total net current assets 5, 395. 149, 581. 328, 073. 766, 470. 031, 175. 66 Miscellaneous expenses not written — Total 16, 696. 0014, 499. 6311, 388. 049, 326. 396, 389. 63 Notes: Book value of unquoted investments 4, 336. 92942. 53189. 31605. 63788. 68 Market value of quoted investments 33, 986. 711, 601. 171, 007. 4797. 7893. 34

Contingent liabilities 6, 436. 781, 992. 48658. 86582. 65392. 31 Number of equity shares outstanding (Lacs) 2285. 302285. 302123. 201855. 731751. 55

Profit loss account(Rs crore)Mar ' 08Mar ' 07Mar ' 06Mar ' 05Mar ' 04

Income: Operating income 6, 889. 795, 752. 473, 963. 974, 156. 733, 511. 58 Expenses Material consumed 2, 487. 691, 601. 861, 031. 931, 030. 041, 129. 98 Manufacturing expenses 1, 015. 523, 044. 051, 710. 822, 036. 251, 300. 35 Personnel expenses 354. 09290. 35212. 80201. 68165. 68 Selling expenses-8. 868. 359. 849. 16 Administrative expenses 1, 960. 50310. 24235. 88206. 32257. 11 Expenses capitalised— Cost of sales 5, 817. 805, 255. 363, 199. 783, 484. 132, 862. 28 Operating profit 1, 071. 99497. 11764. 19672. 60649. 30 Other recurring income 611. 41695. 22555. 24311. 84129. 00 Adjusted PBDIT 1, 683. 401, 192. 331, 319. 43984. 44778. 30 Financial expenses 308. 76250. 32191. 88134. 8269. 93 Depreciation 222. 94300. 10417. 83479. 26454. 46 Other write offs— 0. 67 Adjusted PBT 1, 151. 70641. 91709. 72370. 36253. 24 Tax charges 160. 37122. 0750. 5849. 5050. 28 Adjusted PAT 991. 33 519. 84 659. 14 320. 86 202. 96 Non recurring items-103. 05-14. 2261. 0013. 14 Other non cash adjustments 93. 30157. 92-65. 145. 4622. 28 Reported net profit 1, 084. 63780. 81579. 78387. 32238.

38 Earnings before appropriation 1, 443. 911, 056. 74780. 09509. 87334. 00
Equity dividend 147. 73121. 12104. 6287. 2170. 9 Preference dividend—
Dividend tax 25. 1120. 5814. 8711. 749. 03 Retained earnings 1, 271. 07915.
04660. 60410. 92254. 48 Analysis Form the balance sheet it can be seen
that the company had some issue of shares in March 2004 and March 2005.
The reserve and surplus of the company are gradually increasing which
shows the upward growing trend of the company. This reserve and surplus
would help the company in their further investment and diversification. At
the same time company's profit form the year March 2003 to March 2008
have been completely increased which can be confirmed by the following
chart. There is great management of the current asset, loans and advances
as in the year from March 2007 to March 2008 there is a decrease in the
loans and advances from 12, 849 crores to 9021 crores. The salient points
are: * Total income of Rs 7, 501 crore (US\$ 1. 87 billion), as against Rs 6, 575
crore in the previous financial year, an increase of 14 per cent. * Cash profit
of Rs 1, 308 crore (US\$ 326 million), against Rs 1, 041 crore (US\$ 259
million) in the corresponding period last year, an increase of 26 per cent. *
Net profit of Rs 1, 085 crore (US\$ 270 million), against Rs 801 crore (US\$ 00
million) in the previous financial year, an increase of 35 per cent. * Cash
earnings per share of Rs 55 (US\$ 1. 37) and Earnings per share (EPS) of Rs
46 (US\$ 1. 1) for the year, against Rs 46 (US \$ 1. 1) and Rs 37 (US \$ 0. 9).
With a net worth of about Rs 11, 690 crore (US\$ 2. 91 billion), Reliance
Infrastructure counts among the top RIL's Indian private sector companies.
RIL's company remains debt free at the net level, and enjoys the top-end
ratings of ' AAA' and ' Ind AAA' assigned by Crisil and Fitch respectively – a
resounding re-affirmation of RIL's unwavering and long-standing

commitment to financial prudence and conservatism. In keeping with RIL's fundamental and overriding philosophy of creating value for RIL's investors, we decided to utilize a part of RIL's accumulated surplus for buy-back of shares, improving in the process the return on equity. RIL's Company has so far bought back about 24.38 lakh equity shares aggregating to Rs 307.68 crore from the open market. Power generation, transmission and distribution Generation RIL's Company's power generation units continue to demonstrate significant improvements across all important performance parameters.

During the past year, the Dahanu power station achieved a record Plant Load Factor (PLF) of 101.53 per cent. This is the highest ever PLF achieved by any power station in India. Similarly, RIL's power stations at Samalkot and Goa also registered healthy levels of PLF during the year. Power transmission Reliance Infrastructure continues to explore emerging opportunities in the transmission sector. RIL's Company has been selected as a joint venture partner, along with Power Grid Corporation of India Limited (PGCIL), for setting up the transmission network for Parbati and Koldam hydroelectric projects in Himachal Pradesh. We have also emerged as the lowest bidder for the construction, financing, operation and maintenance of transmission lines, running to 1,515 kms, for two separate projects floated by PGCIL. Power Distribution RIL's Company's distribution network in Mumbai continues to operate with 99.9 per cent online reliability. The continued vibrancy in residential, commercial and industrial activity in RIL's distribution area has raised the demand for quality and reliable power. With RIL's strong emphasis on the augmentation of RIL's existing network and greater check on T&D losses, we are better positioned than ever to meet this challenge. Share holding Share holding pattern as on : 30/06/200831/03/200831/12/2007 Face <https://assignbuster.com/fundamental-analysis-of-power-sector/>

value10. 0010. 0010. 00 No. Of Shares% HoldingNo. Of Shares% HoldingNo. Of Shares% Holding Promoter’s holding Indian Promoters8502864636. 658502864335. 958202864634. 68 Sub total8502864636. 658502864335. 958202864634. 68 Non promoter’s holding Institutional investors Banks Fin. Inst. and Insurance4313892818. 604297651918. 174308343418. 22 FII’s3910938716. 864385872718. 544936114320. 87 Sub total9421797840. 629875960241. 7510573601644. 71 Other investors Private Corporate Bodies147715616. 37156520156. 62154540176. 53 NRI’s/OCB’s/Foreign Others14743830. 6414486860. 114455970. 61 Govt812140. 04813680. 03817760. 03 Others64282442. 7760888132. 5733568121. 42 Sub total227554029. 81232708829. 84203382028. 60 General public2996823612. 922947113512. 462839999212. 01 Grand total231970262100. 00236530262100. 00236502856100. 00 The share holding pattern can viewed in the following pie chart. Dividend YearMonthDividend (%) 2008Apr63 2007Apr53 2006Apr38 2005Jul12 2005Apr14 2005Jan11 2004Sep11 2004Jul11 2004Apr15 2004Jan10 2003Oct10 2003Jul10 2003Apr44 2002Jun43 2001Jun40 2000Mar37 1999May34 1998Jun32 1997Jul30 Ratios (Rs crore) Mar ‘ 08Mar ‘ 07Mar ‘ 06Mar ‘ 05Mar ‘ 04 Per share ratios Adjusted EPS (Rs) 43. 822. 7531. 0417. 2911. 59 Adjusted cash EPS (Rs) 53. 1335. 8850. 7243. 1237. 57 Reported EPS (Rs) 47. 4635. 0730. 6328. 0421. 36 Reported cash EPS (Rs) 57. 2248. 2050. 3153. 8647. 34 Dividend per share 6. 30 5. 30 5. 00 4. 70 4. 50 Operating profit per share (Rs) 46. 91 21. 75 35. 99 36. 24 37. 07 Book value (excl rev res) per share(Rs) 477. 11378. 13331. 24270. 50248. 85 Book value (incl rev res) pershare(Rs.) 477. 11 408. 67 366. 66 311. 03 291. 80 Net operating income per share (Rs) 301. 48251. 72186. 70223. 99200. 48 Free

reserves per share (Rs) – 339. 74 292. 31 227. 62 192. 46 Profitability ratios Operating margin (%) 15. 55 8. 64 19. 27 16. 18 18. 49 Gross profit margin (%) 12. 32 3. 42 8. 73 4. 65 5. 54 Net profit margin (%) 14. 45 12. 43 14. 39 11. 64 10. 27 Adjusted cash margin (%) 16. 18 12. 71 23. 83 17. 90 18. 07 Adjusted return on net worth (%) 9. 09 6. 01 9. 37 6. 39 4. 65 Reported return on net worth (%) 9. 94 9. 27 9. 24 10. 36 8. 58 Return on long term funds (%) 9. 17 6. 51 9. 04 5. 85 5. 05 Leverage ratios Long term debt / Equity 0. 45 0. 58 0. 41 0. 71 0. 46 Total debt/equity 0. 45 0. 67 0. 60 0. 74 0. 46 Owners fund as % of total source 68. 52 59. 59 62. 3 57. 31 68. 21 Fixed assets turnover ratio 2. 25 0. 97 0. 72 0. 80 0. 70 Liquidity ratios Current ratio 2. 49 3. 93 4. 25 3. 94 1. 68 Current ratio (inc. st loans) 2. 49 2. 63 2. 09 3. 58 1. 68 Quick ratio 2. 40 3. 82 4. 07 3. 75 1. 57 Inventory turnover ratio 22. 94 32. 87 19. 60 31. 27 32. 28 Payout ratios Dividend payout ratio (net profit) 15. 93 17. 68 18. 37 19. 01 21. 25 Dividend payout ratio (cash profit) 13. 21 12. 86 11. 18 9. 89 9. 58 Earning retention ratio 82. 57 72. 75 81. 88 69. 17 60. 82 Cash earnings retention ratio 85. 77 82. 72 88. 91 87. 64 87. 92 Coverage ratios Adjusted cash flow time total debt 4. 13 7. 14 3. 96 4. 67 3. 09 Financial charges coverage ratio 5. 45 4. 76 6. 88 7. 30 11. 13 Fin. charges cov. ratio (post tax) 5. 23 5. 40 6. 57 8. 41 12. 86 Component ratios Material cost component (% earnings) 36. 10 26. 96 27. 67 24. 57 29. 50 Selling cost Component – 0. 15 0. 21 0. 23 0. 26 Exports as percent of total sales – – – 0. 02 0. 01 Import comp. in raw mat. consumed – – – Long term assets / total Assets 0. 55 0. 27 0. 23 0. 24 0. 64 Bonus component in equity capital(%) 3. 43 3. 53 3. 80 4. 35 4. 61

POWER GRID CORPORATION OF INDIA COMPANY BACKGROUND Power Grid Corporation of India Limited (PGCIL) is the central transmission utility (CTU) in India with a <https://assignbuster.com/fundamental-analysis-of-power-sector/>

mini-navratna status and owns and operates inter-state and inter-regional transmission lines. It currently handles 45% (298b units) of the total power generated in the country with a network 61, 875 ckt kms and 106 substations (as of June-07). It has completed 101 transmission projects valued at Rs251. 8b till date. The company forayed into telecom business to leverage its existing resources and domain expertise and currently owns 19, 000 kms of optical fiber cable network covering 60 cities. PGCIL is also a nodal agency nominated by the Gol to provide consultancy services for the investment lined up under Rajiv Gandhi Gramin Vidyutikaran Yojana (RGGVY, PGCIL's outlay of Rs94b) and Accelerated power development and Reforms Programme (APDRP, PGCIL's outlay of Rs84b). PGCIL is a central transmission utility (CTU) with a mini-navratna status, which owns and operates most of India's interstate and inter-regional power transmission system. It has been identified as a nodal agency by the Government to set up inter-regional transmission capacity in India. The company has also initiated the steps to develop certain transmission project on Public- Private Partnership (PPP) basis. It has already developed the 2, 000 MW Tala transmission line projects in partnership with Tata Power wherein PGCIL owns 49% stake (investment of Rs2. 23b). PGCIL has also entered into JV with Torrent Power with (26% stake) and with Jaiprakash Hydro (20. 63% stake) power for Karcham Wangtoo hydro power project. Significant ramp up in transmission capacity: During the Eleventh Five Year Plan (FY08 – FY12), planned capex on inter-state and inter- regional transmission network stands at Rs700b. Of this, PGCIL's share stands at Rs550b, which is 1. 9x FY07 gross block of Rs290b. Assured return business, new avenues to further boost overall returns: As per CERC norms, the returns in transmission sector are

regulated at 14% ROE, plus incentives (based on normative parameters).

Post factoring in the efficiency incentives, PGCIL can earn ROE of 15.5-16.

0%. Diversification into telecom and consultancy services will also enable to

improve return profile. The company earns services fees ranging from 12-

14% for implementation of RGGVY and APDRP schemes, resulting in revenue

potential of ~Rs22b during FY08-FY12. Balance sheet

Mar ' 99 Mar ' 07 Mar ' 06 Mar ' 05 Mar ' 04

Sources of funds Owner's fund Equity share capital 2, 883. 653, 787. 413, 584. 633, 204. 063, 035. 25

Share application money 157. 8938. 8138. 81-38. 81 Preference share capital --- Reserves & surplus

2, 329. 297, 138. 666, 378. 555, 826. 875, 454. 23 Loan funds Secured loans

2, 946. 8313, 053. 3010, 406. 628, 953. 637, 586. 97 Unsecured loans 3,

584. 256, 272. 204, 619. 514, 434. 414, 679. 41 Total 11, 901. 9130, 290.

3825, 028. 1222, 418. 9720, 794. 67 Uses of funds Fixed assets Gross block

8, 850. 6829, 004. 0924, 879. 2221, 930. 5619, 876. 23 Less : revaluation

reserve --- Less : accumulated depreciation 2, 175. 17, 198. 566, 372. 015,

635. 044, 992. 40 Net block 6, 675. 3721, 805. 5318, 507. 2116, 295. 5214,

883. 83 Capital work-in-progress 4, 306. 679, 450. 936, 409. 895, 024. 793,

876. 06 Investments -1, 967. 002, 139. 411, 882. 421, 851. 13 Net current

assets Current assets, loans & advances 1, 627. 463, 523. 072, 742. 312,

611. 272, 924. 80 Less : current liabilities & provisions 714. 346, 469. 014,

791. 433, 424. 722, 780. 15 Total net current assets 913. 12-2, 945. 94-2,

049. 12-813. 45144. 65 Miscellaneous expenses not written 6. 7512. 8620.

7329. 6939. 00 Total 11, 901. 9130, 290. 3825, 028. 1222, 418. 9720, 794.

67 Notes: Book value of unquoted investments -1, 955. 02, 127. 41- Market

value of quoted investments -71. 4670. 92- Contingent liabilities -6, 909.

616, 207. 85- Number of equity shares outstanding (Lacs) 28836. 5037874.

07358. 4632040. 6030352. 50 INCOME STATEMENT (Rs crore) Mar ' 99Mar ' 08Mar ' 07Mar ' 06Mar ' 05 Income: Operating income 1, 709. 604, 614. 823, 589. 853, 145. 342, 513. 07 Expenses Material consumed 133. 080. 030. 010. 010. 01 Manufacturing expenses 18. 90161. 87148. 0889. 7532. 29 Personnel expenses106. 01691. 60468. 21358. 91227. 18 Selling expenses- 8. 667. 245. 81- Administrative expenses93. 53204. 48175. 47155. 08230. 60 Expenses capitalised-694. 37-197. 10-154. 0- Cost of sales351. 52372. 27601. 91455. 16490. 08 Operating profit1, 358. 084, 242. 552, 987. 942, 690. 182, 022. 99 Other recurring income60. 66468. 95358. 98341. 03318. 21 Adjusted PBDIT1, 418. 744, 711. 503, 346. 923, 031. 212, 341. 20 Financial expenses380. 871, 842. 191, 171. 731, 104. 00808. 69 Depreciation 522. 88959. 65827. 58744. 33642. 26 Other write offs2. 335. 438. 198. 869. 31 Adjusted PBT512. 661, 904. 231, 339. 421, 174. 02880. 94 Tax charges 52. 61282. 07249. 53161. 84122. 85 Adjusted PAT 460. 05 1, 622. 16 1, 089. 89 1, 012. 18 758. 09 Non recurring items-0. 03-0. 13-0. 2227. 43 Other non cash adjustments-15. 63-173. 6139. 61-3. 03- Reported net profit444. 421, 448. 471, 229. 371, 008. 93785. 52 Earnigs before appropriation444. 421, 464. 711, 284. 001, 040. 83785. 52 Equity dividend20. 00505. 08368. 82302. 68184. 00 Preference dividend— Dividend tax2. 2085. 8459. 2642. 4442. 51 Retained earnings422. 22873. 79855. 92695. 71559. 01 CASH FLOW STATEMENT (Rs crore) Mar ' 08Mar ' 07Mar ' 06 Profit before tax1, 730. 531, 482. 001, 168. 99 Net cash flow- operating activity2, 989. 524, 345. 533, 686. 80 Net cash used in investing activity-5, 342. 00-6, 735. 76-4, 602. 82 Net cash used in fin. activity3, 021. 252, 998. 00901. 10 Net inc/dec in cash and equivlnt668. 7607. 77-14. 92 Cash and equivalnt begin of year1, 196. 82589. 05603. 97 Cash and

equivalent end of year1, 865. 591, 196. 82589. 05 ANALYSIS Share holding
 Share holding pattern as on : 30/06/200831/03/200831/12/2007 Face
 value10. 0010. 0010. 00 No. Of Shares% HoldingNo. Of Shares% HoldingNo.
 Of Shares% Holding Promoter's holding Indian Promoters363490833586.
 36363490833586. 36363490833586. 36 Sub total363490833586.
 36363490833586. 36363490833586. 36 Non promoter's holding Institutional
 investors Banks Fin. Inst. and Insurance789052891. 87562160021.
 34318911520. 76 FII's1143570042. 721215988692. 891682908464. 00Sub
 total2189032765. 202052704034. 882212374045. 26 Other investors Private
 Corporate Bodies762805031. 81811689041. 93844283342. 01
 NRI's/OCB's/Foreign Others52000480. 1252337680. 1243246030. 10
 Others36660280. 0926505790. 0670526170. 17 Sub total851429142.
 02890495862. 12958029542. 28 General public2698830406.
 412796092416. 642568899376. 10 Grand total4208837565100.
 004208837565100. 004208838630100. 00 The shareholding pattern can be
 seen more clearly from the following pie chart: IPO DETAILS Issue Size: 573.
 9m shares(Rs24. 6b-Rs29. 1b) Price Band: Rs44 to Rs52 per share Issue
 Date: 10 Sep-2007 to 13 Sep-07 ISSUE ALLOCATIONRetails not less than 35%
 of issue Non Inst. bidders not less than 15% of issue Qualified Inst. buyers At
 least 50% of issue Dividend YearMonthDividend (%) 2008Jun7 2008Feb5
 Ratios(Rs crore) Mar ' 99Mar ' 08Mar ' 07Mar ' 06Mar ' 05 Per share ratios
 Adjusted EPS (Rs) 1. 603. 852. 88282. 372. 37 Adjusted cash EPS (Rs) 3. 426.
 155. 08492. 484. 40 Reported EPS (Rs) 1. 543. 443. 25281. 462. 45 Report