

October 18, 2010

India Equity Research | **Research Report** | Utilities Power

Tata Power

"Multi-fold expansion in power generation & distribution"

CMP ₹1,394

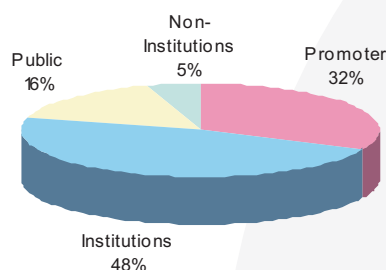
Target Price ₹1700

BUY

COMPANY SNAPSHOT (October 18, 2010)

Market Price	Sensex
₹1394	20,169
52 Wk H / L	Bloomberg Code
1,518/ 1193	TPWR IN
Mkt Cap (mn)	Shares O/S (mn)
₹330901	237
BSE CODE	NSE CODE
500400	TATAPOWER

Shareholding Pattern



Price Performance Chart



Quick Fundamentals

Particulars	FY09	FY10	FY11E	FY12E
Net Sales	72362	70983	84596	101171
PAT	9222	9388	10018	11328
OPM	25%	30%	25%	24%
EPS	43.7	40.8	43.1	48.7
DPS	11.5	12.0	12.1	13.6
BV per share	393	448	477	509
PE (x)	31.9	34.2	32.4	28.6
P/B (x)	3.6	3.1	2.9	2.7
EV/Sales (x)	4.2	4.4	3.8	3.3
EV/EBITDA (x)	17.2	14.3	15.0	13.4
Dividend yield	0.8%	0.9%	0.9%	1.0%
RoE	11%	9%	9%	9%
ROCE	10%	10%	9%	9%

INVESTMENT RATIONALE

✓ Integrated Business Model

Pioneering as a power generator, Tata Power has emerged as a well integrated power major in India. The company's presence across the power sector value chain strengthens each business segment internally making it a unique business model. Every new component of business is opening up roads of opportunities and growth, for example, its recent penetration into untapped areas of Coal Bed Methane and Geothermal partnering with experts in the respective fields, has opened up new areas of development in coal and renewable business.

✓ Multi-fold Capacity Expansion plan

The company has embarked upon a very ambitious but measured expansion plan to multiply its capacity 8-fold. Tata Power plans to develop 25000 MW capacity with an investment of ₹700 bn by 2017, owning 8-10% of the countries generation assets from the current level of 2%. Aiming to be company to reckon in future is seeking opportunities in all dimensions to achieve its target. The targets and funding for the next couple of years is well planned and achievable.

✓ De-risk Fuel Availability and Pricing

With secured fuel supply, Tata Power is ready to take off its projects under construction and in pipeline. Stake in Bumi Resources has reinforced its stand in coal business and hedged the risk of its pioneering supercritical project at Mundra. Multi-fuel strategy at Trombay provides the flexibility to pump in the cheapest fuel and generate power at the best cost. Going forward, these strategic arrangements shall provide an added advantage in the depleting reserves scenario.

✓ Pioneer in Parallel Licensee Arena

Consistent performance, reliable power supply and customer satisfaction in Mumbai License Area has encouraged implementation of Parallel Licensing in Mumbai, the first of its kind in India. Tata Power has outperformed competition by supplying electricity at reasonable tariff and has successfully penetrated the rival territory. Its market share has increased significantly from 14% in November 2009 to 26% in August 2010, the customer base has shot up by 200% and peak customer demand has gone up by 65%, which is a remarkable achievement and the trend is expected to continue going forward though at a slower pace. With this the bulk electricity supplier in Mumbai is now the most preferred retail distributor in the city.

Key Risks:

- ✓ Regulatory risk
- ✓ Delay in project implementation
- ✓ Fluctuation in fuel prices and changes in Indonesian Mining Laws

VALUATION

We have valued Tata Power using SOTP method, wherein we have employed FCFF method to value the standalone entity and FCFE is used to value the under-construction projects of Mundra UMPP and Maithon Power. We assign P/BV of 2x FY12E to NDPL where Tata Power holds 51% stake. The Indonesian Coal mines are discounted by 25% at the Olympus deal value. We have thus estimated the fair value of Tata Power at ₹1700 and recommend to 'BUY' the stock at the current market price.

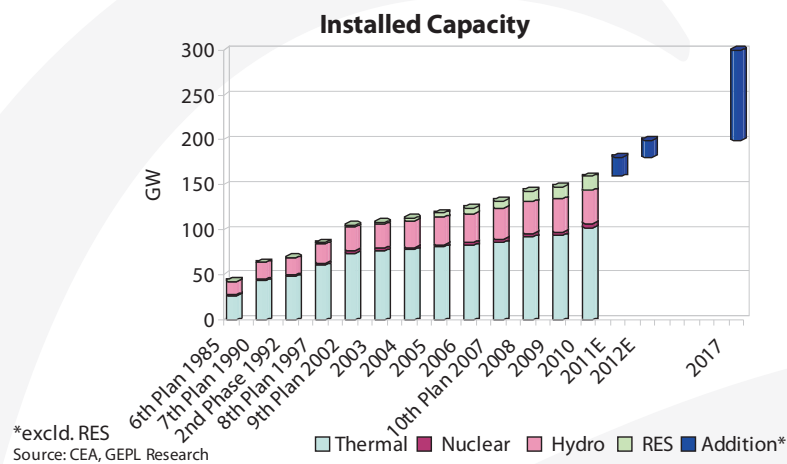
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1. Power Sector in India

1.1 Introduction

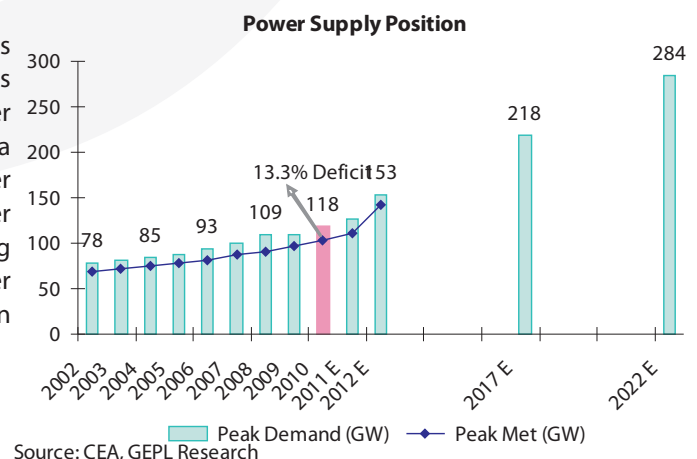
Infrastructure being a key prerequisite to the continued growth of the Indian economy, the sector is attracting huge investments. Any slippage in the development targets would constrain the nation's growth. India needs to maintain an economic growth rate of 8% to 10% over the next 25 years, to ensure human development and growth of all classes of society. To achieve the growth rate of 8% through 2031-32 and to facilitate development across all categories, India needs to multiply its primary energy supply by 3 to 4 times and expand its electricity generation by 5 to 6 times. As per estimates, by 2031-32 power generation capacity of India must increase to nearly 800 GW from the current capacity of around 164 GW.



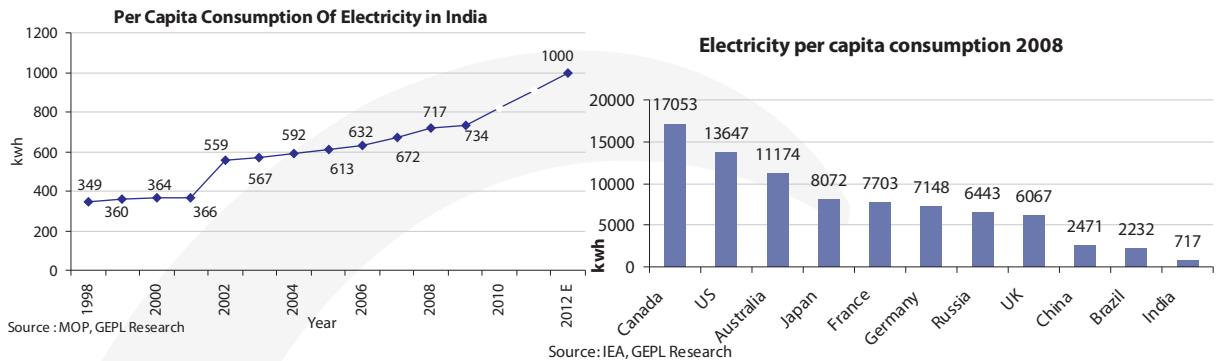
As energy is a significant part of infrastructure, Government of India has identified power sector as a key sector of focus to promote sustained industrial growth. Power sector is monitored and controlled by the government and regulatory bodies as it is an important sector facilitating the accelerated industrial growth of the country. India has seen a 5% CAGR growth in capacity since the 6th plan and also during the 11th Plan, however the capacity addition is expected to boost up ranging from 10-13% in FY11 and FY12 to meet 11th plan capacity target. The 11th plan capacity addition target has been revised downward from about 78,700 MW set by the Planning Commission to 62,374 MW by CEA, out of which 26,400 MW of capacity is commissioned till August 2010 and 17,500 MW is expected to be commissioned in the balance period of FY11 and 18,600 MW in FY12. Thereafter the sector is expected to grow at 8% CAGR in the 12th & 13th plan to achieve the 100 GW capacity addition target in each plan. The estimated requirement of funds during 11th Plan was ₹10,000 bn and for 12th Plan is about ₹11,000 bn comprising of Generation, Transmission and Distribution schemes.

1.2 Demand Supply Gap

Although the generation capacity is growing at 5% CAGR the demand is increasing at a higher rate. The power demand is expected to grow at 7% with a GDP growth of 9% for the 12th Plan. The per capita consumption is increasing at a higher rate of 7% CAGR, resulting in increasing power deficit. The demand may further grow with the increasing industrialization and technological advancement.



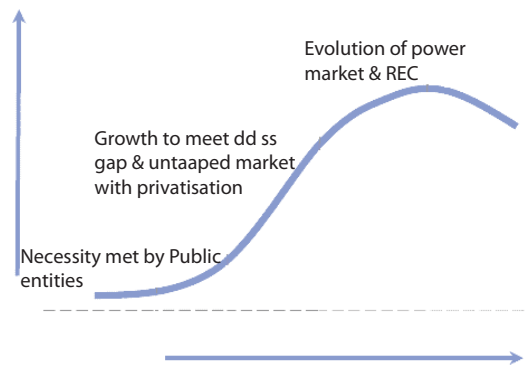
The per capita consumption of electricity in India is 734 kwh as per 2009 statistics and is estimated to rise upto 1000 kwh by FY12. However, as compared to global markets the per capita consumption of India is the lowest at the current level. The actual per capita consumption for FY12 might exceed the expectation of 1000 kwh, considering the consistent efforts made at central and state level to penetrate in the rural and un-electrified markets, which will increase the power requirement further.



1.3. Power Sector in Growth Phase

Predominantly power business is in the hands of Public Utilities, however post Electricity act 2003, reforms were initiated and the sector was opened up for privatization and competition. Since then, various initiatives have been taken on the regulatory front to encourage investments in the sector, with the motive to support economic growth of the country. Private sector companies are progressing to grab the investment opportunity and evolve as major players in this public dominant sector.

The current scenario unveils that Power Sector is in growth phase and the sector shall see accelerated growth till the demand supply gap is met in the most efficient way. This growth phase shall continue till the electricity deficit situation is overcome, facilitated by increased power generation and reduced T&D losses. The growth curve has sharpened with private sector exposure to the governed sector. Private players contributed 13% to the installed capacity by the end of the 10th plan and are expected to contribute about 19% of the installed capacity post 11th plan.



The upcoming developments in power market to facilitate trading of power and renewable energy certificates shall rule the sector going forward. Power markets in India are now opened up with the introduction of Power Exchange; however the operations are still in the nascent stage of development and the market is looking forward to enter into phase of complex future products.

As the power supply catches up with the demand requirement, power market shall get active and the competition shall look forward to market determined price of power. Foreseeing the future market scenario power regulators are thus encouraging open access and power trading.

Currently thermal energy contributes 60% of the installed capacity as it is the most viable option in present scenario. The regulators have initiated higher returns and incentive for development of renewable energy based power projects to attract investments. Going forward, the contribution of renewable energy is expected to increase significantly to generate fuel free power and reduce the dependence on thermal energy.

Tata Power was a pioneer in private participation in this sector and is growing in line with the upcoming events and activities by participation and this makes it a complete power sector entity.

2. Tata Power – Introduction

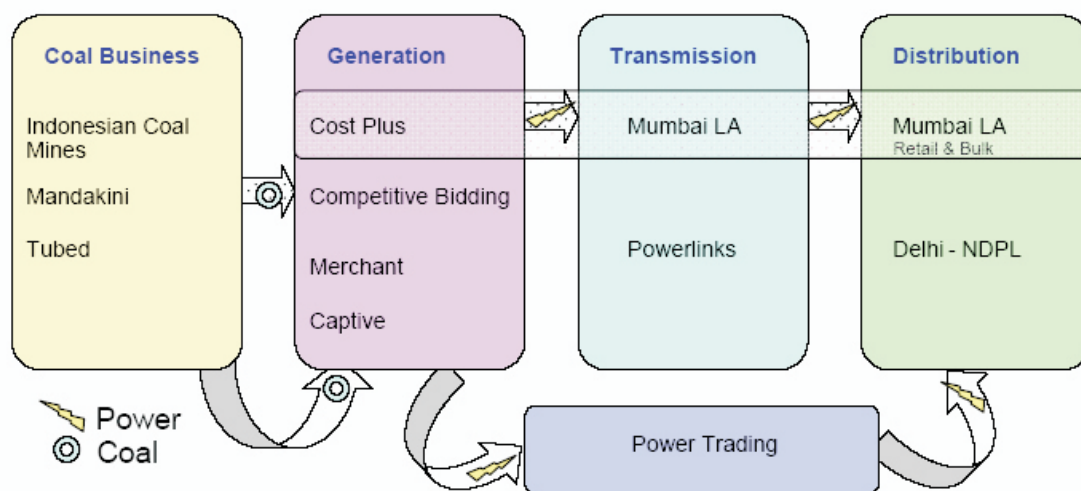
Tata Power, erstwhile known as Tata Electric, pioneered generation of electricity in India in 1910 with the establishment of Tata Hydro-Electric Power Supply Company Limited and The Andhra Valley Power Supply Company Limited was established in 1916. On April 1, 2000, the two companies were merged with Tata Power Company established in 1919 to form Tata Electric Company.

Now this company has presence in all aspects of Power, be it Thermal, Hydro, Solar, Wind Energy, Transmission, Trading and Distribution and also coal business. Tata Power is licensed to generate, transmit and distribute power to the city of Mumbai and its suburbs. It has coal mines in India and abroad to fuel its robust capacity additions. The subsidiaries operating Distribution, Transmission and Trading are also performing well.

3. Investment Thesis

3.1 Integrated Business Model

Tata Power is a well integrated private sector utility having presence across the power sector value chain including power generation, transmission, distribution, power trading and coal business. The company's strategy to venture into all related business areas supporting its existing business activities makes it a unique business model. Integration has helped the company to minimize risks and also overcome the embedded hurdles of power sector in the most efficient manner.



Tata Power has an operational generation capacity of 2997 MW, which includes 2027 MW generated for the vertically integrated operations in Mumbai Licensee Area. Out of the Mumbai generation 650-700 MW is utilized to meet the demand requirement of distribution business (Tata - D) and 100 MW is used for merchant sale via its subsidiary, Tata Power Trading Company. The balance power is sold to other Distribution Licensees operating in the area on regulated terms. The generation business is thus supporting the distribution segment and the company has a balanced mix of regulated and merchant sales, restraining its risk exposure.

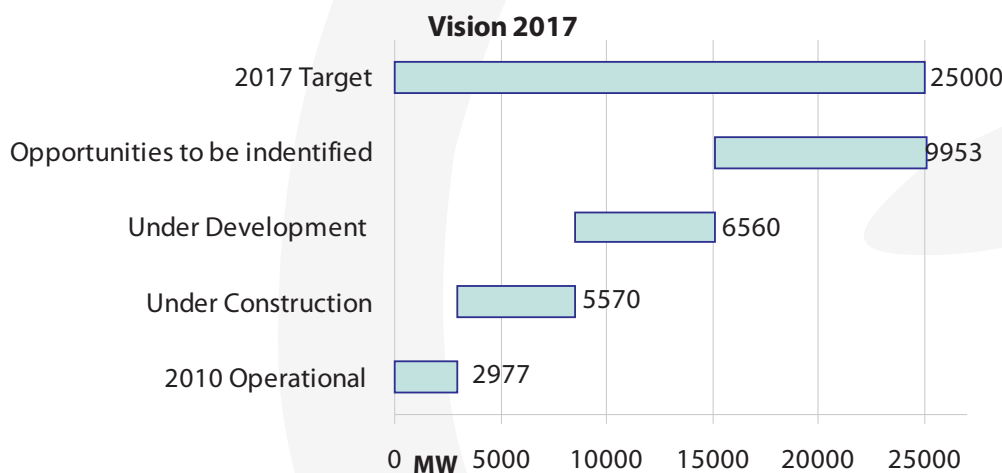
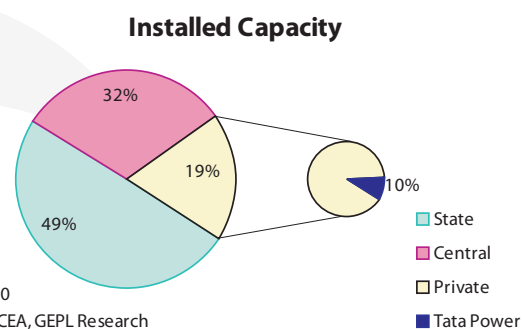
Foreseeing the future constraints in fuel supply, in 2006-07, Tata power had ventured into Coal business by acquiring 30% take in Indonesian Coal mines from Bumi Resources via investments in Bhivpuri Investments and Bhira Investments. It has entered into a back to back Fuel Supply Agreement with Bumi Resources to source Indonesian coal for Mundra UMPP. Tata Power also owns coal blocks at Mandakini and Tubed, these blocks shall be utilized to fuel the generation projects in pipeline. Thus, the company's backward integration into fuel supply secures its upcoming projects.

Trust Energy Resources, a Singapore based wholly owned subsidiary of Tata Power, was also formed to securitize coal supply and to ship coal for Tata Power's thermal power generation operations. This subsidiary is also one of the parties supplying power equipments to Tata Power.

The integrated approach opens up new streams of business for Tata Power and hedges the risk exposure of the company, especially power supply and fuel, at consolidated level.

3.2 Robust Capacity addition plan

Tata Power pioneered power generation in India with the commissioning of India's first large hydro-electric project in 1910 and since then it has a track record of performance, customer care, sustained growth and balanced risk approach for implementation of projects. Tata Power now has operational capacity of 2997 MW amounting to about 2% of the all India capacity of 163 GW. The Company plans to scale up the capacity upto 25000 MW by 2017 which shall contribute 8-10% to the nation capacity with an investment of over ₹700 bn.



Source: Company, GEPL Research

Projects	Under Construction	Under Development
Mundra	4000	
Maithon	1050	
Jojobera	120	
Dagachhu	114	
DG Set	40	
Dehrand		1600
Naraj Marth.		660
Tiruldih		1980
Corus		525
Bhivpuri		400
Tama Koshi		880
Sorik Marapi		240
Solar	3	25
Wind	243	250

With over 12000 MW capacity under construction and planning, Tata Power looks forward to organic and inorganic growth to attain the vision of 25000 MW. We expect the company to participate aggressively in UMPP projects, competitive bidding and acquisitions as well.

The company is developing solar project under the purview of the National Solar Mission. It intends to venture into nuclear power as well, if the central government opens up nuclear generation for private sector.

Having firm base in India, Tata power is exploring opportunities across the globe with its generation projects in Nepal, Bhutan, Netherlands and now Indonesia. It has 10% stake in Geodynamics Ltd. in Australia for geothermal energy and Tata Power led consortium has won a bid to develop a 240 mw geothermal project in Indonesia.

Status of Upcoming Projects

	Jojobera	Maithon	Mundra	Dagachhu	Naraj Marthpur	Tiruldih	Coastal Maha.
MW	120	1050	4000	114	1200	1200	2400
Status on Approvals							
Land	Y	Y	Y	Y	In progress	In progress	In progress
Environment	Y	Y	Y	Y	In progress	In progress	Y
Water	Y	Y	Y	Y	Y		Y
Fuel	Y	Y	Y	NA	Y	Y	
Off Take – PPA	Y	Y	Y	Y			
EPC award	Y	Y	Y	Y			
Financial Closure	Y	Y	Y	Y			
Constructions Started	Y	Y	Y	Y			
Project Commissioning	Q3 FY10	FY12	FY14	FY14	Land+ 3 yrs	Land+ 3 yrs	Land+ 3 yrs

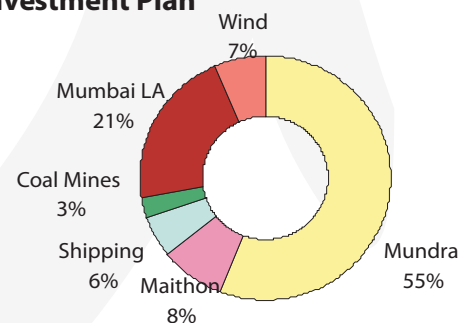
Source: Company, GEPL Research

3.3 Capex in Place

Tata power has planned for funds to meet the capex requirements till FY13. The company will require ₹179 bn by FY 13 to fund in its existing and upcoming projects. The funding requirements shall be met by a mix of debt and equity, where in equity shall be supported by internal accruals and balance of FCCB (issued in FY10) proceeds and the debt will be raised via domestic and foreign loans. With regards to debt, Tata Power had issued 9.15% non convertible debenture amounting to ₹3.5 bn in July 2010 followed by ₹2.5 bn in September 2010 via debentures.

FY11- FY13	Fund Requirement
	Own Funds ₹ 47 bn
	Debt ₹132 bn
Total	₹179 bn

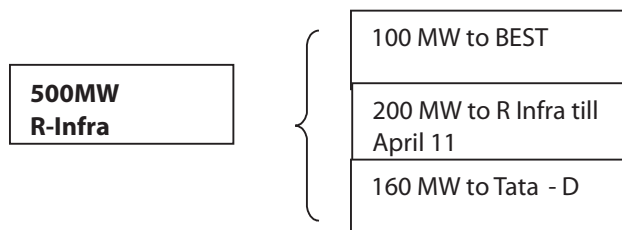
Investment Plan



Source: Company, GEPL Research

3.4 Pioneer in Parallel Licensee Arena - Competitive Edge in Mumbai License area

Since historic times Tata Power has been supplying power to Reliance Infrastructure (R-Infra) and R-Infra has been consuming this power to meet its customer demand in Mumbai License Area. However, the power purchase agreement between the parties was under legal dispute. In May 2009, Tata Power received favorable consent from Supreme Court and it is now free to sell this power to consumers other than R-Infra. Retrospective to the order, the 500 MW supplied to R-Infra is now utilized in the following manner:



Adding on to the ongoing conflict between Tata Power and R-Infra in the matter of supply of power in Mumbai, the MERC has issued its order in October 2009 favoring Tata power and permitting the consumers of R-Infra to switch over to Tata Power's network, in consumers interest. With the implementation of parallel licensing, Tata Power has entered the next phase of development of Power Markets in India. Tata power has outperformed competition in its Mumbai Licensee area by supplying electricity at reasonable tariff as compared to the competition.

Cost Benefit analysis

Category	Consumption	Savings on switch over from R Infra to Tata – D*	Savings on switch over with Revised tariff effective Sep 2010*
Residential	100 units	Nil	15%
	300 units	Nil	26%
	500 units	4%	29%
	1000 units	17%	34%
Commercial	10 KW	20%	14%
	50 KW	34%	29%
	100 KW	41%	38%
	200 KW	41%	38%

* Including open access charges

Source: MERC Tariff Orders , GEPL Research

Till September 2010, switching over from R Infra to Tata Power was beneficial to consumers having monthly consumption of 400 units and above. So even if more residential consumers were opting for changeover, they are high tariff paying subsidizing consumers and thus Tata Power will have better realization.

Subsidizing consumers to benefit from changeover than subsidized consumers... resulting in better realization for Tata Power

However, subsequent to the tariff revision in September 2010, consumers with consumption less than 400 units shall also benefit from switching over of distribution licensee.

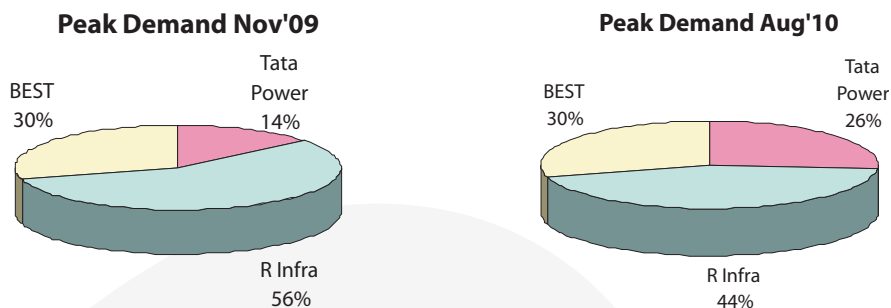
Tata Power's consumer base has increased by 58,000 consumers from 26,000 in November 2009 to 84,000 MW in September 2010 by providing a cost-effective proposition. Peak Demand has increased by more than 65% from ~ 450 MW in November 2009 to 761 MW till June 2010. However, currently Tata Power Generation is able to supply only 650 MW of its generation and Tata Power –D is purchasing about 100 MW on merchant basis at the rate of ₹6 – 6.5 per unit increasing its power purchase cost.

Peak demand is expected to reach 1050 MW by FY13, 38% above the Q1 FY11 level of 761 MW

Post April 2011, Tata Power may divert 200 MW to Tata – D (which is currently being supplied to R Infra) this will enable the Company to reduce the Power Purchase Cost from ₹6.0 – 6.5 per unit on Merchant basis to ₹3.5 – 4.0 per unit on regulated basis. With the reduced power cost Tata Power may not benefit in terms of enhanced margins, as the cost of power purchase is passed on to the consumers in Mumbai Distribution business, however Tata Power will be able to attract more consumers by quality supply and cost effective tariff.

The composite equation of increased power supply from self generation and switching over of consumers to Tata Power has helped the company to increase its market presence in Mumbai with the competitive pricing. Although Tata Power is supplying power to BEST for retail distribution, BEST consumers are also now permitted to procure power directly from Tata Power at cheaper tariff.

Mumbai Scenario



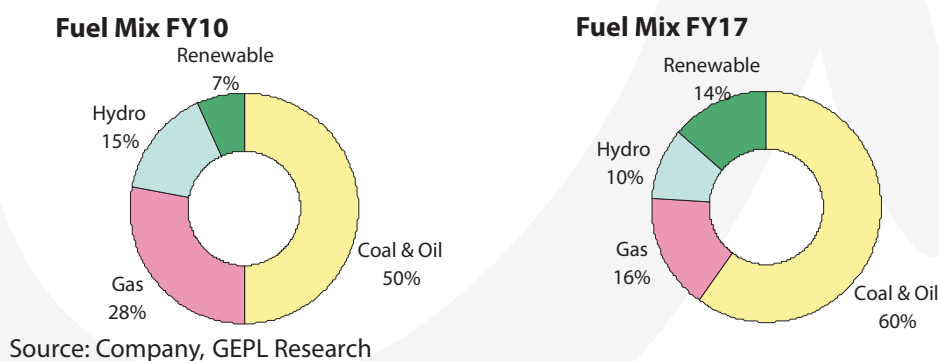
Source: SLDC, GEPL Research

Market Share of Tata Power in Mumbai Distribution area has increased from 14% in November 2009 to 26% in August 2010.

Further to the above discussion, MERC has recently floated an Expression of Interest bid for R-Infra's license area, as the current license of R-Infra will expire on August 15, 2011. This is a significant opportunity for Tata Power to spread its operations across Mumbai.

3.5 Balanced Fuel Mix and Assured Fuel Arrangement

Fuel being a major input to a generation, it is a key performance driver of any power project. However, the availability and pricing of fuel is a matter of concern for all generating companies. Tata Power has adopted a multi-fuel strategy to reduce the dependence on single fuel, this enables the company to modify the fuel mix to generate power at the best cost. Last fiscal, in order to reduce the fuel costs efforts were made to replace the expensive Oil by cheaper RLNG.



Source: Company, GEPL Research

Tata Power has entered into fuel supply agreements for its projects in operation, under construction and in pipeline. The Coal requirements for the upcoming projects will be taken care of as specified in the below tables and the balance coal requirement, if any, for the projects will be secured through linkage coal.

Project	Fuel Source
4000 MW Mundra UMPP	Bumi Resources, Indonesia
1050 MW Maithon	Bharat Coking Coal Limited
1320 MW Naraj Marthapur	Mandakini coal block
1980 MW Tiruldih Power Project	Tubed coal block
525 MW Corus (Tata Steel)	Production Gas from Corus

Source: Company, GEPL Research

Tata Power looks forward to make further investment in coal assets to support capacity expansion in future. The company's holding in domestic and international coal sources shall provided an added advantage in the reserve depleting scenario.

3.6 Coal Investments – hedging risk

In March 2007, Tata Power acquired 30% stake in two coal mines in Bumi for US\$ 1.2 bn and had also signed a fuel supply agreement to source $10.11 \pm 20\%$ MTPA of imported coal from Bumi's coal mines. The intent behind this was to assure coal supply for Mundra UMPP and hedge the risk of coal price variation. In light of the 30% stake in Bumi resources, Tata Power shall be entitled to 30% of the coal production. In CY09, the coal production at Bumi was 63 MT is targeted to attain 75 Mt by 2012 and 100 MT going forward. If Tata Power is entitled to 19-20 MT, out of this only ~12 MT will be utilized for Mundra UMPP as per the fuel supply agreement, thus Tata Power is long on coal. In case of increase in coal prices, the generation projects will have a negative impact, however Tata Power as a consolidated entity shall benefit in the form of better return from coal stake in Bumi and vice versa.

Tata power is currently in the process of selling 15% of its holding in Indonesian coal mines, scouting to acquire more mines overseas. However the hedging strategy shall remain unaffected even after sell of stake to Olympus Capital.

Besides Indonesian coal mines, Tata Power also has stakes in two captive coal blocks, which shall be utilized for power generation projects in Orissa and Jharkand. The company has a one-third share in the 7.5 MMTPA a year Mandakini coal block in Orissa, and 40% stake in Tubed Coal Mining Limited where the share of coal off-take is 2.3 MMTPA out of the total of 5.75 MMTPA.

3.7 Renewables - Solar and Wind Projects

To meet the Renewable Energy Purchase Obligation (RPO) of Mumbai distribution business and understanding the upcoming trends in renewable energy, Tata Power intends to multiply its wind energy capacity from 201 MW in FY10 to about 450 MW in FY12 and also plans to develop 25 MW Solar projects to attract preferential tariff going forward. Incentive schemes for non conventional energy generation and introduction of Renewable Energy Certificates (REC) will facilitate Tata Power to recover the project cost and realize fuel free earnings.

India is gifted with abundant potential of Renewable Energy, which includes wind energy, biomass, small hydro, solar etc. At present India has reached to an installed capacity of 16.429 MW (upto August 2010) which is about 10% of the total capacity. The National Action Plan of Climate Change (NAPCC) has set the target of 5% renewable energy purchase for FY 2009- 10 which will increase by 1% for next 10 years. Strong regulatory measures are required to fulfill these targets. Every electricity distributor is supposed to meet its RPO as per the State regulation, for example in Maharashtra the RPO is 6%.

Cost of electricity generation from renewable energy sources is classified as cost of electricity generation equivalent to conventional energy sources and the cost for environmental attributes. So a distribution company will have two options

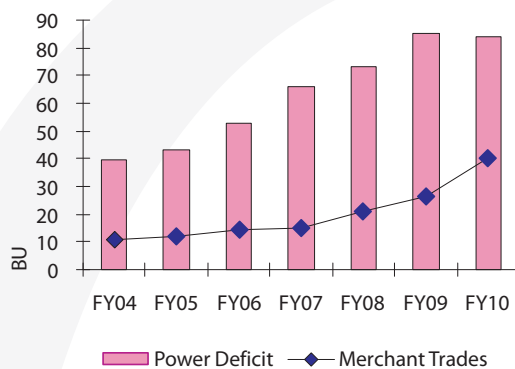
- i) either to buy the renewable energy at preferential tariff or
- ii) to buy conventional electricity and environmental attributes associated with RE generations separately.

Renewable energy contributes 7% to the current installed capacity of the company and is expected to contribute 14% to the 25000 MW target portfolio of Tata Power by FY17.

3.8 Power trading – in upcoming merchant sales scenario

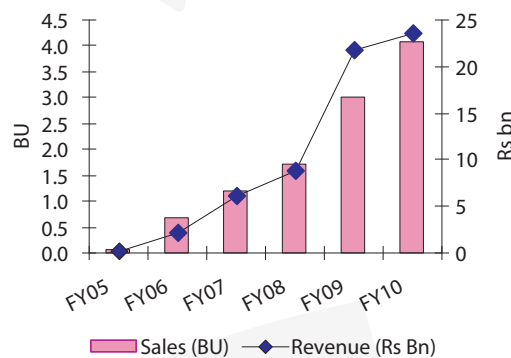
In our power deficit country, merchant sales contributes 7.43% (in June 2010) of the total electricity generation including bilateral trades and power exchange trades. Trading volumes have increased with the private sector participation and merchant capacity in hand. Also, in the Indian power market the off-take risk is low as the peak power deficit has increased from 9.5 GW in 2004 to 15.75 GW in 2010. Power markets are evolving in India due the following reasons, firstly, as subsidizing consumers are willing to procure costly power for interrupted supply so trading shall gain importance till the power demand exceed supply. Secondly, when the supply exceeds demand trading shall facilitate determination of market driven prices.

Scope of Power Trading in India



Source: CEA, CERC, GEPL Research

Performance of Tata Trading arm



Source: Company, GEPL Research

Tata Power Trading contributes 14.35% (in June 2010) to the total volume traded in the country; its share to the traded electricity has increased by about 6% from 8% contribution in FY08. Tata Power Trading Company, which has a trading licensee under category I of the CERC regulation, has seen multifold growth of 43% CAGR over the last 5 years.

Power trading in India is dominated by few players resulting in high Herfindahl-Hirschman Index (HHI) (HHI has been used for measuring the competition among the trading licensees). In order to promote competition and encourage transparency and derive fair market price of power, the Central Regulatory Commission has increased the trading margin cap from ₹0.04 per unit to ₹0.07 per unit. In view of this regulation, we expect the profitability of Tata Power Trading to increase in FY11 with the increase in margins.

3.9 Capturing the untapped

Tata Power is mulling multiple acquisition opportunities in domestic and overseas markets, including power generation companies, distribution business and coal mines for ensuring raw material supply.

Geothermal Energy

Tata Power has stepped in the business of geothermal energy through a consortium company where Tata Power and Origin Energy Limited hold equal stake of 47.50% and PT Supraco Indonesia (5%). The consortium has won the bid to develop 240 MW Sorik Marapi geothermal project in Northern Sumatra, Indonesia. The Consortium would undertake a detailed exploration programme over the next 18 months and the project is expected to get operational by June 2015.

Tata Power also has a 10% stake in Geodynamics Ltd., a listed Australia-based organization specializing in geothermal energy and Enhanced Geothermal Systems. Along with Geodynamics, Tata Power is reviewing the potential of geothermal prospects outside Australia to secure a foothold in the growing renewable energy markets.

Tata is also looking at opportunities in India and is in talks with Gujarat and Maharashtra governments to explore regions with geothermal potential.

Coal Bed Methane

Tata Power along with its consortium partner Arrow Energy has been awarded the Satpura Coal Bed Methane (CBM) block in Madhya Pradesh during the CBM IV bidding round. Harnessing unconventional sources of energy like CBM for power generation will help secure fuel for the end-use power project.

Coal Bed Methane is a naturally occurring gas found in coal reserves. The gas is trapped within the coal formation. Advanced technology is required to produce this green fuel from deeper coal seams. CBM is extracted by drilling holes into the coal seams that contain gas and are commercially unviable for mining. The extracted gas can be utilised for power generation, CNG, fertiliser manufacture, etc.

There are four to five coal seams in the Satpura Block with gross coal thickness of 6-15m at a depth of 300-900m and the block has an area of 714 sq km. Arrow Energy with 80% stake will be the operator of the block. It plans to drill 15 core holes and 2 pilot wells in first two years under the Phase-I exploration and 21 pilot wells in Phase-II. Initial production is expected to start from 2014. Arrow and Tata Power will jointly explore options for the best use of the CBM gas produced from the block.

InterGen Acquisition

Tata Power is evaluating opportunities to buy a 50 percent stake in power utility InterGen NV from GMR Infrastructure Ltd. About four companies are competing for the stake. GMR Infrastructure paid \$1.1 billion in 2008 for the stake in InterGen, which operates 12 power plants in the U.K., Netherlands, Mexico, Australia and the Philippines.

Distribution Franchisee

Pioneer in private power distribution in India, Tata Power is seeking opportunities to tap new markets via distribution franchisee route. The company has bid for distributing power in the areas serviced by a controversial Mula Pravara Electric Co-operative Society (MPECS) in Ahmednagar district. MPECS's licence will expire in January 2011 and the Ahmednagar area will be handed over to the successful bidder.

3.10 Financial Performance

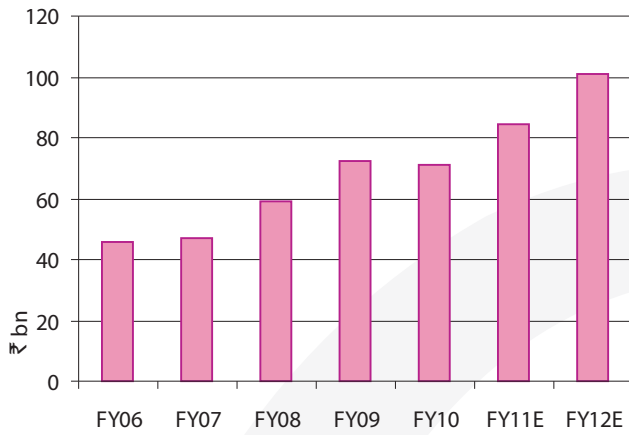
We expect Tata Power to report 10% CAGR growth for the period FY10- FY13 driven by 30% growth in distribution business on conservative estimates. The generation business revenues are expected to grow at 5% CAGR for FY10- FY13 based on better operational efficiencies and realization. No major capacity additions are expected for the standalone entity, expect renewable energy which is operating at PLF of 19%.

Operating Margin is expected to be around 25% in FY12, assuming status quo on the 200 MW power being supplied to R Infra, post April FY11 as well.

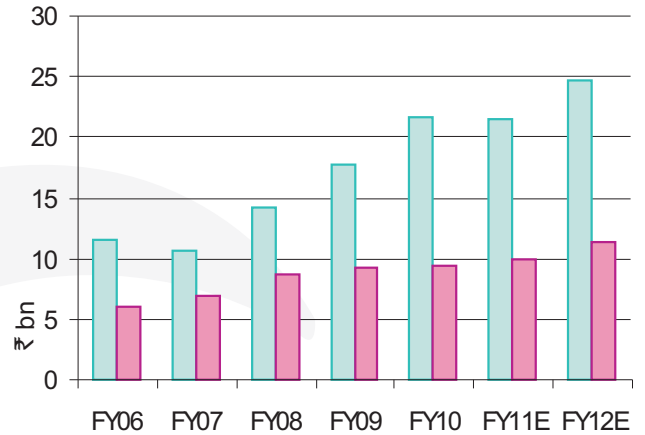
Impact of possible options -

- ✓ As assumed in our analysis, if Tata Power continues to supply 200 MW power to R Infra, there will be an additional power purchase burden on Tata Power to meet the increased demand in Mumbai Licence Area, this will reflect in an increase in the Cost of Power Purchase, however this additional cost will be passed on to the consumers.
- ✓ Or else, if Tata Power utilizes 200 MW for Tata-D, the costly short term power purchase would not be required and the consumers shall benefit with lower tariff. In both the cases the operating margin of Tata Power will not be affected.
- ✓ However, with an optimistic view, if 200 MW is opened up for merchant sales after April 2011 operating margin will improve significantly and thus the profitability will shoot up.

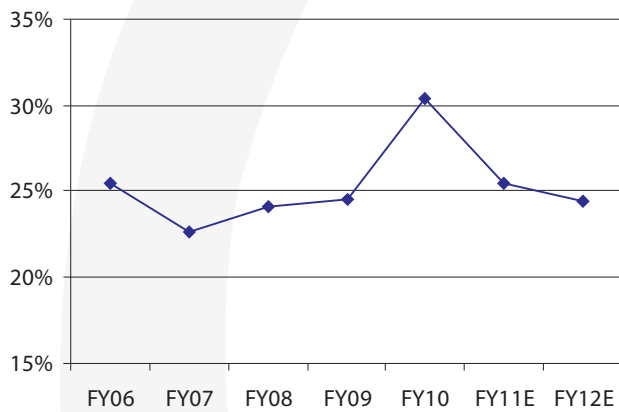
Net Sales



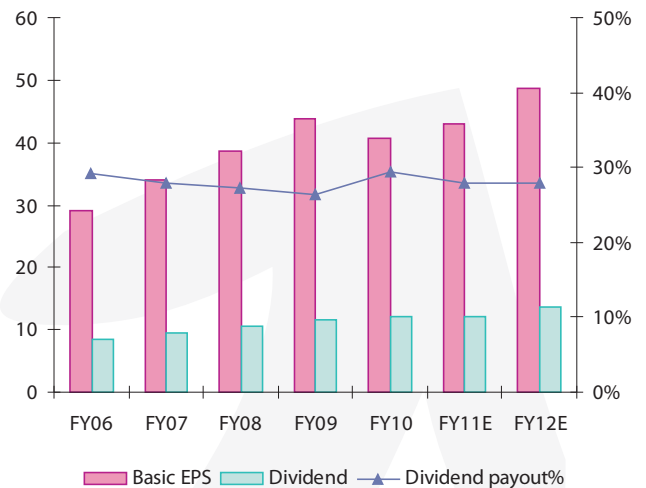
EBITDA - PAT



Operating Margin



Dividend



Source: Company, GEPL Research

4. Key Concern

4.1 Regulatory Risk, esp. in the Mumbai LA dispute

Being a part of the regulatory regime, any change in the regulatory frame work shall affect the company's performance. Some of the issues under discussion for Mumbai Licensee Area may affect Tata Power adversely like imposing cross subsidy surcharge and uniform tariff in Mumbai License Area.

4.2 Cost plus vs Competitive bidding tariff from Jan '11

The National tariff policy provides a deadline of January 2011 for shifting to a tariff-based competitive bidding regime for the procurement of electricity from the market, and the future projects to enter into power purchase agreements will be based on competitive bidding instead of cost-plus, regulator determined tariffs. Tata Power has regulated projects which may be affected with effect to the norms.

4.3 Initial case of Supercritical Technology

Supercritical technology is very new in India, Tata Power being one of the first project implementers, has execution risk and pressure to perform is high on the company to supply power at the competitively bid levelised rate of ₹ 2.26 per kwh.

4.4 Fluctuation in Coal Prices

Coal prices are cyclical and subject to fluctuations, any drastic decline in the prices the Coal will impact the revenues for coal mining operations. Indonesian coal prices have been fluctuating from US\$ 35-40 to US\$ 80-85 from 2007 to 2010, thus increasing the risk exposure in coal business.

Tata Power's performance may also be affected in major way if the fuel cost assumptions vary in case of competitively bid projects like Mundra UMPP.

4.5 Indonesia Mining Laws

Tata Power is procuring coal from Indonesia for its operational and upcoming projects, any legal modification or new law is a matter of concern. The Indonesian government is in the process of development of new mining law which may affect the Coal Business.

4.6 Merchant Prices

Power prices in India are fluctuating and may be pulled down with increased competition and reduced power deficit in future.

4.7 Project execution risk

Major clearances for projects under development are awaited by Tata Power and the company may face obstacles and delay in project implementation, which are inherent to the sector.

5. Valuation

Power sector is identified as a key sector of focus to promote sustained industrial growth and Tata Power is one of the leading power utilities in private sector and has strong track record and experience in the business of power generation, transmission and distribution in India. The company has also tested its hand in Power Trading and Coal Business and proved its capabilities in these areas as well. The company has a robust growth plan to own 25000 MW power projects by FY17 with a capital expenditure of ₹700 bn. With 200% increase in its customer base in Mumbai License Area, the company is now reaping fruits of its consistent performance, quality supply and customer satisfaction. Tata Power is exploring untapped area like geothermal energy and coal bed methane partnering with experienced player in their respective fields, thus growing with balanced risk.

We have valued Tata Power using SOTP method, wherein we have employed FCFF method to value the standalone entity and FCFE is used to value the under-construction projects of Mundra UMPP and Maithon Power. We assign P/BV of 2x FY12E to NDPL where Tata Power holds 51% stake. The Indonesian Coal mines are discounted by 25% at the Olympus deal value. We have thus, estimated the fair value of Tata Power at ₹1700 and recommend to 'BUY' the stock at the current market price.

SOTP Summary		
Business	Value per share	Method
Mumbai Licensee	746	FCFF
Mundra UMPP	262	20 year FCFE
Maithon Power	150	20 year FCFE
NDPL	76	P/BV of 2x FY12E
Coal	297	Olympus deal value discounted at 25%
Investments	169	At book value
TATA POWER	1700	

6. FINANCIAL OVERVIEW

Profit and Loss statement

Standalone		₹ in Mn				
Particulars	FY08	FY09	FY10	FY11E	FY12E	
Net Sales	59159	72362	70983	84596	101171	
Total Income	63818	78686	73799	84596	101171	
EXPENDITURE						
Cost of power purchased	5489	4935	2517	6215	14021	
Cost of Fuel	37150	48077	40456	47047	50668	
Employee Cost	2497	2919	3053	3384	4047	
Other Exp	4400	5022	6171	6424	7683	
Total Expenditure	49535	60953	52197	63070	76418	
<i>% Net Sales</i>	84%	84%	74%	75%	76%	
PBDIT	14282	17733	21602	21526	24753	
<i>% Net Sales</i>	24%	25%	30%	25%	24%	
Depreciation	2905	3289	4779	5185	6025	
Interest	1676	3278	4230	4123	4914	
PBT	9701	11167	12593	12218	13815	
<i>% Net Sales</i>	16%	15%	18%	14%	14%	
Tax	1002	1945	3205	2199	2487	
PAT	8699	9222	9388	10018	11328	
<i>% Net Sales</i>	15%	13%	13%	12%	11%	
EPS	38.6	43.7	40.8	43.1	48.7	

Source: Company, GEPL Research

Balance Sheet

Standalone					₹ in Mn
Particulars	FY08	FY09	FY10	FY11E	FY12E
SOURCES OF FUNDS :					
Share Capital	2207	2214	2373	2373	2373
Reserves Total	78782	84709	103864	110727	118487
Net Worth	80989	86924	106238	113100	120860
Loans	30373	51982	58720	69379	81965
Net Deferred Tax	189	1144	2078	2078	2078
Capital Employed	111551	140050	167036	184557	204903
APPLICATION OF FUNDS :					
Gross Fixed Assets	64823	89859	100108	117086	135291
Less: Accumulated Depreciation	34768	37953	42581	47917	53942
Net Fixed Assets	30055	51905	57527	69168	81349
Capital Work in Progress	16817	7612	4762	4762	4762
Investments	44300	54435	66886	66793	66793
Current Assets	38755	46811	59543	68208	79772
Current Liabilities	18393	20713	21683	24373	27771
Net Current Assets	20362	26098	37860	43836	52001
Total Assets	111551	140050	167036	184558	204904

Source: Company, GEPL Research

Cashflow Statement

Standalone					₹ in Mn
Particulars	FY08	FY09	FY10	FY11E	FY12E
PBT	9701	11167	12593	12218	13815
Add:					
Depreciation	2905	3289	4779	5185	6025
Interest Expenditure	1676	3058	4066	4123	4914
Others	-5062	-6720	-3195	0	0
Operating Cash Flow before WC	-481	-374	5651	9308	10938
(Inc)/Dec in WC	1568	-3109	-2532	-7100	-6261
Taxes Paid	475	-1198	-2183	-2199	-2487
Net Cash from Operating Activities	11263	6486	13529	11967	16005
Net Cash from Investing Activities	-25411	-22205	-18732	-16884	-18205
Net Cash from Financing Activities	4409	15887	17938	3380	4104
Inc/(Dec) in Cash	-9740	168	12735	-1537	1904
Beginning Balance	10027	287	455	13190	11653
Closing Balance	287	455	13190	11653	13556

Source: Company, GEPL Research

Ratio Analysis

Ratio Analysis	FY08	FY09	FY10	FY11E	FY12E
EPS	38.6	43.7	40.8	43.1	48.7
Book Value per share	366.9	392.5	447.7	476.6	509.3
DPS	10.5	11.5	12.0	12.1	13.6
Dividend Payout	27%	26%	29%	28%	28%
Valuation Matrix					
PE (x)	36.1	31.9	34.2	32.4	28.6
P/B (x)	3.8	3.6	3.1	2.9	2.7
P/CEPS (x)	27.9	23.8	23.2	21.8	19.1
EV/Sales (x)	4.96	4.23	4.37	3.80	3.29
EV/EBITDA (x)	20.55	17.25	14.35	14.95	13.43
Dividend yield (%)	0.8%	0.8%	0.9%	0.9%	1.0%
Profitability Ratios					
RoE	11%	11%	9%	9%	9%
ROCE	10%	10%	10%	9%	9%
Leverage Ratios					
Debt : Equity	0.38	0.60	0.55	0.61	0.68
Debt : Asset	0.27	0.37	0.35	0.38	0.40
Interest Coverage Ratio	6.79	4.41	3.98	3.96	3.81
Operating Ratios					
Operating Margin	24%	25%	30%	25%	24%
Net Profit Margin	15%	13%	13%	12%	11%
Net Sales growth	25%	22%	-2%	19%	20%
PAT growth	25%	6%	2%	7%	13%
EPS growth	13%	13%	-7%	6%	13%
Turnover Ratios					
Debtor days	85.1	78.1	99.1	90.0	85.0
Inventory days	28.5	31.7	29.6	30.0	30.0
Assets turnover	0.5	0.5	0.4	0.5	0.5

Source: GEPL Research

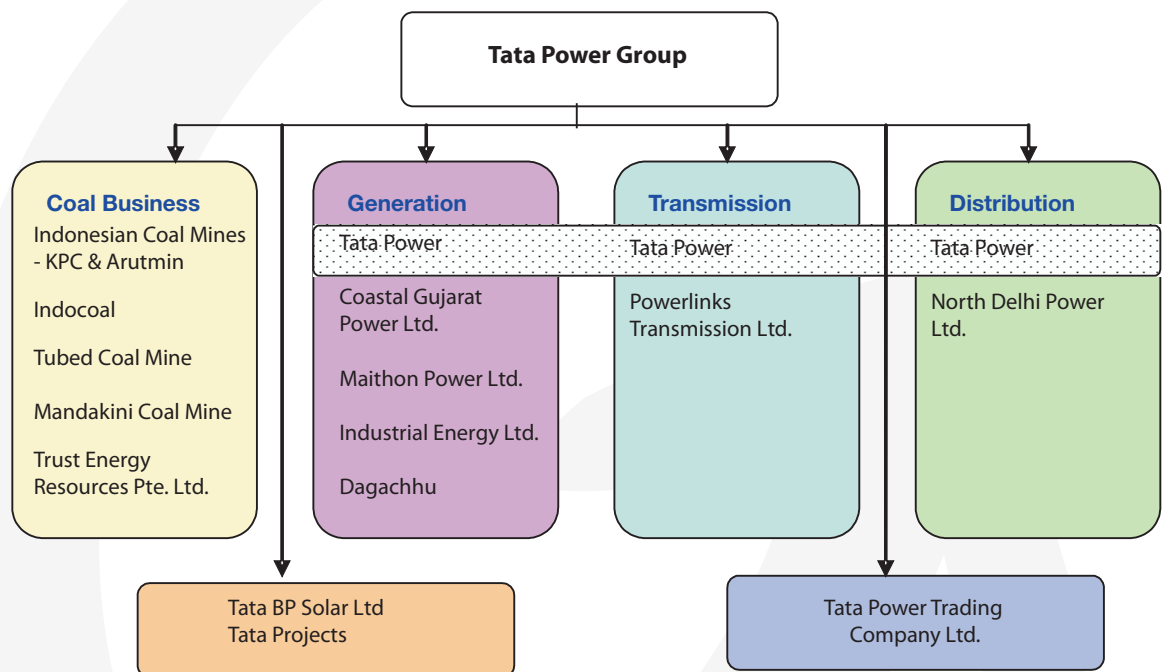
Annexure

7. Tata Power – Company Profile

Tata Power, erstwhile known as Tata Electric, pioneered the generation of electricity in India in 1910 with the establishment of Tata Hydro-Electric Power Supply Company Limited, followed by The Andhra Valley Power Supply Company Limited established in 1916. On April 1, 2000, the two companies were merged with Tata Power Company established in 1919 to form Tata Electric Company.

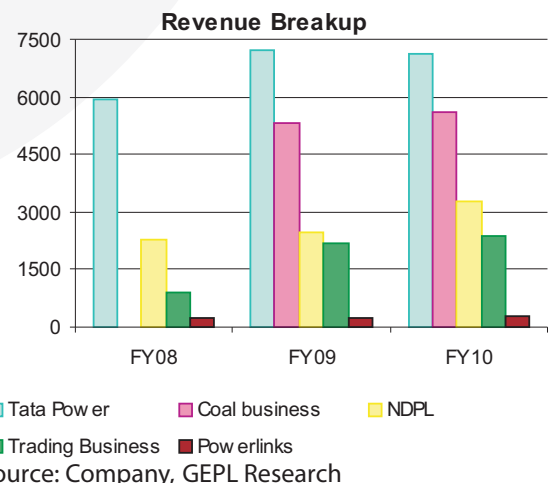
Now this company has presence in all aspects of Power, be it Thermal, Hydro, Solar, Wind Energy, Transmission, Trading and Distribution and also coal business. Tata Power is licensed to generate, transmit and distribute power to the city of Mumbai and its suburbs. It has coal mines in India and abroad to fuel its upcoming projects. The subsidiaries operating Distribution, Transmission and Trading are also performing well.

7.1 Group Composition



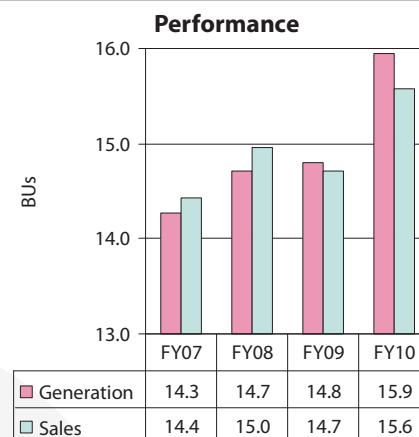
Revenue Contribution

For the consolidated entity, power business including generation, transmission, distribution and trading of electricity contributes major portion of the revenues about 66% in FY 09 & FY10, coal business operating in mining and trading contributes 29% and balance revenues come from other businesses like project management, defence electronics and solar equipment.



7.2 Generation

Tata Power has an operational capacity of 2997 MW having a diversified fuel mix of Thermal, Hydro and Wind. The Company generated 15,946 MUs of power from all its power plants in FY10 as compared to 14,807 MUs in the previous year, an increase of 8%.



Source: Company, GEPL Research

Operational Projects

Plant	Capacity	Fuel	Off take
Unit 4	150	Oil & Gas	Mumbai Licensee
Unit 5	500	Oil, Coal & Gas	Mumbai Licensee
Unit 6	500	Oil & Gas	Mumbai Licensee
Unit 7	180	Gas	Mumbai Licensee
Unit 8	150	Coal	Mumbai Licensee
Khopoli	72	Hydro	Mumbai Licensee
Bhivpuri	75	Hydro	Mumbai Licensee
Bhira	300	Hydro	Mumbai Licensee
Unit 8	100	Imported Coal	Merchant – PPA with TPTCL
Haldia	100	Gas	Merchant – PPA with TPTCL
Haldia	20	Gas	PPA to WBSEDCL
Belgaum	81	Heavy Fuel Oil	Case II – KPTCL 12 year PPA till 2012
Jojobera	428	Domestic Coal	Captive Tata Steel 20 year PPA till 2017
IEL PH-6	120	Coke Oven Gases of Tata Steel	Captive (74:26 JV of Tata Power and Tata Steel)
Wind	221		Maharashtra: TPC-D 100 MW 3 rd Party 21 MW Karnataka: BESCOM 50 MW Gujarat: GUVNL 50 MW
Total Existing	2997		

Status of Major Upcoming Projects

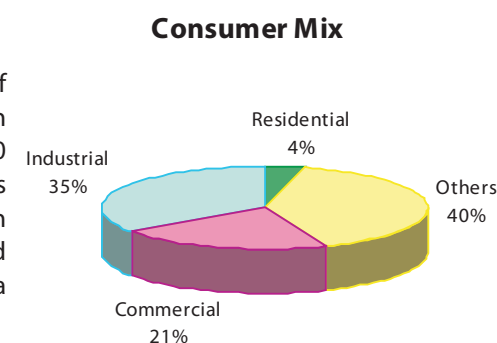
Mundra UMPP under the SPV, Coastal Gujarat Power Limited, is implementing the 4,000 MW at Mundra in Gujarat. The estimated to projects cost ₹170 bn and is progressing as per schedule. The cumulative progress till the end of September 2010 was approximately 59%, the civil, structural, mechanical, electrical and control and instrumentation work is underway.

Maithon Power Limited is a joint venture between Tata Power holding 74% stake and Damodar Valley Corporation having 26% stake to develop 1,050 MW (2 x 525 MW) power plant at Maithon in Jharkhand. The project is under construction and has achieved 85% completion and the commissioning of the first unit of 525MW has been delayed to December FY11 due to rail works.

7.3 Distribution

Mumbai distribution

Tata Power Distribution distributes electricity in the city of Mumbai, where it had approximately 26,000 customers in November 2009 and has increased to about 84,000 consumers by September 2010. Tata Power Distribution has a distribution network of around 1,335 km of high tension and low tension cable network, 17 receiving and distribution stations and 318 consumer sub-stations. Tata Power continues to invest in and expand this network.



Source: Company, GEPL Research

Delhi Distribution

Tata Power holds a stake of 51% in the Delhi distribution company, North Delhi Power Limited (NDPL) and the remaining 49% is held by the Delhi Vidyut Praday Nigam. NDPL supplies power to a largely residential customer base in Northern Delhi. NDPL was privatised in July 2002. NDPL has upgraded its network to improve reliability and has successfully brought down the Aggregate Technical and Commercial losses to around 14.7% in FY10 against 53% in FY02. NDPL has over one million customers. The peak load in this area is about 1,259 MW, with energy consumption of over 6,900 MUs.

7.4 Transmission

Mumbai Transmission

In Mumbai, Tata Power has a transmission capacity of around 1100 ckm network comprising of 973 ckm of 220 kV / 110 kV overhead lines and 124 ckm of 220 kV / 110 kV underground cables. Two Extra High Voltage lines capacity augmented (170 MVA to 350 MVA) by replacement of the conductor with new technology "High Ampacity conductors". Transformer capacity at Receiving Stations has also been augmented by 300 MVA. In FY10, transmission grid availability was 98.86% as against the Maharashtra Electricity Regulatory Commission norm of 98%.

Powerlinks Transmission Limited

Powerlinks Transmission Limited (PTL) is a JV between Tata Power (51%) and PGCIL (49%). PTL transmits power from the 1,020 MW Tala Hydro Electric Power Project in Bhutan and surplus power from the Eastern / North - Eastern region of India through its transmission lines between Siliguri (West Bengal) and Mandaula (Uttar Pradesh), spanning a distance of 1,166 Kms. The availability of transmission line was maintained at 99.94% for Eastern Region and 99.79% for Northern Region in FY10 as against the minimum stipulated availability of 98%.

7.5 Trading

Tata Power Trading was incorporated in December 2003 with an equity capital of ₹2 crores, was the first company in India to receive a power trading license from the Central Electricity Regulatory Commission in June 2004. Tata Power trading company traded 4.08 BUs in FY 10 generating revenue of ₹23.59 bn and reported PAT of ₹82.4 mn. In addition to power trading the Company also provided consultancy services for Energy Management, Coal Supply Facilitation, Project Analysis and Clean Development Mechanism. The Company's short term credit is rated by Fitch Rating Agency as 'BBB+'.

7.6 Coal Business

Tata Power has acquired, through its wholly-owned overseas subsidiaries a 30% stake in the KPC and Arutmin coal mines in Indonesia. Separate from this acquisition, long term off-take arrangements for a total of approximately 10 MMTPA \pm 20% have been entered into between Tata Power and Indocoal, a trading arm of KPC.

The performance of the two Indonesian thermal coal companies continued to be robust. The production during calendar year 2009 was 63MT as against 53MT in 2008 and the production is expected to scale upto 75 MTPA in FY12 and 100 MTPA going forward.

Operating Performance	CY '09	CY '08
Quantity mined (MT)	~63	~53
Average Selling Price (FOB USD/ton)	~62	~73
EBITDA from Operations (USD mn)	815	1131

In addition, Tata Power has also been allocated, together with its joint venture partners, the Tubed coal block in Jharkhand and the Mandakini coal block in Orissa. The land acquisition for 290MT Mandakini coal block has begun and is expected to be complete by end FY12. Regarding Tubed IPP project, the acquisition of land has been largely done and development activity can start by end FY11. Land acquisition for mining is also under way and project is expected to be commissioned by FY14.

7.7 Credit Rating

During the quarter, CRISIL assigned AA/Positive rating to Tata Power for its ₹6 billion non-convertible debenture programme. Tata Power has issued 15 year 9.15% NCD and raised ₹3.5 bn to prepay loan on wind projects in July 2010, followed by ₹2.5 bn issue in September 2010.

7.8 Q1 FY11 Performance

In Q1 FY11, Tata power saw 9% revenue de-growth in standalone business due to lower fuel cost, although the volumes increased by 8%. In Mumbai Licensee area the sales have increased and shall continue to grow as the company has increased its customer base to 76800. The cost of power purchase increased by 400% and brought the net profit down by 29%, this increased cost of power purchase will be passed on to the consumers and realized in future. Also from 30th June 2010, 160 MW power was diverted from Reliance Infra to Mumbai area, this shall help in reducing the power purchase cost. Coal sales and realization increased during the quarter, the company produced 15.3 MT in this quarter and expects to scale up the production to 75 MT in next 12-18 months.

In Q1 FY11, Tata -D added 36,060 consumers (18,300 new customers and 17,760 changeover customers) to attain the mark of 76800 consumers till June 2010 from 26005 consumers in November 2009. To meet the demand of 76800 consumers the company requires 761 MW power as against 488 MW till November 2009. Tata power is serving the additional demand by diverting 160 MW from Reliance Infra from July 2010 and purchase 113 MW power on merchant basis.

Standalone		₹ mn						
Particulars	Q1 FY11	Q1 FY10	yoy %	Q4 FY10	qoq %	FY 10	FY 09	yoy %
Total Income	18679	20156	-7%	17951	4%	70983	72362	-2%
Net Revenue from Operations	18025	19756	-9%	17178	5%	68935	70715	-3%
Other Operating Income	654	400	63%	773	-15%	2048	1647	24%
Expenditure	14170	13833	2%	13460	5%	52360	61173	-14%
Cost of Fuel	9519	11137	-15%	9210	3%	40456	48135	-16%
Cost of Power Purchased	2438	482	406%	1457	67%	2517	4935	-49%
Other Expenditure	1164	1399	-17%	1909	-39%	5913	4801	23%
Employees Cost	899	764	18%	637	41%	3053	2919	5%
Cost of Components, Materials & Services in Respect of Contracts	149	52	187%	247	-40%	422	383	10%
EBITDA	4509	6323	-29%	4491	0%	18623	11190	66%
(% of Net Sales)	25%	32%		26%		27%	16%	
Depreciation	1267	1118	13%	1270	0%	4779	3289	45%
Other Income	1275	1076	19%	533	139%	2816	6324	-55%
Interest	796	1177	-32%	950	-16%	4066	3058	33%
Profit before tax	3721	5104	-27%	2805	33%	12593	11167	13%
(% of Net Sales)	21%	26%		16%		18%	16%	
Tax Expense	1032	1333	-23%	499	107%	3205	1945	65%
Tax Rate	28%	26%		18%		25%	17%	
Profit after Tax	2690	3771	-29%	2306	17%	9388	9222	2%
EPS	11.07	17.89				40.77	43.69	
Dividend						12.00	11.50	

Source: Company, GEPL Research

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