

January, 2011

Surplus situation by end FY13E to bring down power prices

Else, power distribution companies (discoms') losses to trigger restrictions / caps / defaults

Expect sector underperformance to continue till the time tariffs stabilize at Rs2.7/Unit, maximum leeway being upto FY13E



Amit Golchha

Senior Research Analyst
amit.golchha@emkayglobal.com
+91 22 6624 2408

Nihag Shah, CFA

Research Analyst
nihag.shah@emkayglobal.com
+91 22 6624 2486

Contents

Sector

Synopsis	3
Investment Arguments	8
Demand, including latent, to grow at 9.5% assuming India follows China's path	8
Supply to surprise big time starting FY12E; To grow at 13.0% during FY11E-FY15E	18
Discoms' financials - another potential trigger	22
Expect power tariffs to stabilize at Rs2.7/unit, maximum leeway being FY13E	28
Initiate coverage on IPPs with an 'Underperform' rating	31
Annexure	32

Companies

JSW Energy	34
Adani Power	45
Jaiprakash Power Ventures	54
Reliance Power	65
Lanco Infratech	75
KSK Energy	85
Nava Bharat Ventures	95

Synopsis

Our analysis of all the factors having a bearing on power tariffs - (1) demand, (2) supply and (3) health of state distribution companies (discoms) - point towards low merchant power prices. Even our most optimistic assumptions for power generators indicate unfavorable risk reward for investors. While demand supply dynamics (surplus situation by end FY13E) are bound to significantly bring down power prices, discoms' financials otherwise would be a potential trigger. Our detailed scrutiny of discoms' financials for the past 5 years reveals that higher power prices were responsible for almost 2/3rd of its increased losses (Rs342bn) during FY08-FY10. Should the discoms continue to buy upcoming merchant power at Rs4.5/unit (current bilateral merchant tariffs) or Rs3.6/unit (implied tariffs accounting for current stock valuations), its annual losses would rise to Rs1,143bn (1.4% of nominal GDP) or Rs1,006bn by FY13E respectively. Moreover, states are likely to feel the real pinch of losses going forward as large part of increased losses would be actual cash outflows (till now, 85% merchant volumes by state utilities, hence forth by private utilities).

No wonder, power stocks have already underperformed the Nifty by 24% in the last one year. We believe that the underperformance is likely to continue as our assessment where tariffs will stabilize is Rs2.7/unit, maximum leeway being till FY13E. In this context, our valuation matrix to choose stocks is largely driven by the nearness to this long term tariff (Rs2.7/unit) besides other factors like (1) fuel security at competitive rates, (2) off take tie ups at attractive IRRs, (3) early mover advantage and (4) relatively lower EVM (enterprise value per adjusted mw). We initiate coverage on Independent Power Producers (IPPs) with an 'Underperform' rating and within the IPPs, we prefer Lanco Infratech. Our stock specific rating is as follows:-

Buy - Lanco Infratech (Lanco) (lowest implied merchant rate of Rs2.9/unit).

Accumulate - Reliance Power (RPL) (implied tariff of Rs3.4/unit, however most sustainable business model), Nava Bharat Ventures Ltd (NBVL) (natural hedge, early mover advantage, relatively lower implied tariff of Rs3.3/unit).

Hold - Adani Power (APL) (balanced but valuations price in all the upsides and implied tariff of Rs3.9/unit), Jaiprakash Power Ventures (JPVL) (back ended capacity additions and implied tariff of Rs3.6/unit) and KSK Energy (attractive MOUs/contracts but materialization risk, implied tariff of Rs3.6/unit).

Reduce - JSW Energy (fuel and off-take both open - a risky strategy, highest implied tariff of Rs4.0/unit)

	Lanco	NBVL	RPL	APL	JPVL	KSK Energy	JSW Energy
CMP (Rs/share)^	54	318	142	124	50	107	88
Recommendation	Buy	Accumulate	Accumulate	Hold	Hold	Hold	Reduce
Price Target (Rs/share)*	71	369	157	116	49	110	78
Implied Stock Prices at Rs2.7/Unit (Rs/share)	50	235	104	96	37	74	45
Implied Merchant Tariff (Rs/unit)	2.9	3.3	3.4	3.9	3.6	3.6	4.0
EVM (Rsmn/MW)	27	27	31	31	43	38	37
Early mover advantage (Y/N)	Y	Y	N	Y	N	Y	Y
Fuel security	Very Good	Good	Excellent	Good	Average	Excellent#	Poor
Off take	Good	Poor	Average	Good	Average	Very Good**	Poor

^ Closing price as on 21st January, 2011

* Optimistic Scenario

** If the contract with Reliance Infra materializes

If all the fuel contracts/MOUs materialize

Source: Emkay Research, Companies, PFC, CEA, CERC

Demand is not unlimited, optimistic assumptions peg growth at 9.5% CAGR

After a detailed analysis of (1) latent demand, (2) power shortage, (3) structure/bifurcation of GDP compared to China and (4) inefficient use of electricity in India - we disagree with the argument that 'India has significant latent demand for electricity capped by supply, which will result in electricity demand growth being higher than long term real GDP growth'. Assuming real GDP compounding of 9.3%, India's GDP will reach China's current level by FY27E. Converging each electricity consumption factor to China's level by that time, we get electricity demand growth of 9.5% during FY10-FY27E, including latent demand.

Supply to grow at a faster pace starting FY12E - 13.0% over FY11E-15E

The current race to jump onto the power bandwagon has resulted in a number of major power capacity plans being announced/implemented by private players in the last 4-5 years. The first chunks of under construction projects are ready for commissioning and our bottom up analysis of under construction projects indicates a quantum leap in generation capacity addition, starting FY12E. To account for any reduced supply due to (1) rollback of expansion plans, (2) execution delays and (3) coal shortage, we have assumed only 55% of scheduled capacity additions. We expect addition of 22,706MW (including captive) in FY12E, a growth of 11.6%. Thereafter, growth is likely to accelerate to 13.4% during FY12E-FY15E, resulting in a surplus situation by FY13E end.

As a result, high merchant prices unlikely to sustain

We believe that the lucrative merchant prices are unlikely to sustain (YTD FY11 average of Rs4.5/unit) in the coming years. We expect the current downtrend in merchant prices to continue and get pronounced in FY12E. Further, we expect the downtrend in merchant market to extend to the long-term power market in FY12E itself, thereby putting pressure on long term power prices also.

'Deficit level to merchant price' elasticity further substantiates our view

Further, we highlight that merchant prices are highly elastic to (1) volumes and (2) deficit levels. We derive this conclusion from recent price and volume data on the exchange along with the overall deficit levels in the country. We believe that at deficit level of 8% and below, SEBs comfortably manage their supplies, including scheduled power cuts. We have observed that during periods when deficit level reduces to 1) Below 9%- short term prices have averaged below Rs4/unit, 2) Below 8.5%- merchant prices have averaged below Rs3.5/unit and 3) In past two months, when the deficit has been below 7.5%, merchant prices have averaged below Rs3/unit - indicating huge elasticity. Thus, we believe merchant prices are likely to come down in FY12E itself ahead of bridging of deficit in FY13E end.

Discoms' financials - a potential trigger

While demand supply dynamics are bound to significantly bring down power prices, discoms' financials otherwise would be a potential trigger. A detailed analysis of 56 discom accounts over FY06-FY10 reveals that power purchase cost (especially merchant power) has contributed to most of the increased losses (almost doubled to Rs746bn) in the past two years. Should the discoms continue to buy upcoming merchant power at Rs4.5/unit (current bilateral merchant tariffs) or Rs3.6/unit (implied tariffs accounting for current stock valuations), their losses are likely to increase to Rs1,143bn (1.4% of nominal GDP) or Rs1,006bn by FY13E. Moreover, we highlight that until now, major volumes (85%) in the short term market were contributed by state utilities which supported subsidy funding to discoms. However going forward, 80% of increased merchant volumes will be contributed

by private players, resulting in actual cash outflow for discoms, an unsustainable situation. As a result, we expect payment defaults and regulatory interventions (capping merchant prices, resorting to power cuts) leading to lowering of power prices.

We estimate merchant tariffs to stabilize at Rs2.7/unit

As per our analysis, Rs2.7/unit is the tariff at which discoms' losses do not increase further (break even tariff - Rs1.6/unit). We expect merchant prices to continue their decline and stabilize at Rs2.7/unit, maximum leeway being till FY13E.

Expect sector underperformance to continue

Power stocks have already underperformed the Nifty by 24% in the past one year. We believe that the underperformance will continue till the time tariffs stabilize at Rs2.7/unit.

Valuation matrix to choose stocks is nearness to Rs2.7/unit

In this context, our valuation matrix to choose stocks is largely driven by the nearness to this long term tariff (Rs2.7/unit) besides other factors like (1) fuel security at competitive rates, (2) off take tie ups at attractive IRRs, (3) early mover advantage and (4) relatively lower EVM (enterprise value per adjusted mw). We have valued the stocks based on the most optimistic assumptions - (1) long term power tariff of Rs3.6/unit (current implied tariffs), (2) long term merchant capacity utilization of 80% and (3) execution/fuel/off take/operating parameters as guided. We initiate coverage on Independent Power Producers (IPPs) with an 'Underperform' rating and within the IPPs, we prefer Lanco Infratech. Our stock specific rating is as follows:-

Buy - Lanco Infratech (Lanco) (lowest implied merchant rate of Rs2.9/unit).

Accumulate - Reliance Power (RPL) (implied tariff of Rs3.4/unit, however most sustainable business model), Nava Bharat Ventures Ltd (NBVL) (natural hedge, early mover advantage, relatively lower implied tariff of Rs3.3/unit).

Hold - Adani Power (APL) (balanced but valuations price in all the upsides and implied tariff of Rs3.9/unit), Jaiprakash Power Ventures (JPVL) (back ended capacity additions and implied tariff of Rs3.6/unit) and KSK Energy (attractive MOUs/contracts but materialization risk, implied tariff of Rs3.6/unit).

Reduce - JSW Energy (fuel and off-take both open - a risky strategy, highest implied tariff of Rs4.0/unit)

Company Valuations

	JPVL			KSK Energy			JSW Energy			
	FY10	FY11E	FY12E	FY10	FY11E	FY12E	FY10	FY11E	FY12E	FY13E
Financials (Rsmn)										
Net Sales	6,496	6,299	22,022	4,534	8,213	20,046	23,551	42,450	72,343	70,549
EBITDA	5,645	5,587	18,648	2,568	4,461	11,142	12,136	16,342	30,652	29,090
PAT	2,418	1,843	4,488	1,751	2,048	4,870	7,457	7,763	13,042	10,836
Growth (%)										
Net Sales	124.9	(3.0)	249.6	29.4	81.1	144.1	28.3	80.2	70.4	(2.5)
EBITDA	112.6	(1.0)	233.8	36.8	73.7	149.8	128.2	34.7	87.6	(5.1)
PAT	64.4	(23.8)	143.6	28.8	17.0	137.8	169.3	4.1	68.0	(16.9)
Profitability (%)										
EBITDA Margin	86.9	88.7	84.7	56.6	54.3	55.6	51.5	38.5	42.4	41.2
PAT Margin	37.2	29.3	28.2	42.2	26.6	25.0	31.7	18.3	18.1	15.4
ROACE	7.3	3.4	8.3	3.7	4.3	9.2	10.6	9.1	12.3	8.2
ROIC	8.0	3.9	7.8	3.9	3.8	7.7	10.3	7.9	10.4	6.8
ROE	10.6	5.1	13.4	7.6	7.3	14.7	23.7	15.0	20.8	14.3
Per Share Data (Rs)										
EPS	1.2	0.9	2.1	4.7	5.5	13.1	4.5	4.7	8.0	6.6
CEPS	1.6	1.7	4.3	5.4	8.2	18.5	5.4	6.7	11.8	10.8
BVPS	16.3	18.4	25.8	76.7	84.8	98.3	29.2	34.0	42.7	49.7
DVPS	-	-	-	-	-	-	0.7	0.8	1.3	1.1
Valuation										
PER (x)	43.3	56.9	23.3	22.8	19.5	8.2	19.4	18.6	11.1	13.3
CPER (x)	30.4	29.4	11.5	19.8	13.1	5.8	16.4	13.1	7.5	8.2
P/BV (x)	3.1	2.7	1.9	1.4	1.3	1.1	3.0	2.6	2.1	1.8
EV/Sales (x)	22.6	26.6	11.8	18.0	9.1	6.2	8.6	5.7	4.0	5.2
EV/EBITDA (x)	26.0	30.0	13.9	31.7	16.8	11.1	16.7	14.8	9.5	12.5
Dividend Yield (%)	-	-	-	-	-	-	0.9	0.9	1.5	1.2
Turnover (Days)										
Debtors Turnover	91	116	51	35	34	29	32	37	42	55
Inventory Turnover	8	13	5	26	27	18	31	39	31	36
Working Capital Turnover	500	142	112	50	34	39	75	31	4	6
Gearing Ratio (x)										
Net Debt / Equity	1.2	1.6	2.9	1.5	1.1	2.3	1.5	1.7	2.1	2.7
Debt / Equity	2.0	2.2	3.0	1.9	1.5	2.3	1.6	1.9	2.4	2.8
Capacity (MW)	700	700	2,400	144	727	862	1,130	2,135	3,140	3,275
Rating			HOLD			HOLD			REDUCE	

Source: Emkay Research

Investment Arguments

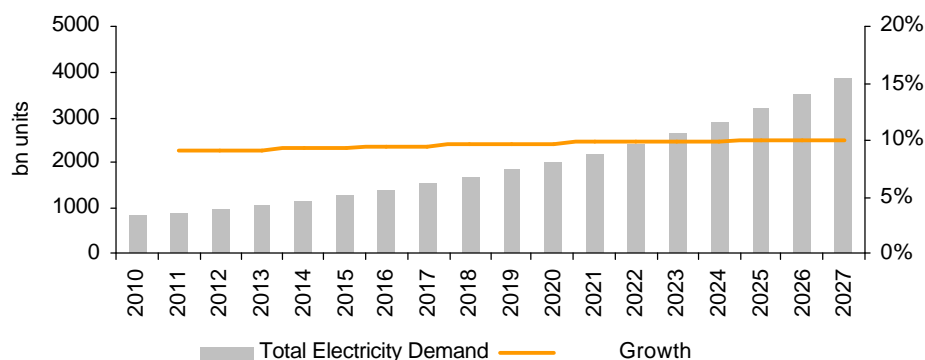
Demand, including latent, to grow at 9.5% assuming India follows China's path

Converging each electricity consumption component to China's level by FY27E, we derive an electricity consumption growth of 9.5% for India

After a detailed analysis of latent demand, power shortage, structure/bifurcation of GDP and inefficient use of electricity in India, we disagree with the argument that 'India has significant latent demand for electricity capped by supply, which would result in electricity demand growth outpacing long term GDP growth'. Assuming real GDP compounding of 9.3%, India will reach China's current level in the next 17 years (FY27E). Converging each electricity consumption component to China's level by FY27E, we derive an electricity consumption growth of 9.5% for India. Coincidentally, India's per capita electricity consumption which works out to 2,586 units p.a in FY27E matches China's current level (2,580 units). This reconfirms our belief that electricity demand in India is likely to grow at long term GDP growth rate and not higher than that. This also leads to the conclusion that per capita electricity consumption of a country is a function of the absolute GDP (development) level of a country.

Further, we have been optimistic in our assumptions - (1) we have not considered that India's industrial (highest electricity intensive segment) share as a % of GDP in FY27E is likely to be 32%, significantly lower than China at 49%, (2) we continue to build in inefficiency in electricity use in agriculture and (3) we have not considered lower incremental demand due to improvement in T&D losses.

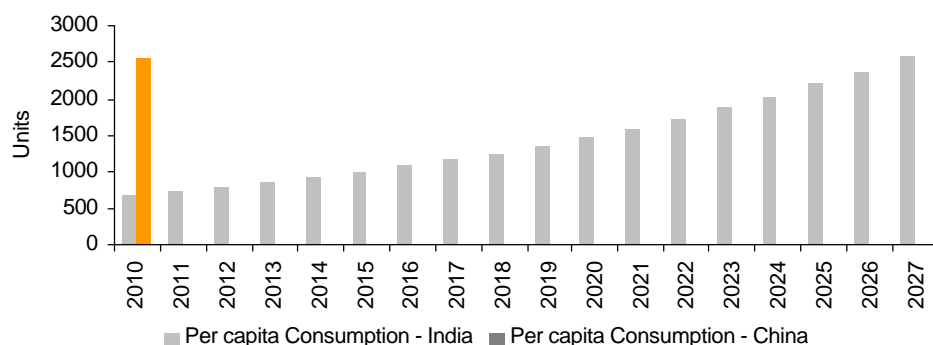
Electricity consumption to grow at 9.5%, assuming best case latent demand



To touch 3,873bn units in FY27E from 817bn units in FY10E

Source: CEA, Emkay Research

Coincidentally, India's per capita electricity to reach China's level in FY27E



India's per capita electricity consumption to increase from 691 units p.a. to 2,586 units p.a in FY27E

Source: CEA, China Yearbook, Emkay Research

To assess the potential electricity demand growth in India, we analyzed India's electricity consumption on the following aspects:-

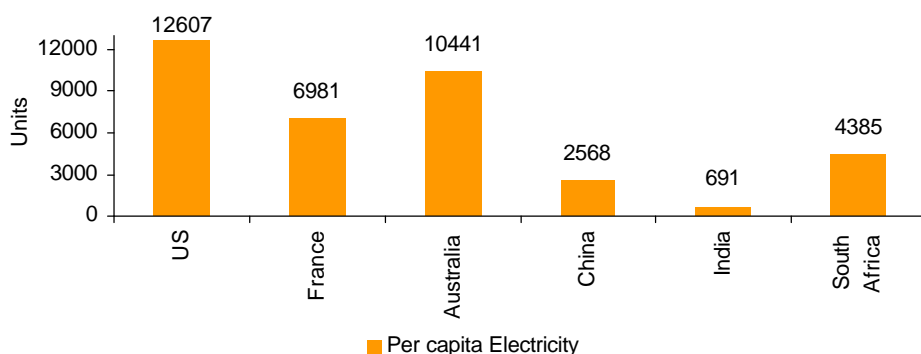
- Why per capita electricity consumption (691 units) in India is low - 1/4th of China (2568 units)?
- By when will India's per capita electricity consumption scale up to China's level?
- Will the perceived latent demand in the country translate into actual demand?

Why is India's per capita electricity consumption (691 units) low?

A country with (1) relatively higher GDP, (2) lower population and (3) higher industrial cum services output - would have higher per capita electricity consumption and vice versa

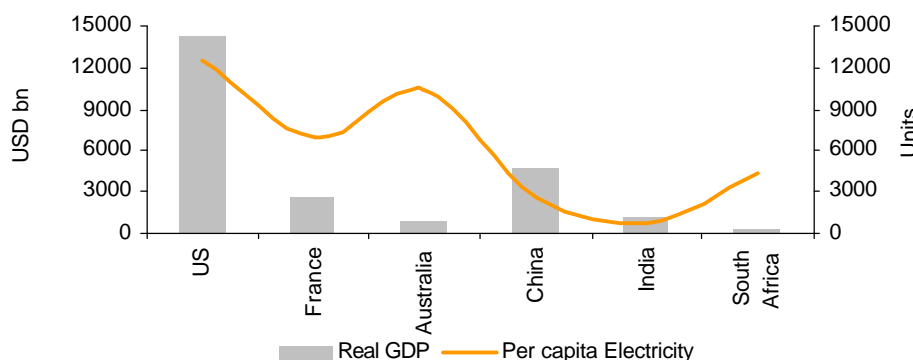
Our analysis of electricity consumption of six countries (developed, underdeveloped and developing) with different population sizes and different GDP structures indicates that the per capita electricity consumption of any country is a function of (1) absolute GDP levels, (2) GDP structure and (3) population size. A country with (1) relatively higher GDP, (2) lower population and (3) higher industrial cum services output - would have higher per capita electricity consumption and vice versa.

India has lowest per capita consumption (1/4th of China)



Source: World Factbook, Emkay Research

Higher the real absolute GDP, higher the per capita electricity consumption

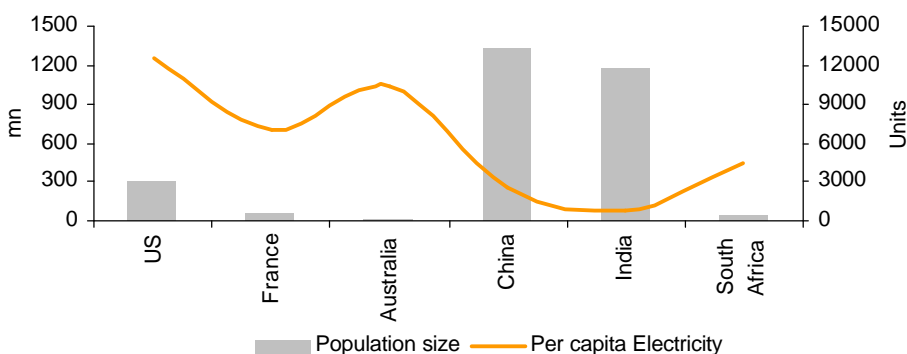


Source: IMF, World Fact Book, Emkay Research

Australia and South Africa have higher per capita electricity despite lower GDP and China has relatively lower per capita electricity despite higher GDP. That's because...

Lower the population size, higher the per capita electricity consumption

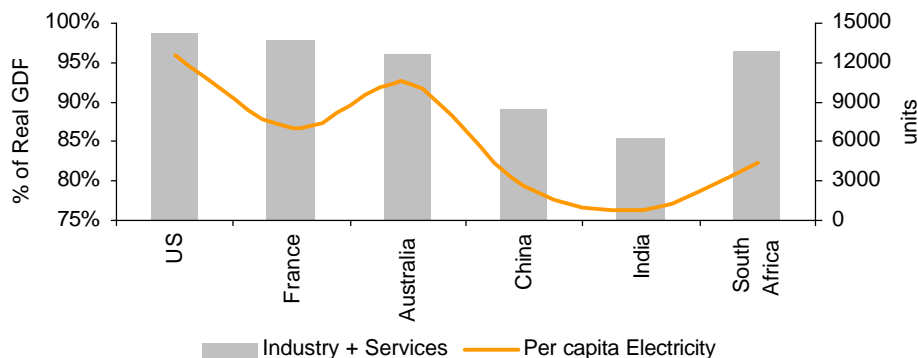
Australia and South Africa have very low population and China has the largest population....



Source: World Factbook, Emkay Research

Higher industry + services output = higher per capita electricity consumption

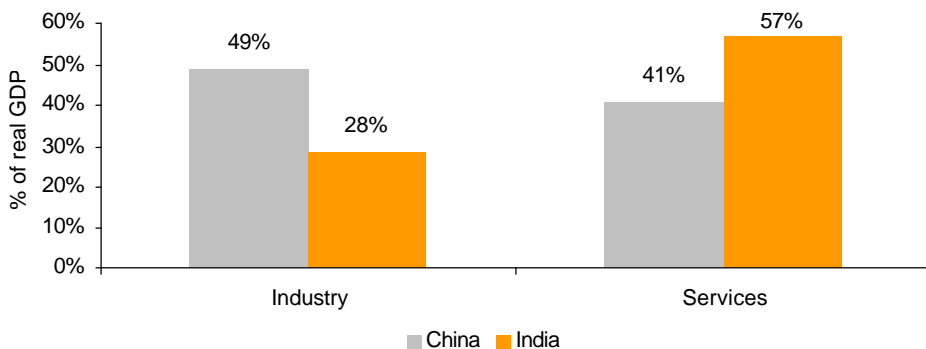
India's industry + services segment is smallest as a % of GDP



Source: World Factbook, Emkay Research

India's industrial output as % of GDP is 28% versus China's 49%

And within that, India's industrial output (highest electricity intensive segment) is significantly lower than China



Source: China Yearbook, MOSPI, Emkay Research

Thus, we reach the conclusion that India's per capita electricity consumption is lowest because of (1) lower GDP (1/4th of China), (2) second largest population size (4x US population) and (3) lowest contribution of industrial output to GDP (28% versus 49% of China).

By when will India's per capita electricity consumption scale up to China's level?

We have converged each electricity consumption factor to China's level by FY27E, namely;

- 1) Residential per capita electricity consumption,
- 2) Electricity use per USD of industrial cum services GDP and
- 3) Electricity use per USD of agricultural GDP

Based on the consumption pattern in each segment coupled with the fact that India uses electricity inefficiently compared to China, we conclude that none of the segments have significant latent demand

We believe India's per capita electricity consumption is likely to gradually progress and reach China's current level, but only by FY27E. In our analysis, we have assumed real GDP compounding of 9.3% resulting in India's GDP (USD 1095bn) reaching China's current GDP level (USD 4758bn) in the next 17 years (FY27E). Assuming that each electricity consumption component converges to China's level by FY27E, India's electricity consumption is likely to grow at 9.5% over the next 17 years to 3,873bn units in FY27E. The population growth at 1.4% would be much lower. Thus by FY27E, India's per capita consumption of electricity is likely to reach 2,586 units, coincidentally similar to China's current level of 2,580 units. However, we do not expect drastic / front loaded improvement in per capita electricity consumption.

Will the perceived latent demand in the country translate into actual demand?

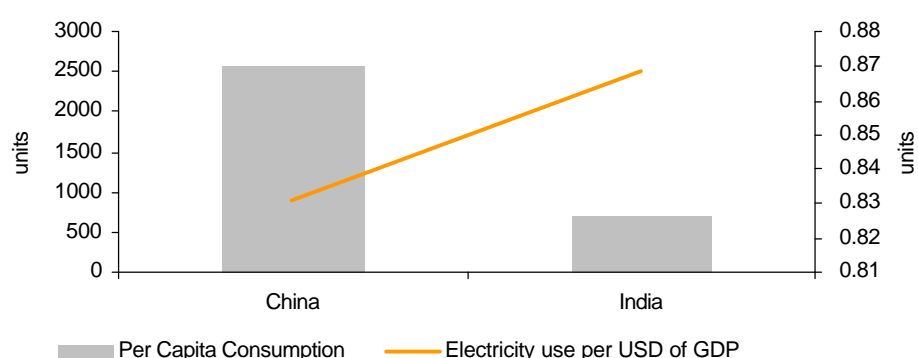
To assess the latent demand in India, we have analyzed each electricity consumption segment - Industrial, Agricultural and Residential in detail. Based on the consumption pattern in each segment coupled with the fact that India uses electricity inefficiently compared to China, we conclude that none of the segments have significant latent demand to propel faster/front loaded growth in electricity consumption. Considering the most optimistic scenario, we estimate electricity demand to grow at 9.5% CAGR during FY10-FY27E driven by (1) 11.2% CAGR in industrial electricity consumption, (2) 2.2% CAGR in agricultural electricity consumption and (3) 9.7% CAGR in residential electricity consumption.

India uses electricity inefficiently compared to China

Despite India's per capita electricity consumption being 1/4th of that of China, electricity usage is inefficient in India. India uses 0.87 units of electricity to generate 1 USD of real GDP as against China using 0.83units/USD. Industrial and agricultural segments account for all the inefficiencies. In the agriculture segment, India uses 1.13units of electricity to generate 1 USD of agricultural GDP versus China's 0.20units/USD. Also, in case of industrial segment, India uses 1.37units of electricity to generate 1 USD of industrial GDP versus China using only 1.27units/USD.

India uses 0.87units of electricity to generate 1 USD of real GDP versus China using only 0.83units/USD

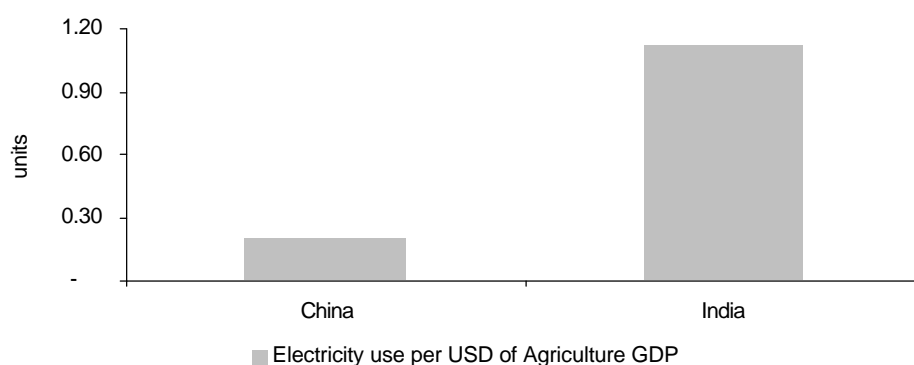
India's use inefficient despite lower per capita electricity consumption than China



Source: World Fact book, Emkay Research

Agriculture segment has significant inefficiencies in using electricity

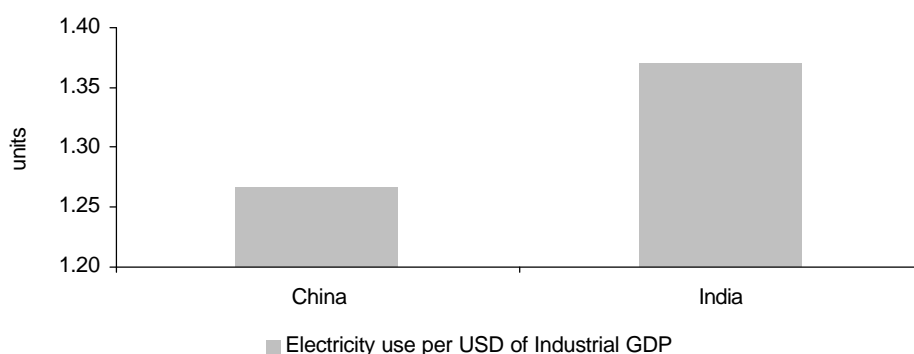
That's because India uses 1.13units of electricity to generate 1 USD of agricultural GDP versus China using only 0.20units/USD



Source: World Fact book, Emkay Research

And inefficiencies lie in industrial segment too

India uses 1.37units of electricity to generate 1 USD of Industrial GDP versus China using only 1.27units/USD



Source: World Fact book, Emkay Research

Yes, but only to the extent of use of diesel generators for industrial production. We estimate this demand to be insignificant - not more than 2% of overall demand

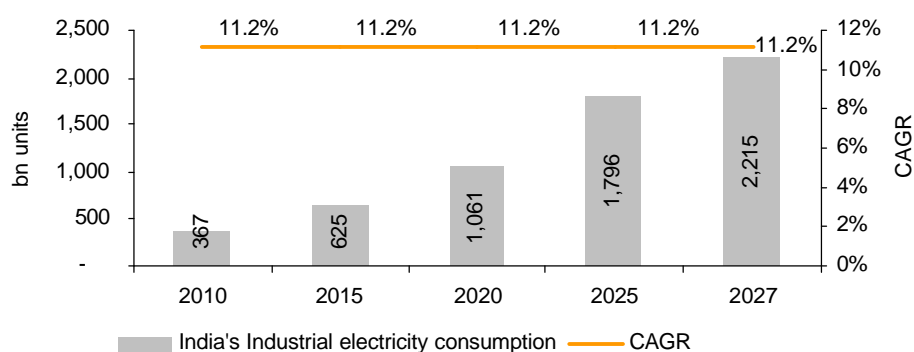
Does latent demand exist in the industrial segment in India?

The inefficient use of electricity per se suggests that latent demand does not exist in the industrial segment in India. To crosscheck, we have analyzed the electricity shortage state wise. We have observed that electricity cuts/shortages reported for industries are across few states like Maharashtra, UP, MP, Andhra, Karnataka, Tamil Nadu, Bihar and Jharkhand. But, we highlight that inspite of electricity cuts in a particular part of the country, goods are produced in some other parts, where there is enough electricity available at that point in time. We derive this conclusion from the fact that in general, there is no shortage of goods supply in the country. Thus, even if the power supply in a particular part improves going forward, the overall level of production/supplies in the country is likely to remain at the same level or grow in line with demand. We believe that latent demand exists to the extent of use of diesel generators for industrial production. As per Infraline, the total captive power generation capacity stands at 25,000MW (as on 31st July 2010) out of which about 19,506MW is connected to grid. Assuming, the balance capacity of 5,494MW being fired solely from diesel, the latent demand would be 2% of the overall demand. But, we estimate this demand to be not more than 2% of overall demand because this capacity runs at not more than 20-30% PLF. This, we believe, is insignificant.

We estimate industrial electricity consumption to grow at 11.2%

India's real industrial GDP has grown at 9% during the past 5 years. Excluding the impact of 2009 (growth of 3.9%), the CAGR works out to 10.2%. We have assumed similar growth of 10% in industrial output, going forward. And to factor in optimism in our numbers, we have assumed the electricity use per USD of industrial output to increase to 1.65units (current use - 1.37units) by FY27E, higher than China. Considering (1) absence of significant latent demand, (2) industrial GDP growth similar to past five year average and (3) increase in electricity use per USD of industrial GDP, we estimate maximum electricity demand growth for industries at 11.2% CAGR during FY10-FY27E.

India's industrial electricity consumption to grow at 11.2%...



Industrial electricity consumption CAGR of 11.2% factors in (1) 10% Industrial GDP growth and (2) increase in electricity use per USD of industrial output to 1.65units (current use - 1.37units) by FY27E, higher than China.

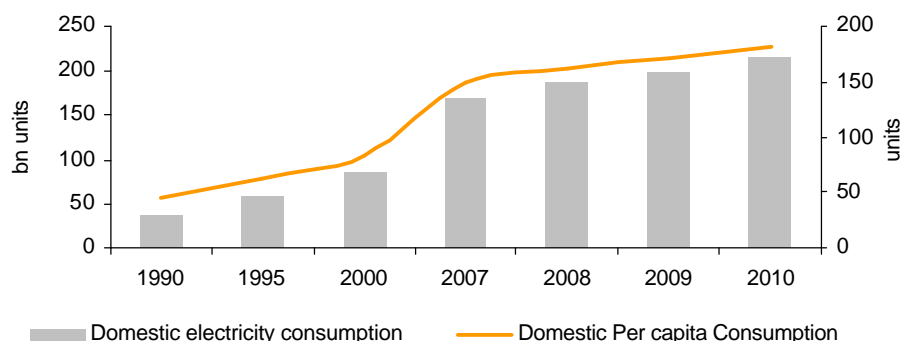
Source: World Fact book, Emkay Research

Is there significant latent demand in domestic segment in India and can that drive front loaded improvement?

To be limited to the extent of un-electrified households (36%), who are largely below poverty line

We believe there isn't significant latent domestic electricity demand in India because even after 100% electrification, China's per capita domestic consumption of electricity currently stands at 344 units against India's consumption of 183 units. That too, is mainly driven by significantly higher per capita incomes and not higher electrification levels. Though almost 36% of India's population is not electrified, we believe that electrification of these households is not likely to create significant additional demand for electricity. This is because most of these households are below poverty line and would be using minimal electrical appliances.

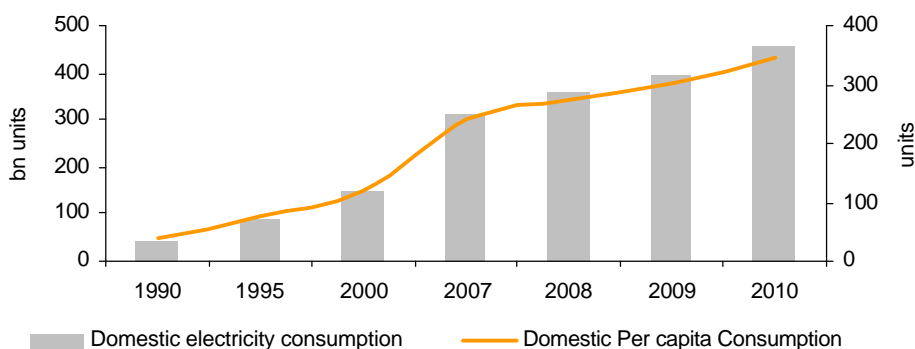
India's domestic per capita consumption stands at 183 units



Source: CEA, MOSPI, Emkay Research

Against China's domestic per capita consumption at 344 units

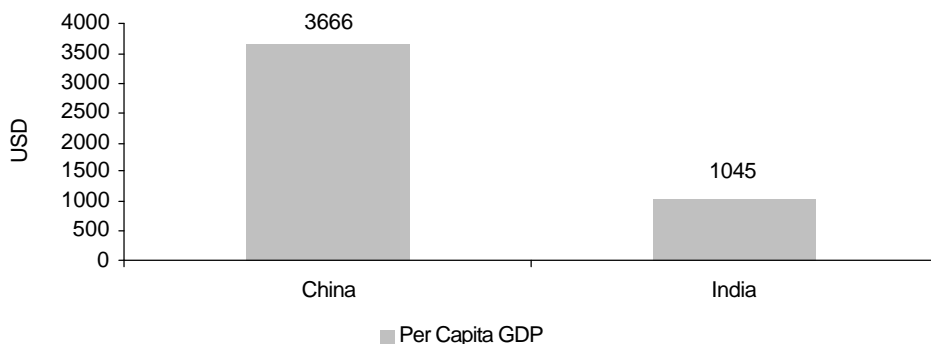
China's per capita domestic consumption of electricity currently stands at 344 units against India's consumption of 183 units



Source: China Yearbook, Emkay Research

Mainly due to significantly lower per capita income

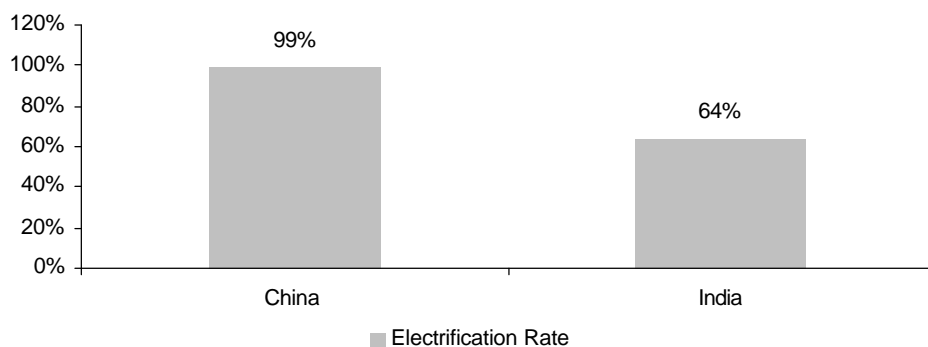
Electricity use is directly correlated to the income levels of a country



Source: MOSPI, China Yearbook

And not due to lower electrification levels

Though almost 36% of India's population is not electrified, we believe that electrification of these households is unlikely to create significant additional demand for electricity. This is because most of these households are below poverty line and would be using minimal electrical appliances.



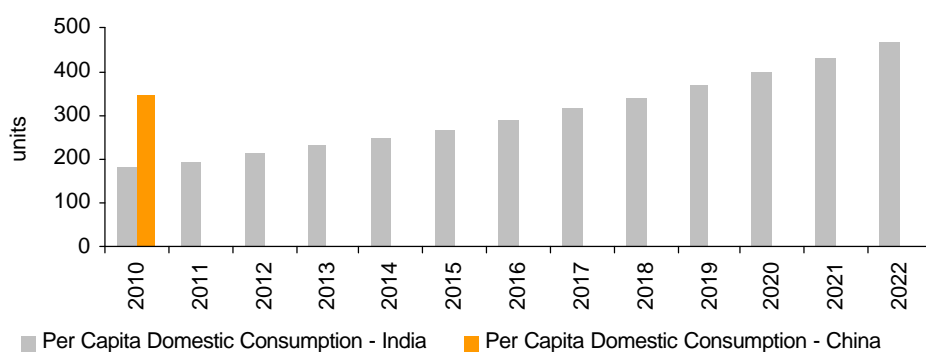
Source: China Yearbook, CEA, Emkay Research

Domestic electricity demand to grow at 9.7% including best case latent demand

Our optimistic domestic demand estimates peg growth at 9.7% CAGR (including best case latent demand). In our assumptions, we have increased the per capita domestic consumption (183 units) to China's level (344 units) by FY18E, despite India reaching China's current GDP level by FY27E.

Assumed per capita domestic electricity to reach China's current level by FY18E

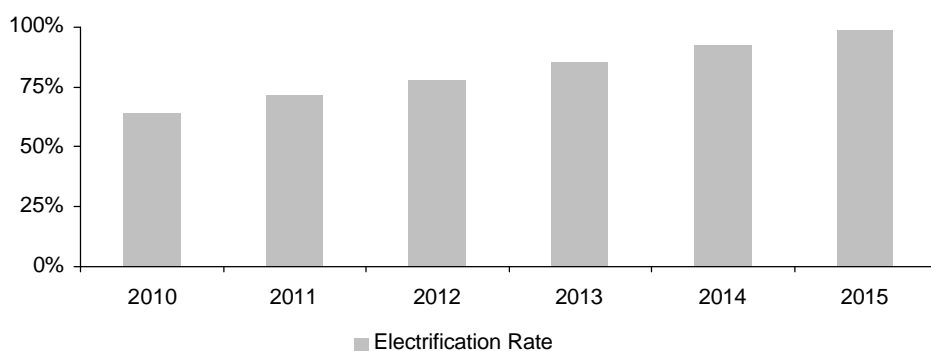
Building in optimism in our estimates, we have increased India's per capita domestic electricity consumption to China's level by FY18E despite India reaching China's current GDP level by FY27E....



Source: China year book, MOSPI, Emkay Research

We estimate 100% electrification by FY15E

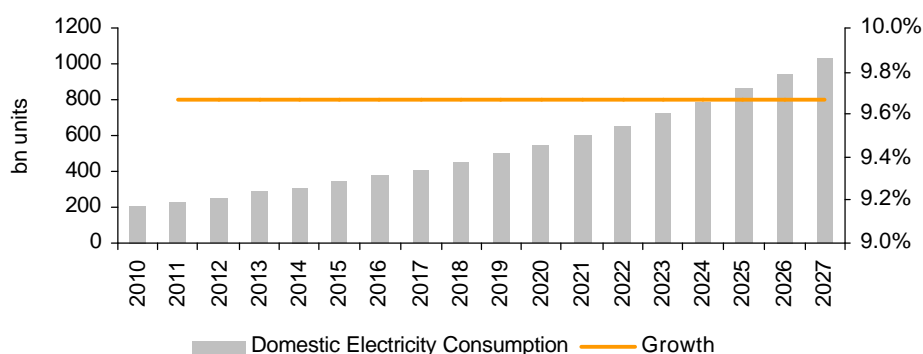
....And estimate 100% electrification by FY15E



Source: CEA, Emkay Research

Expect domestic electricity demand growth of 9.7% p.a., including latent demand

Domestic electricity demand CAGR of 9.7% assumes best case latent demand, indicating absence of significant latent demand in domestic segment despite low electrification levels



Source: CEA, Emkay Research

No question of latent demand in agriculture segment seeing the huge inefficiencies

Expect 2.2% CAGR in agricultural electricity consumption

In the agriculture segment, India uses 1.13units of electricity to generate 1 USD of agricultural GDP versus China using only 0.20units/USD. Thus, we believe there is a lot of inefficiency in the agricultural consumption in India mainly due to subsidized/free power available to this category in most of the states. The actual CAGR in agricultural electricity consumption during FY00-FY07 was 2.6%. Seeing the inefficiencies, we expect a slightly lower growth of 2.2% on some efficiency improvement and regulatory policies against inefficient use of electricity.

Thus, including the best case latent demand, we expect electricity demand to grow at 9.5% CAGR over FY10-FY27E

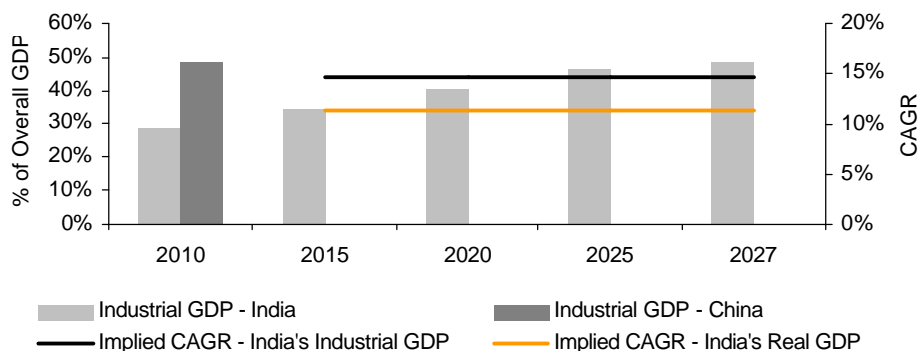
After taking into account (1) latent demand across segments and (2) power shortage, we expect electricity demand growth of 9.5% during FY10-FY27E. We disagree with the argument that 'India has significant latent demand for electricity, resulting in electricity demand growth being higher than long term real GDP growth'.

We have ignored the fact that India's industrial output is unlikely to reach China's level

Our analysis of China's GDP history of past 20 years indicates that the industrial GDP as a % of overall GDP has increased to 49% from 43%, thereby growing (11.5% CAGR) slightly higher than overall GDP growth (10% CAGR). India's current industrial GDP is 28% of overall GDP. To reach China's level of 49%, India's industrial GDP has to grow at 14.7% along with overall GDP growth of at least 11.3% per annum for the next 17 years. This is unlikely, looking at China's history. Assuming India's long term GDP growth at 9.3% for the next 20 years, we have factored industrial GDP growth at 10%.

To reach China's level of 49%, India's industrial output has to grow by 14.7% CAGR

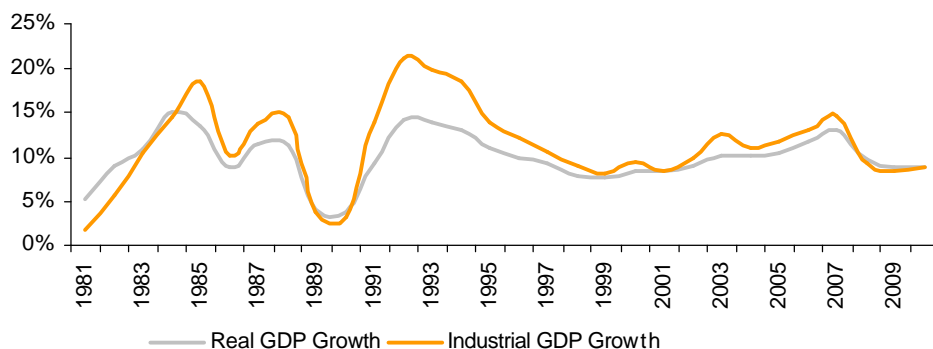
To reach China's industrial GDP of 49%, India's industrial GDP has to grow at 14.7% over FY10-FY27E



And real GDP has to grow at 11.3% during FY10-FY27E

Source: MOSPI, China Yearbook, Emkay Research

Unlikely seeing China's Industrial GDP growth at 11.5%, slightly higher than overall GDP



Unlikely, seeing China's real GDP has grown at 10.0% during past 20 years

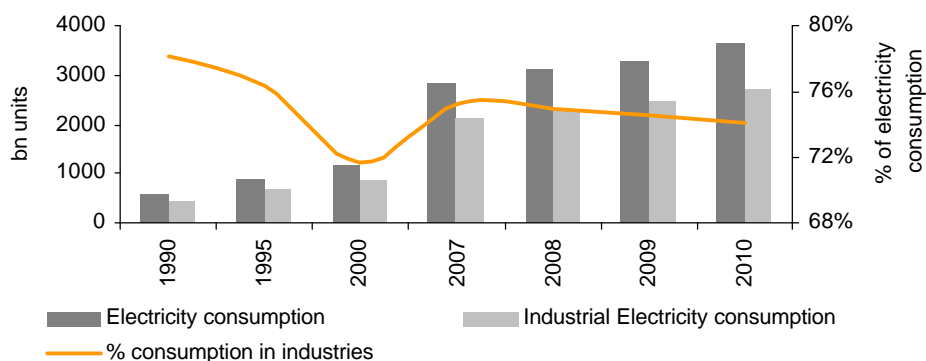
Source: China Yearbook, Emkay Research

Industrial output is relatively higher in China, consuming 75% of electricity

China is an industry centric economy with industry contributing 50% or USD 2,131bn of real GDP. As a result, industry (most electricity intensive segment) constitutes 75% or 2,700bn units of China's total electricity consumption. However, India's industrial GDP at USD 268bn is just 28% of India's real GDP. As a result, India's industrial electricity consumption is just 367bn units or 45% of overall electricity consumption.

75% of China's electricity consumption is from industries...

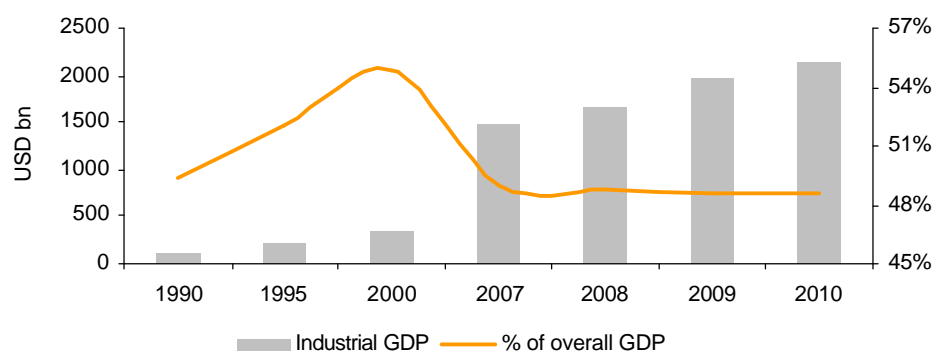
The highest electricity intensive segment – Industrials, consume 75% of China's electricity....



Source: China Yearbook, Emkay Research

...Driven by huge Industrial GDP of USD 2131bn or 50% of overall GDP

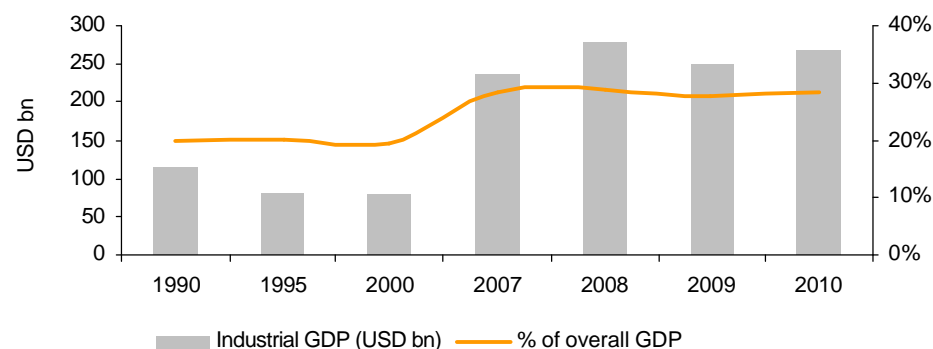
.....as China is an industry centric economy



Source: China Yearbook, Emkay Research

India's industrial share as a % of GDP is very low at 28%

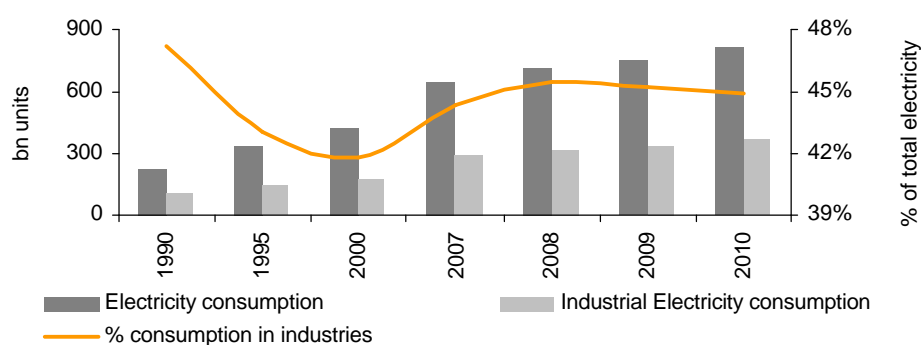
On the other hand, India is relatively less industry centric



Source: MOSPI, Emkay Research

India uses only 45% of its electricity in industries

Out of 817bn units of electricity consumption, only 367bn units or 45% is used in industries



Source: CEA, Emkay Research

Supply to surprise big time starting FY12E; To grow at 13.0% during FY11E-FY15E

Private sector is likely to surprise big time with capacity additions of ~70,000MW (including captive) during FY11E-FY15E. This is likely to result in private segment contribution increasing to 46% from the current 23% (including captive).

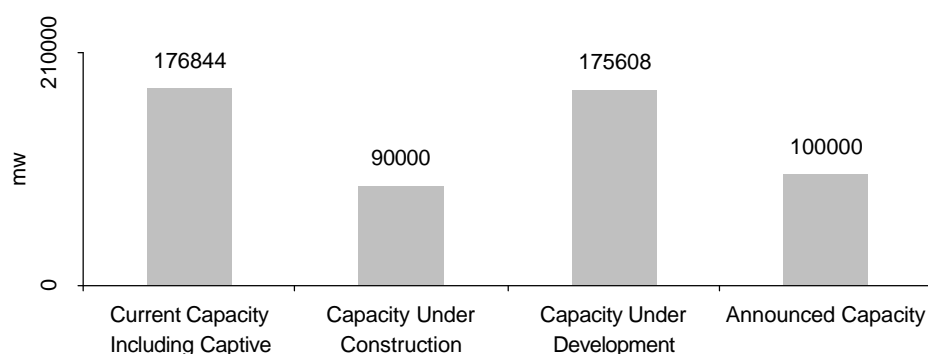
As against demand growth of 9.5% CAGR, we expect supply to grow at 13.0% during FY11E-FY15E. Our bottom up analysis of generation capacity addition in the country revealed that almost (1) 90,000MW capacity is under construction, (2) a whopping 175,000MW is under planning and development and (3) further, at least 100,000MW is announced capacity. To account for any reduced supply due to (1) rollback of expansion plans, (2) execution delays and (3) coal shortage, we have assumed only 55% of scheduled capacity additions. We expect an addition of 22,706MW (including captive) in FY12E, resulting in a supply growth of 11.6%. Thereafter, supply growth is likely to accelerate to 13.4% during FY12E-FY15E. The average addition during FY11E-FY15E is likely to be 25,700MW per year as against the past three year average of 8,500MW, a big jump of 3x. The private sector is likely to surprise big time with capacity additions of ~70,000MW (including captive) during FY11E-FY15E. This is likely to result in private segment contribution increasing to 46% from the current 23% (including captive).

Huge capacity under construction and development

Almost 90,000MW is under construction

A whopping 175,000MW is under planning and development

At least 100,000MW is further announced capacity by various players



Source: CEA, Emkay Research

We have assumed 55% of scheduled capacity additions

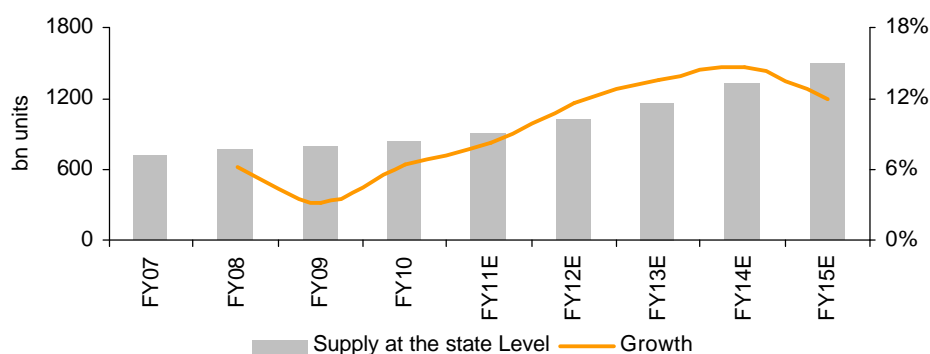
	FY11E	FY12E	FY13E	FY14E	FY15E
Scheduled Additions (mw)	28361	42842	46427	58147	36486
Our Assumption (%)	50.0%	53.0%	55.0%	57.0%	59.0%
Expected Additions (mw)	14180	22706	25535	33144	21527

Source: Emkay Research, CEA, Companies

Supply to increase significantly, going forward

In first three years of 11th plan, supply grew at 5.3%

Going forward, we expect a growth of 11.6% in FY12E and thereafter, further acceleration to 13.4% in FY12E-FY15E...



Source: CEA, Emkay Research

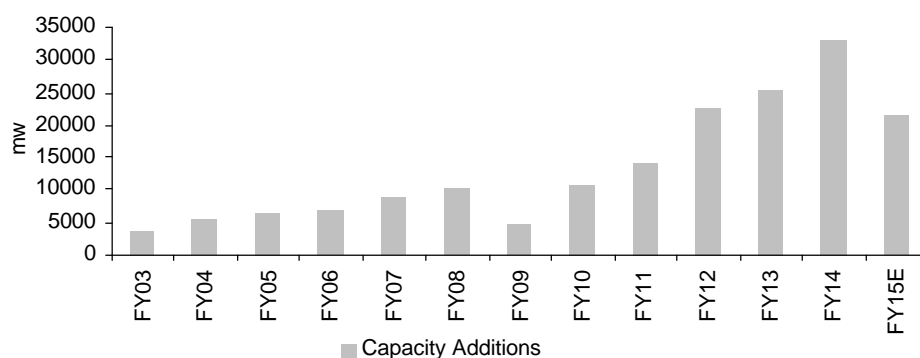
And capacity additions to venture into a different league starting FY12E

Average additions of 6,300MW per year in the 10th plan

And 8,500MW p.a. in first three years of the 11th plan

But, we expect average annual addition of 25,000MW during FY11E-FY15E...

...A big jump of 3x

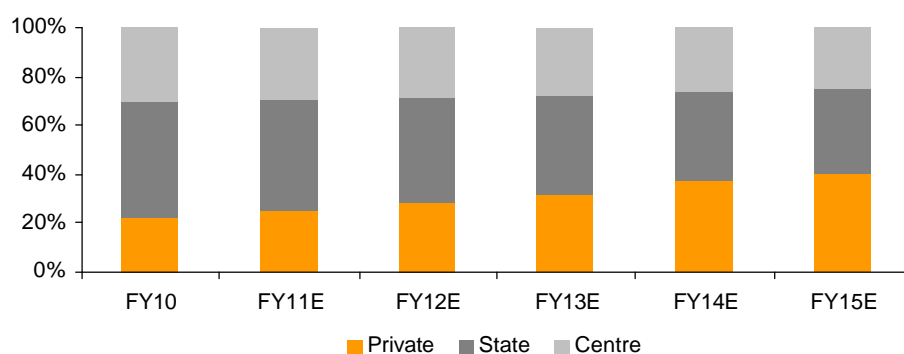


Source: CEA, Emkay Research

Including captive capacity, private sector currently accounts for 23% of the generation capacity

Based on bottom up analysis of projects under construction and development, we expect private sector to surprise big time with capacity additions of 70,000MW during FY11E-FY15E...

...And to take a big lead in additions and to contribute about 46% (highest) of overall capacity by FY15E...

Race among private sector to make it the largest contributor by FY15E

Source: CEA, Emkay Research

Further, we have not considered incremental supply from reduction in AT&C losses

Currently, AT&C losses stand at ~30% of the total supply. The government has set a target to reduce AT&C losses to 15% in the next five years. Even if the target is partially achieved, it is likely to result in an incremental supply of 7-8%, which we have not considered in our supply side analysis.

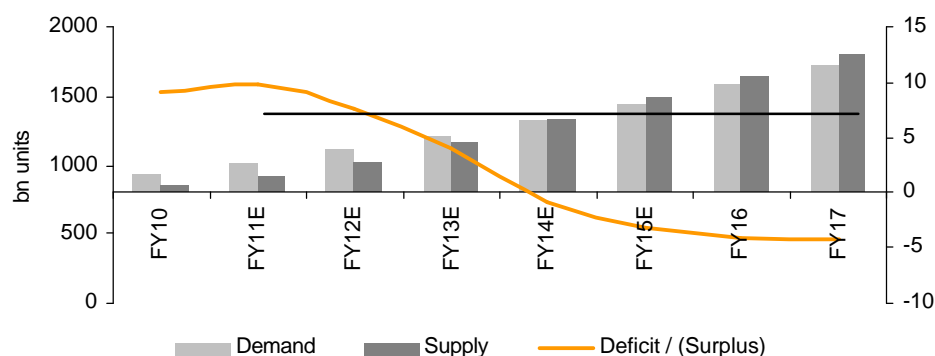
Supply to overtake demand at the end of FY13E

As a result of demand growing at 9.5% CAGR and supply growing higher at 13.0% CAGR, supply is likely to overtake demand at the end of FY13E. We expect surplus situation in FY14E.

Supply to overtake demand by end of FY13E

Supply growth to significantly outpace demand growth starting FY12E

And, overtake demand by the end of FY13E



Source: CEA, Emkay Research

As a result, high merchant prices unlikely to sustain

We believe that the lucrative merchant prices are unlikely to sustain (YTD FY11 average of Rs4.5/unit) in the coming years. We expect the current downtrend in merchant prices to continue and get pronounced in FY12E. We do not rule out temporary increase in merchant prices on account of elections, seasonal demand etc.

Elections may result in temporary price increases

Election Schedule	Q1	Q2	Q3	Q4
FY11E			Bihar	
FY12E	Tamil Nadu, Kerala, Assam, Puducherry, West Bengal			Uttarakhand, Punjab, Manipur
FY13E	UP, Goa			Himachal, Gujarat, Meghalaya, Tripura, Nagaland
FY14E	Karnataka		MP, Mizoram, Delhi, Rajasthan	Chhatisgarh
FY15E	Sikkim, Andhra, Orissa, Union Elections	Arunachal		J&K

Source: Emkay Research

For electricity prices to come down, the whole deficit need not be bridged

Merchant prices highly elastic to volumes and deficit levels

Further, we highlight that merchant prices are highly elastic to (1) volumes and (2) deficit levels. We derive this conclusion from recent price and volume data on the exchange along with the overall deficit levels in the country. We believe that at deficit level of 8% and below, discoms comfortably manage their supplies, including scheduled power cuts. We have observed that during periods when deficit level reduces to 1) Below 9% - short term prices have averaged Rs3.6/unit, 2) Below 8.5% - merchant prices have averaged Rs3.1/unit and 3) In past four months, when the deficit was below 7.5%, merchant prices averaged below Rs2.6/unit - indicating huge elasticity. Thus, we believe merchant prices are likely to come down in FY12E itself, ahead of bridging of deficit in FY13E end.

Even after energy deficit at 6.5% in November 2010, there were few takers for short term power on exchanges above Rs2/unit

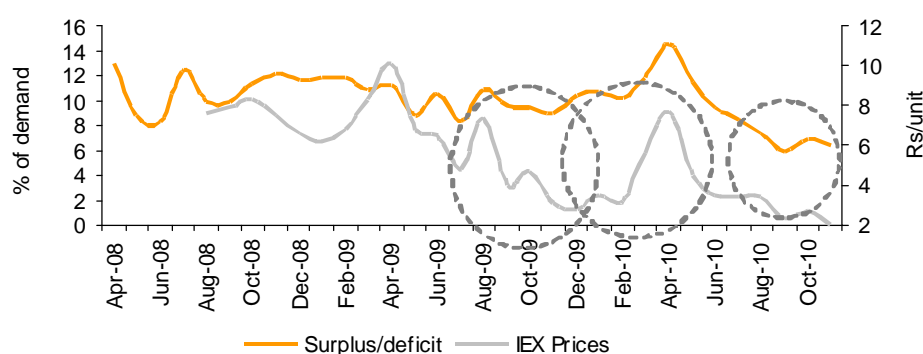
This indicates that sustained deficit figures of 6-7% are sufficient to ensure lower merchant prices

This is because (1) SEBs would have more options to schedule power cuts, (2) The deficit figures are overstated because the demand/requirement estimates given by states takes into consideration the fact that centre allots the power based on state's deficit

Aug-Dec'10 have seen volumes of more than 1000 MU units (higher than average volumes of 700 MU in Apr-Jul'10)

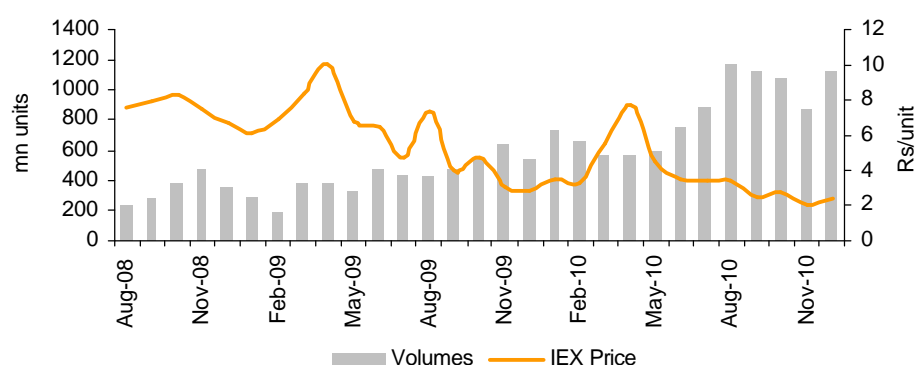
....And day ahead prices ranged between Rs2.0-Rs3.4/unit (on an average 42% lower yoy) indicating very high elasticity to increased volumes too...

Power prices highly elastic to energy deficit



Source: IEX, Emkay Research

...as well as volumes on the power exchanges



Source: IEX, Emkay Research

Fall to extend to long term power market too

The weighted average tariff of some of the recent case I bids is Rs3.13/unit. This is an increase of 30% from average till date of Rs2.38/unit (case I and II both). We believe that crashing of merchant prices is likely to lead to a run-up for off-take tie ups, leading to lower prices in competitive bids too.

Some of the recent case I bids – weighted average tariff of Rs3.13/unit

State utility	L1	Capacity (MW)	Tariffs (Rs/unit)
Rajasthan	Adani Power	1,200	3.25
Maharashtra	GMR	200	2.88
Maharashtra	Indiabulls	450	3.26
Maharashtra	Adani	1,200	3.28
Maharashtra	Indiabulls	150	3.44
Gujarat	KSK Energy	1,010	2.34
Gujarat	Shapoorji Paloonji	800	2.80
Gujarat	Essar	1,000	2.80
Bihar	Essar Power	450	3.06
Karnataka	PTC - Monnet Ispat	150	3.76
Karnataka	PTC Thermal Power Tech	430	3.77
Karnataka	PTC - Meenakshi	430	3.80
Karnataka	JSW Energy	600	3.81
Weighted Average			3.13

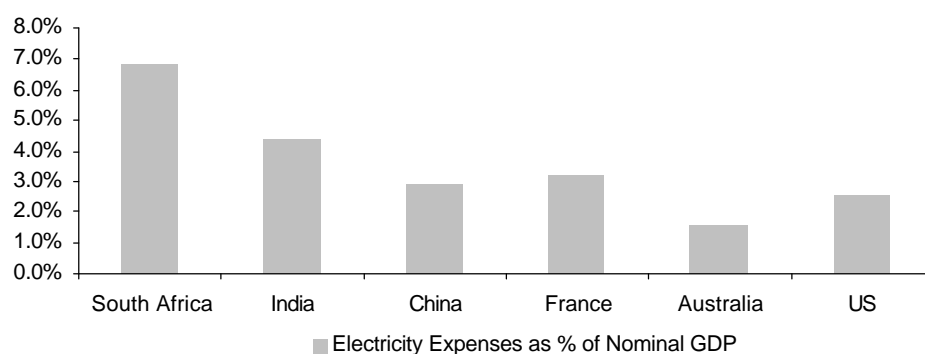
Source: Emkay Research, Companies, State utilities

Our stand on long-term prices is supported by the fact that electricity prices are inversely correlated to the development of a country. We derive this conclusion from our study of electricity expenses as a % of income of few countries at different levels of development. We highlight that India's current electricity prices (USD0.09/unit) and expenses (4.3% of nominal GDP) are significantly higher than China at USD 0.06/unit and 2.8% of nominal GDP.

	Electricity Price Level (\$/unit)	Electricity Consumption (bn units)	Electricity Cost (USD bn)	Nominal GDP (USD bn)	Electricity cost as % of GDP
US	0.09	3873	359	14256	2.5%
France	0.19	447	86	2676	3.2%
Australia	0.07	222	16	997	1.6%
China	0.06	2500	142	4909	2.9%
India	0.09	628	53	1236	4.3%
South Africa	0.09	215	20	287	6.9%

Source: World Fact book, Emkay Research

Electricity expenses reduce with the development of a country



Source: World Fact book, Emkay Research

Discoms' financials - another potential trigger

In the event of demand supply dynamics failing to lower power prices in FY12E, the discoms who are already reeling under huge losses on account of higher merchant prices will trigger fall in FY13E.

A detailed analysis of all discoms accounts (FY06-FY10P) indicate that merchant power contributed to 2/3rd of increased losses in the past two years - Alarming

A detailed Profit & Loss statement and Balance sheet analysis of 56 discoms (all India - state sector) of India (FY06-FY10P) reveals that the annual losses (loss without subsidy and unrealized revenues) have almost doubled in the last two years to Rs746bn in FY10P. Our analysis indicates that merchant power prices have contributed to 2/3rd of the past two year's increased losses, leading to trapped situation of discoms.

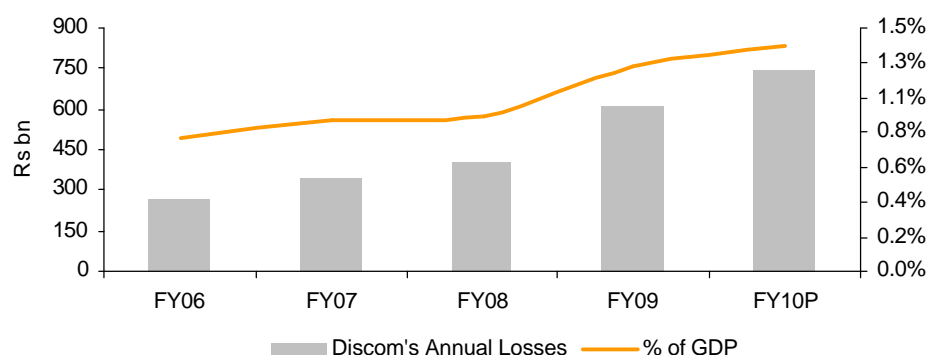
The discoms bought 111bn units of traded power/UI in FY09 and FY10P put together - at a weighted average cost of Rs5.13/unit. This is as against the balance power purchase of 1043bn units at an average price of Rs2.61/unit. At additional cost of Rs2.53/unit (Rs5.13-Rs2.61), 111bn units of short term power resulted in cost increase of Rs281bn. During past two years, SEBs have increased their interstate trading by Rs53bn (our estimate), leaving a net loss of Rs228bn being contributed by short term power prices, which is 2/3rd of the increase in losses in the past two years - an alarming situation.

Rsbn	FY09 & FY10P
Total Power Purchase Cost (Rsbn)	3210
Short Term Power Cost (Rsbn)	572
Balance Power Cost (Rsbn)	2638
Total Power Purchased (bn Units)	1184
Short Term Power Bought (bn Units)	111
Balance Power Bought (bn Units)	1043
Overall Power Purchase Tariffs (Rs/unit)	2.85
Short Term Power Tariff (Rs/unit)	5.13
Balance Power Bought (Rs/unit)	2.61
Actual Short Term Power Cost (a)	572
Cost if bought at balance power tariff (b)	291
Additional Cost due to merchant prices (c = a-b)	281
Savings due to Interstate trading (d)	53
Net losses contributed by short term power (e = c-d)	228
Increase In Discoms Losses in Two Years	342
Contribution from merchant power	67%

Rs228bn out of Rs342bn of increased losses have been contributed by higher power purchase cost

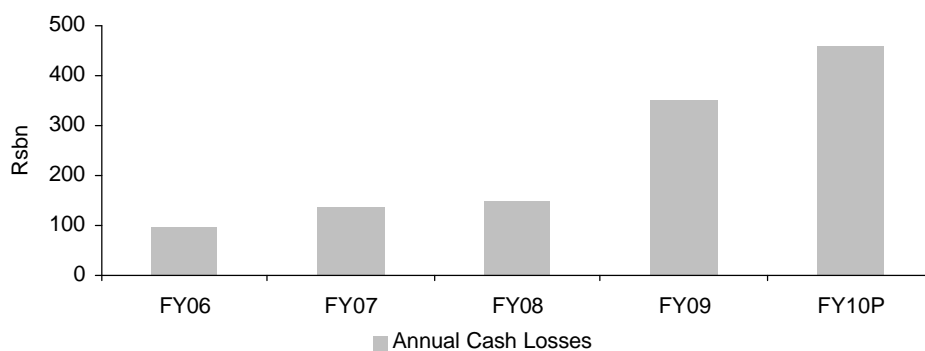
Source: CERC, Discoms annual reports, PFC, 13th finance commission report, Emkay Research

All India discoms annual losses doubled in FY08-10P



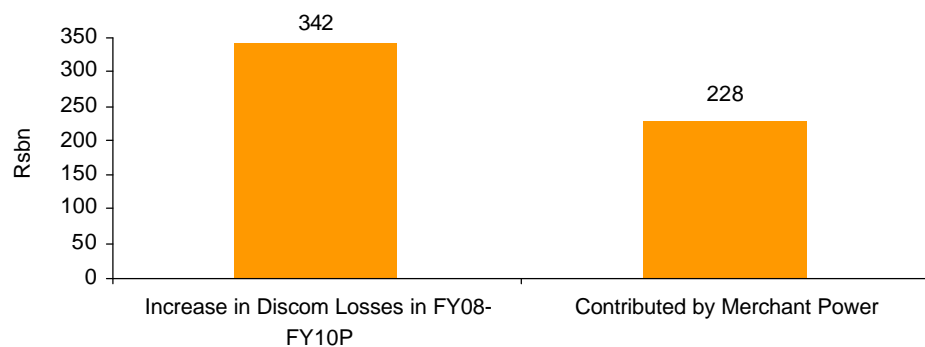
Source: CERC, Discoms annual reports, PFC, 13th finance commission report, Emkay Research

And cash losses tripled in FY08-FY10P



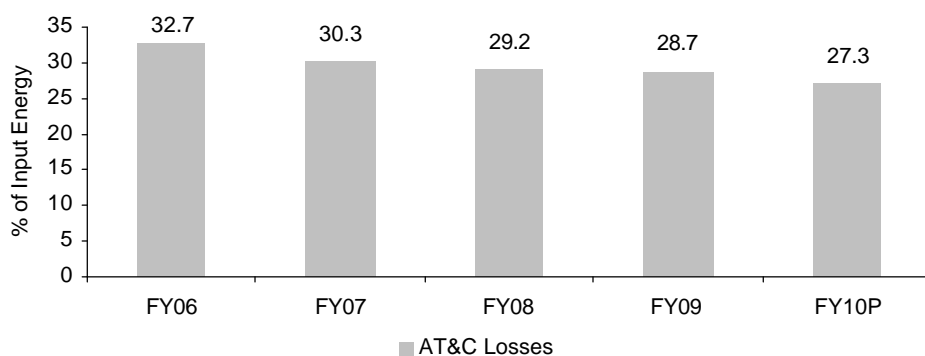
Source: CERC, Discoms annual reports, PFC, 13th finance commission report, Emkay Research

Mostly contributed by short term power prices



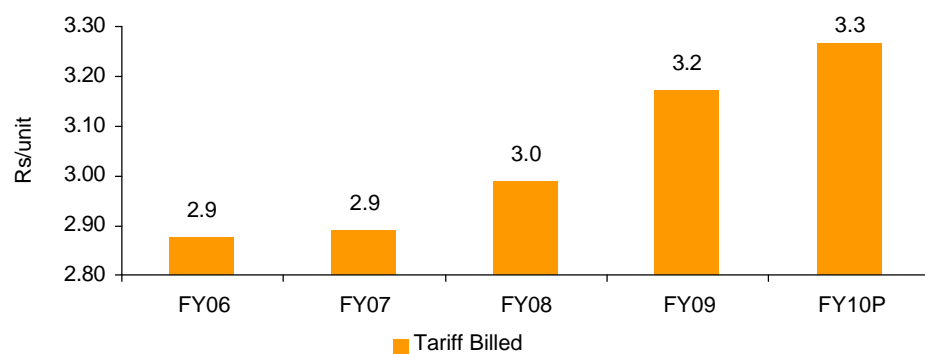
Source: CERC, Discoms annual reports, PFC, 13th finance commission report, Emkay Research

In fact, the AT&C losses have reduced

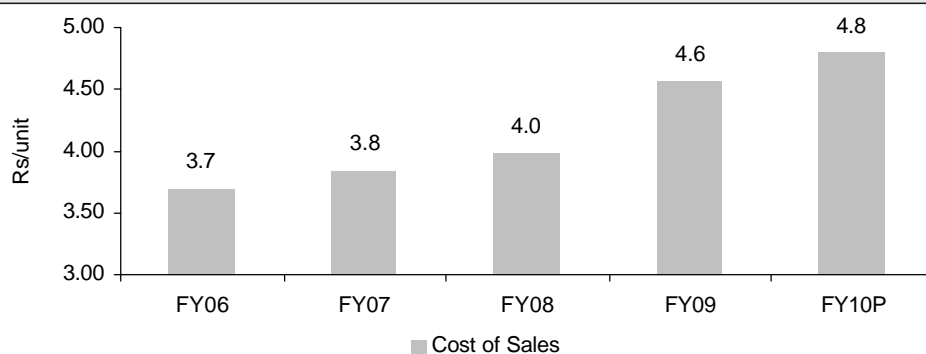


Source: CERC, Discoms annual reports, PFC, 13th finance commission report, Emkay Research

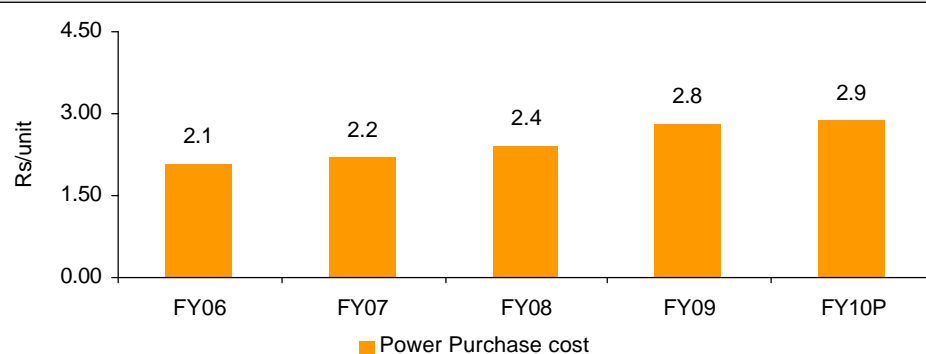
And average tariff increased by 10% during FY08-FY10P



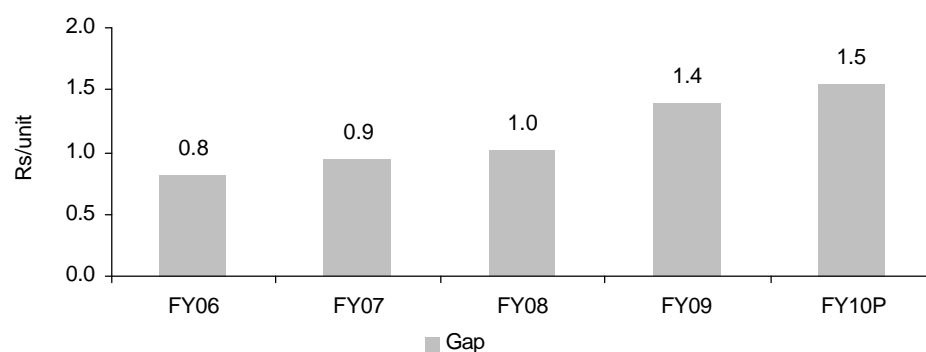
Source: CERC, Discoms annual reports, PFC, 13th finance commission report, Emkay Research

But, the cost of sales increased significantly...

Source: CERC, Discoms annual reports, PFC, 13th finance commission report, Emkay Research

...Led by increase in power purchase cost

Source: CERC, Discoms annual reports, PFC, 13th finance commission report, Emkay Research

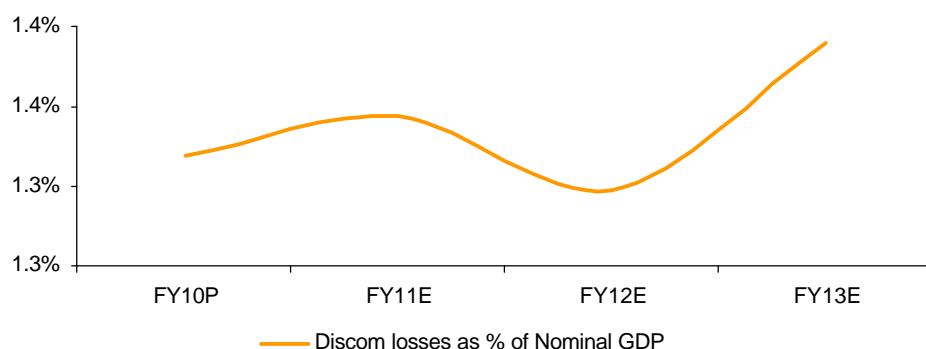
Resulting in gap increasing to Rs1.55/unit

Source: CERC, Discoms annual reports, PFC, 13th finance commission report, Emkay Research

Should the discoms' continue buying at these rates, losses to reach 1143bn by FY13E or 1.4% of nominal GDP**If merchant power bought at Rs4.5/unit, losses to reach Rs1143bn in FY13E**

	FY10P	FY11E	FY12E	FY13E
Expected merchant volumes to be bought by SEBs (bn units)	36	56	113	196
Assumed Power Purchase Cost without additional merchant power (Rs/Unit)	2.7	2.8	2.9	3.0
Assumed Merchant Power Rates (Rs/unit)	5.5	5.0	4.5	4.5
Additional Cost of Merchant Power (Rsbn)		40	115	224
SEB Losses (Rsbn)	(746)	(866)	(949)	(1143)

Source: CERC, Discoms annual reports, PFC, 13th finance commission report, Emkay Research

To reach 1.4% of nominal GDP

Source: CERC, Discoms annual reports, PFC, 13th finance commission report, Emkay Research

If merchant power bought at Rs3.6/unit, losses to reach Rs1006bn in FY13E

	FY10P	FY11E	FY12E	FY13E
Expected merchant volumes to be bought by SEBs (bn units)	36	56	113	196
Assumed Power Purchase Cost without additional merchant power (Rs/Unit)	2.7	2.8	2.9	3.0
Assumed Merchant Power Rates (Rs/unit)	5.5	5.0	4.5	3.6
Additional Cost of Merchant Power (Rsbn)		40	115	87
SEB Losses (Rsbn)	(746)	(866)	(949)	(1006)

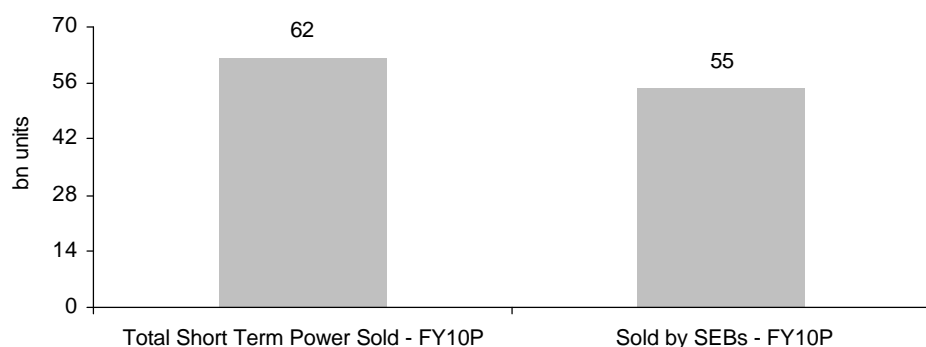
Source: CERC, Discoms annual reports, PFC, 13th finance commission report, Emkay Research

More alarming is the situation, where the losses would be actual cash outflow from states, going forward

We highlight that till now, major volumes (85%) in the short term market were contributed by state utilities (mostly their unbundled generation utilities, trading utilities or power purchase committees) themselves. As a result, though the increased prices had an adverse impact on discom's health, the cash did not go out of the State government's hands in most of the cases. This was supporting the subsidy funding, and states on an overall basis did not bleed. However, the story going forward would be different in the sense that 80% of the increased merchant volumes would be contributed by private players - meaning money going out of the State Government utilities. This, we believe, will lead to an unsustainable situation, whereby the profits of most of the private utilities would be funded by increased losses (debt, subsidies) of discoms. Our sense is that if merchant prices do not correct soon, then discoms (state governments) will start feeling the real pinch of the short term market somewhere in FY12E. This would lead to lots of policy decisions/restrictions (resorting to power cuts, caps on prices) being imposed. Also, we do not rule out a series of defaults by SEBs in the period FY12E-FY14E. All this would be negative for IPPs, especially merchant power producers.

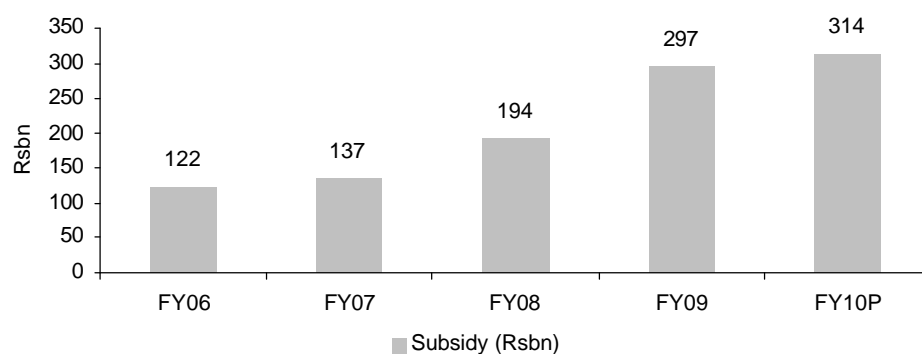
As against 85% contribution by state utilities to merchant power market volumes till now, private players are likely to contribute 80% of the volumes going forward

Leading to discoms funding huge profits of private players – an unsustainable situation

Up till now, almost 85% of short term power was sold by SEBs...

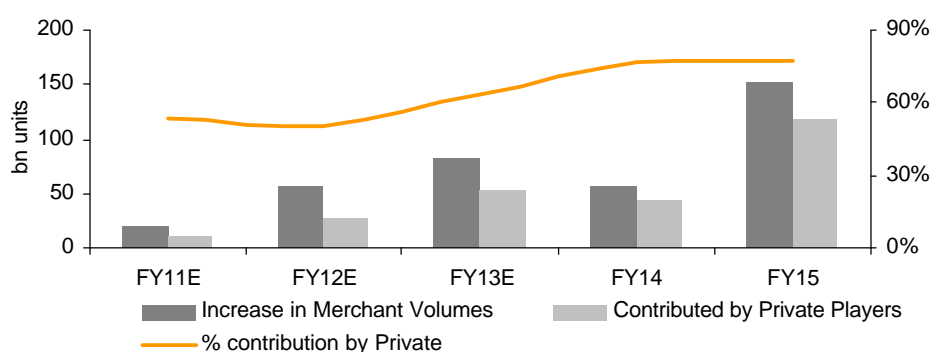
Source: CERC, Discoms annual reports, PFC, Emkay Research

...Which was supporting the subsidy provided to discoms



Source: CERC, Discoms annual reports, PFC, Emkay Research

However, going forward, private players to contribute most of the increased short term volumes



Source: CERC, CEA., Companies, Emkay Research

Supernormal profits of IPPs being financed by increased discoms losses

PAT (Rs bn)	FY10P	FY11E	FY12E	FY13E	FY14E
All India Discoms	(746)	(834)	(977)	(1058)	(1179)
Adani Power	2	8	40	44	59
Lanco Infratech	5	10	8	13	21
Jaiprakash Power Ventures	2	2	7	9	14
JSW Energy	7	13	16	12	13
Reliance Power	7	7	8	10	29
KSK Energy	2	4	8	11	20
Nava Bharat Ventures	5	5	5	5	6
Total	30	49	93	102	162
Incremental Losses of Discoms		(88)	(143)	(81)	(121)
Incremental PAT of under coverage IPPs		20	43	9	60

Source: Companies, CERC, Discoms annual reports, PFC, 13th finance commission report, Emkay Research

Increase in retail tariffs very sensitive because it is mainly agricultural consumers, who are subsidized and contribute 66% of the losses currently

Agricultural consumers paid only Rs0.94/unit in FY10 versus cost of sales of Rs4.54/unit - cross subsidization of Rs3.60/unit

The increase in retail tariffs remain a very sensitive subject because (1) electricity is a concurrent subject and states have the right to set retail electricity rates, (2) most of the categories of consumers already pay high tariffs except agricultural consumers and (3) it is a politically conflicting situation.

If we analyze the cross subsidization, agricultural consumers paid only Rs0.94/unit in FY10P versus cost of sales of Rs4.54/unit, cross subsidization of Rs3.60/unit. In FY10P, agricultural consumers alone contributed 66% of the overall losses.

(Rs/unit)	FY06	FY07	FY08	FY09	FY10P
Cost of Sales	3.45	3.60	3.78	4.26	4.54
Residential Consumers	2.34	2.31	2.31	2.46	2.59
Industrial Consumers	4.05	4.10	4.07	4.23	4.38
Commercial Consumers	4.96	4.90	5.13	5.68	6.00
Others	3.67	3.76	4.35	4.53	4.15
Agricultural Consumers	0.76	0.71	0.77	0.86	0.94
Cross Subsidization					
Residential Consumers	(1.11)	(1.29)	(1.47)	(1.80)	(1.95)
Industrial Consumers	0.60	0.50	0.30	(0.03)	(0.15)
Commercial Consumers	1.51	1.30	1.36	1.42	1.47
Others	0.22	0.16	0.58	0.27	(0.38)
Agricultural Consumers	(2.69)	(2.89)	(3.01)	(3.40)	(3.60)

Source: CERC, Discoms annual reports, PFC, Emkay Research

	FY06	FY07	FY08	FY09	FY10P
Contribution to Overall Losses					
Residential	44.2%	41.8%	42.7%	38.4%	36.4%
Industrial	-36.0%	-24.7%	-13.3%	1.1%	4.3%
Commercial	-18.9%	-13.6%	-12.8%	-9.3%	-8.8%
Others	-3.0%	-1.6%	-5.5%	-1.9%	2.3%
Agriculture	113.7%	98.2%	88.9%	71.7%	65.7%

Source: CERC, Discoms annual reports, PFC, 13th finance commission report, Emkay Research

Thus, if demand supply dynamics fail to bring down prices in FY12E, then the discoms remain trapped in a situation in which (1) they have to buy huge merchant power at high prices increasing their losses, (2) super normal profits instead of going to state utilities, will go in private hands leaving a big gap of subsidies to be filled in and (3) not much scope to increase retail tariffs.

This will lead to payment defaults, policy decisions/restrictions resorting to power cuts, caps on prices being imposed starting FY13E.

Expect power tariffs to stabilize at Rs2.7/unit, maximum leeway being FY13E

As per our analysis, Rs2.7/unit is the tariff at which discoms' losses do not increase further (break even tariff - Rs1.6/unit). We expect merchant prices to decline and stabilize at Rs2.7/unit, maximum leeway being till FY13E. This is because in FY12E - (1) merchant power cost would lead to one of the highest increases in discoms losses and (2) which would purely be cash outflow from the states.

	FY10P	FY11E	FY12E	FY13E
Total Input Energy (bn units)	678	732	782	835
Net Energy Billed (bn units)	489	533	576	622
T&D Losses (%)	28	27	26	25
Average Tariff Billed (Rs/unit)	3.32	3.46	3.56	3.69
Expenses Excluding Power Purchase Cost (Rs/unit)	1.38	1.44	1.53	1.61
Break Even Power Purchase Cost Assuming No T&D Losses (a) (Rs/unit)	1.94	2.02	2.04	2.08
Losses in FY10P (b) (Rs/unit)	1.53	1.53	1.53	1.53
Implied Power Purchase Cost (Rs/unit) at which losses do not increase = (a+b) *(1-T&D Losses)	2.50	2.58	2.62	2.69
Implied break even power purchase cost (Rs/unit) a*(1-T&D losses)	1.40	1.47	1.50	1.55

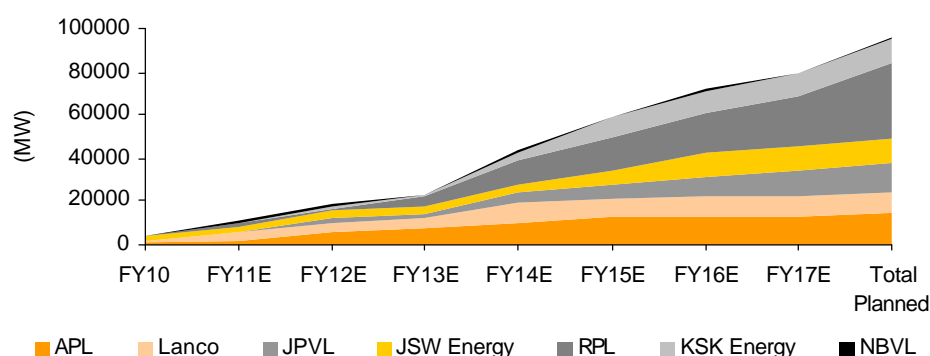
Source: CERC, Discoms annual reports, PFC, 13th finance commission report, Emkay Research

Do not expect interim power prices to also provide any respite to investors

We do not expect prevalent power prices also to provide any respite to power generators as well as investors. This is because as long as power prices remain lucrative, companies are likely to go ahead with their capacity expansion plans. All the internal accruals are likely to be deployed in further capacity expansion and seeing the current pace, this phase will continue till merchant prices turn unremunerative. Once merchant prices crash, companies will be left with huge capacities created from supernormal profits made in earlier years.

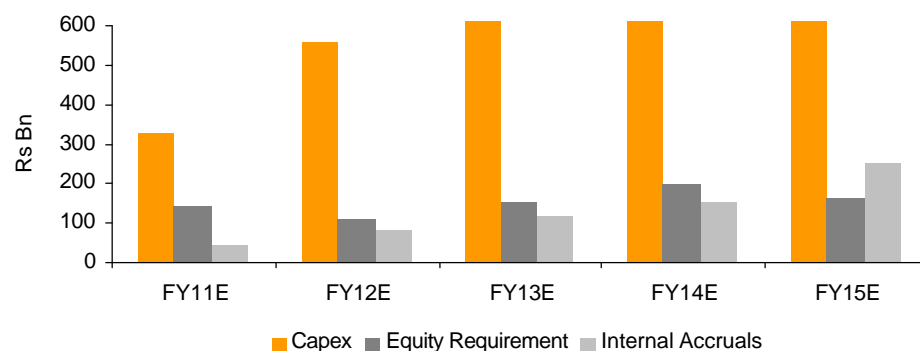
Huge scale-up plans already being implemented

Our IPP universe has plans to scale up to 24x current capacity



Source: Companies, Emkay Research

Internal accruals getting reinvested into huge capex plans



Source: Companies, Emkay Research

We have assumed best case merchant prices in our numbers

In our merchant price assumptions, we have considered the best case and assumed current bilateral tariff (Rs4.5/unit) to continue in FY12E. In the long term we have assumed a tariff of Rs3.6/unit (implied tariffs at current valuations).

Our best case merchant price assumptions

Rs/Unit	FY11E	FY12E	FY13E	FY14E onwards
Merchant Price	5.0	4.5	4.0	3.6

Expect sector underperformance to continue

Power stocks have already underperformed by 24% vs Nifty in past one year. We believe that the underperformance will continue till the time tariffs stabilize at Rs2.7/unit.

	Relative to Nifty % chg			
	1 m	3 m	6 m	12m
Adani Power	4.4	-1.1	-7.4	10.0
Jaiprakash Power	0.5	-17.2	-35.0	-41.4
JSW Energy	-6.2	-23.7	-35.2	-30.7
KSK Energy	-17.8	-32.6	-36.8	-50.6
Lanco Infratech	-8.8	-13.8	-22.5	-0.5
Nava Bharat Ventures	0.9	-11.8	-26.5	-31.6
Reliance Power	0.1	-5.2	-21.5	-17.1
Power	3.2	-1.4	-10.3	-24.1

Source: Capitaline

Valuation matrix to choose stocks is nearness of implied tariff to Rs2.7/unit

In this context, our valuation matrix to choose stocks is largely driven by the nearness to this long term tariff (Rs2.7/unit) besides other factors like (1) fuel security at competitive rates, (2) off take tie ups at attractive IRRs, (3) early mover advantage and (4) relatively lower EVM (enterprise value per adjusted mw). We have valued the stocks based on the most optimistic assumptions - (1) long term power tariff of Rs3.6/unit (current implied tariffs), (2) long term merchant capacity utilization of 80% and (3) execution/fuel/off take/operating parameters as guided.

Few other potential negative triggers not built into valuations

- Consensus is not factoring in a case of significantly lower capacity utilizations, especially for merchant power capacities

We believe that merchant power capacities are not likely to achieve 80% + kind of PLFs consistently because this power will not be required throughout the day. It is only during the peak hours (8-10 hours a day), that it would be required. We believe with the supply increasing significantly, merchant power capacities (especially based on imported coal and gas) would also run a risk of very low PLFs and therefore, significantly higher fixed costs. This is because regulated and competitively bid power has a take or pay contract and would be used first. In our numbers optimistically, we have factored 80% merchant capacity utilisations.

- Domestic coal prices (Kcal Adjusted) are at least 50%-70% cheaper compared to current international coal prices. If IPPs continue to mint money, we believe it would come under the notice of Government and we do not rule out differential coal pricing for IPPs and cost plus projects.

- Likely coal shortage, going forward
- Mandatory requirements of buying renewable energy leading to further deterioration in discoms health.
- 26% profit sharing proposed in new mining bill
- Indian government's indication of taking a binding emission cut, which might result in disincentives for coal based power plants.

Initiate coverage on IPPs with an 'Underperform' rating

We initiate coverage on Independent Power Producers (IPPs) with an 'Underperform' rating and within the IPPs, we prefer Lanco Infratech. Our stock specific rating is as follows:-

Buy - Lanco Infratech (Lanco) (lowest implied merchant rate of Rs2.9/unit).

Accumulate - Reliance Power (RPL) (implied tariff of Rs3.4/unit, however most sustainable business model), Nava Bharat Ventures Ltd (NBVL) (natural hedge, early mover advantage, relatively lower implied tariff of Rs3.3/unit).

Hold - Adani Power (APL) (balanced but valuations price in all the upsides and implied tariff of Rs3.9/unit), Jaiprakash Power Ventures (JPVL) (back ended capacity additions and implied tariff of Rs3.6/unit) and KSK Energy (attractive MOUs/contracts but materialization risk, implied tariff of Rs3.6/unit).

Reduce - JSW Energy (fuel and off-take both open - a risky strategy, highest implied tariff of Rs4.0/unit)

Annexure

EVM (Enterprise value per adjusted mw)

We also introduce EVM (Enterprise value per adjusted mw)- a three stage model, wherein we have adjusted the (1) execution stage of projects, (2) risk through cost of equity and (3) expected equity IRRs, to derive a comparable relative valuation parameter. We prefer companies with relatively lower EVM.

Lanco and NBVL fare relatively better than other peers

		Aggregate	Lanco	NBVL	APL	RPL	JSW	KSK	JPVL
Capacity	GW								
Operational	GW	7.0	1.5	0.2	1.3	1.0	1.7	0.5	0.7
Under Construction	GW	35.6	5.4	0.4	6.6	11.6	1.4	3.9	6.3
Under Development	GW	44.0	2.3	0.3	5.3	14.5	8.2	6.5	6.9
Completion Factor	x	0.42	0.62	0.46	0.49	0.42	0.31	0.27	0.42
Execution Adjusted Capacity	GW	36	6	0	6	11	3	3	6
Economic Interest		95%	91%	100%	92%	100%	97%	94%	91%
Attributable Adjusted Capacity	GW	35	5	0	6	11	3	3	5
Cost of Equity			15%	15%	14%	13%	15%	15%	13%
Equity IRR (at Rs3.6/unit merchant tariff)		29%	36%	41%	30%	30%	19%	20%	
Potential Value Multiple (pvm)		2.2	2.0	2.5	3.0	2.3	2.0	1.3	1.5
PVM Adjusted Capacity (a)	GW	74.6	10.4	1.0	17.7	26.7	6.9	3.5	8.3
Enterprise Value	Rs bn		234	23	426	414	241	68	167
Value of Non Core Business	Rs bn		39	2	0	0	10	7	0
EV (Core business)	Rs bn	1,514	195	20	426	414	231	61	167
Capex to be Incurred (milestone weighted)	Rs bn	937	105	5	120	422	32	65	188
Capex Adjusted EV (b)	Rs bn	2,451	300	25	546	836	263	126	355
EVM ((b)/(a))	Rs mn	32.9	27.0	27.1	30.8	31.3	36.6	37.7	43.0

Source: Emkay Research, Companies

Glossary

- **Plant Load Factor (PLF)** in simple terms, is the capacity utilization of the plant taking into account the loss of generation due to merit order dispatch. PLF for a given period, means the total sent out energy corresponding to scheduled generation during the period, expressed as a percentage of sent out energy corresponding to installed capacity in that period.
- **Plant Availability Factor (PAF)** in relation to a generating station means the average of the daily declared capacities expressed as a percentage of the installed capacity in MW reduced by the normative auxiliary energy consumption. The PAF includes the impact of lower fuel availability.
- **EVM (Enterprise value per adjusted Mw)** a three stage model, wherein we have adjusted the (1) execution stage of projects, (2) risk through cost of equity and (3) expected equity IRR.
- **Latent Demand** is the demand not captured in reported demand numbers. Arising from unscheduled power cuts, unelectrified households, and demand increasing due to supply being available.
- **AT&C losses** are Aggregate Technical & Commercial losses, which includes transmission losses, distribution losses, power thefts and unrealized revenues

Companies

JSW Energy

Adani Power

Jaiprakash Power Ventures

Reliance Power

Lanco Infratech

KSK Energy

Nava Bharat Ventures

Both sides open; risky strategy

25 January, 2011

Reco
Reduce

CMP	Target Price
Rs88	Rs78
EPS change FY11E/12E (%)	NA
Target price change (%)	NA
Nifty	5,697
Sensex	19,008

Price Performance

(%)	1M	3M	6M	12M
Absolute	(11)	(29)	(32)	(22)
Rel. to Nifty	(6)	(24)	(35)	(31)

Source: Bloomberg

Relative price chart



Source: Bloomberg

Stock details

Sector	Power
Bloomberg	JSW@IN
Equity Capital (Rs mn)	16401
Face Value (Rs)	10
No of shares o/s (mn)	1640
52 Week H/L (Rs)	136/86
Market Cap (Rs bn/USD mn)	144/3,154
Daily Avg Vol (No of shares)	1730586
Daily Avg Turnover (US\$ mn)	4.0

Shareholding Pattern (%)

	Dec-10	Sep-10	Jun-10
Promoters	76.7	76.7	76.7
FIINRI	10.9	11.6	11.7
Institutions	6.1	6.4	7.0
Private Corp	1.9	1.8	1.6
Public	4.5	3.6	3.0

Source: Capitaline

- **One of the most experienced IPPs with execution of its under construction projects at an advanced stage; to add 2,010MW in FY10-12E**
- **But both sides open - off-take for 68% of the planned capacity not tied up and 51% - 74% (excl. Barmer lignite project) of fuel requirements (FY11E-FY17E) not tied up; Very risky strategy & consequently, very high sensitivity to fuel prices and merchant rates**
- **Keeping the off-take open without any domestic coal linkages (except lignite for Barmer) and high cost imported coal to place it at a disadvantage compared to its peers in terms of cost of generation**
- **Current valuations imply (1) highest long term merchant prices of Rs4/unit and (2) EVM of Rs37mn/MW (11% premium to our universe average)- leaving room for negative surprises; Initiate coverage with Reduce rating**

One of the experienced IPPs; Projects at an advanced stage

JSW Energy is one of most experienced IPPs in the country with its first plant (260MW) in operation since FY00 and current operational capacity at 1730MW. It further plans to add 9,640MW of capacity over the next five years and the current under construction projects are at an advanced stage of completion. The company is likely to add 2,010MW (18% of the total planned capacity) in FY10-12E.

But, keeping both off-take and fuel requirements open - a risky strategy

JSW Energy has adopted a strategy of keeping both sides open (1) in terms of off-take mix, 68% of the planned capacity (11,370MW) is open and (2) in terms of fuel security, 51% - 74% (FY11E-FY17E) of total long term requirements of 30mn MT (excluding regulated project) remains to be tied up. We believe keeping both the sides (off take and fuel) open is a very risky strategy, which can deliver handsome returns only in case merchant prices remain very high and imported coal prices remain low. Consequently, company's NPV/share is highly sensitive to fuel prices and merchant rates. No domestic coal linkages and tying up expensive imported coal to place it at a disadvantage (in terms of cost of generation) compared to its peers.

Room for negative surprises; Initiate coverage with 'Reduce' rating

Current valuations imply (1) long term merchant prices of Rs4/unit (highest in our universe) and (2) EVM of Rs37mn/MW (11% premium to coverage universe average). Though the company is better placed owing to its projects at an advanced stage of completion, its current valuations already factor this and much more. Thus, we believe there is room for negative surprises due to company's strategy of keeping both its off-take arrangements and fuel requirements open. At CMP of Rs88/Share, JSW Energy is trading at 2.1x FY12E Book value with expected FY11E-FY15E ROE average of 15%. We initiate coverage on JSW Energy with 'Reduce' rating and DCF based PT of Rs78/Share. Key risk to our call - Significant fuel & off-take tie ups at competitive rates, higher merchant rates.

Valuation table

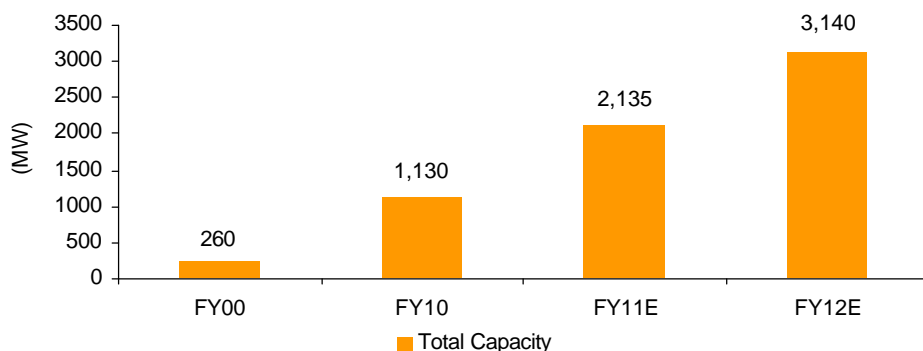
Y/E, Mar	Net Sales	EBIDTA (Core)	EBIDTA (%)	APAT	AEPS (Rs)	EPS % chg	RoE (%)	P/E (x)	EV / EBITDA	P/BV (x)
FY10	23,551	12,136	51.5	7,457	4.5	-10.2	23.7	19.4	16.7	3.0
FY11E	42,450	16,342	38.5	7,763	4.7	4.1	15.0	18.6	14.8	2.6
FY12E	72,343	30,652	42.4	13,042	8.0	68.0	20.8	11.1	9.5	2.1
FY13E	70,549	29,090	41.2	10,836	6.6	-16.9	14.3	13.3	12.5	1.8

Source: Emkay Research

Theme Charts

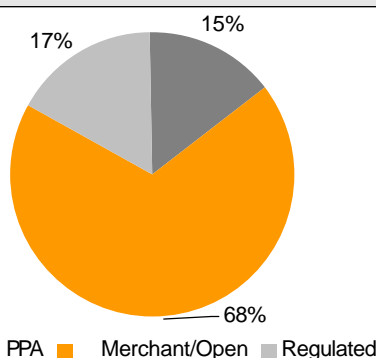
JSW Energy is one of the most experienced IPPs, in the business since FY00. Company's execution of current under construction projects is in advanced stages..

Likely to add 2,010 MW in FY10-12E



Source: Company, Emkay Research

Majority of planned capacity has not been tied up



The company has not tied up 68% of its generating capacity, which will benefit the company only if merchant prices remain high

Source: Company, Emkay Research

Mn MT	FY10	FY11E	FY12E	FY13E	FY14E	FY15E	FY16E	FY17E
Fuel Requirement								
Imported Coal	2.2	3.3	6.2	6.1	6.1	6.2	12.3	18.1
Coal / Lignite	0.1	3.3	6.3	8.2	9.8	15.1	20.6	20.6
Total Requirement	2.3	6.6	12.5	14.3	15.9	21.3	32.9	38.7
Requirement (excl. Barmer)	2.3	3.3	6.2	6.2	7.8	13.2	24.7	30.6
Fuel Availability								
Imported Coal	0.0	0.4	1.8	2.6	2.6	2.6	2.6	7.6
Coal / Lignite	0.1	3.3	6.3	8.1	8.1	11.9	11.9	11.9
Total Availability	0.1	3.7	8.1	10.7	10.7	14.5	14.5	19.5
Availability (excl. Barmer)	0.1	0.4	1.8	2.6	2.6	6.4	6.4	11.4
Shortfall (excl. Barmer)	2.2	2.9	4.4	3.6	5.2	6.7	18.3	19.2
% Shortfall (excl. Barmer)	94%	88%	71%	58%	67%	51%	74%	63%

Source: Company, Emkay Research

Shortfall excluding Barmer Lignite Regulated Project is 51% - 74% during FY12E - FY17E

Sensitivity of price target to fuel prices

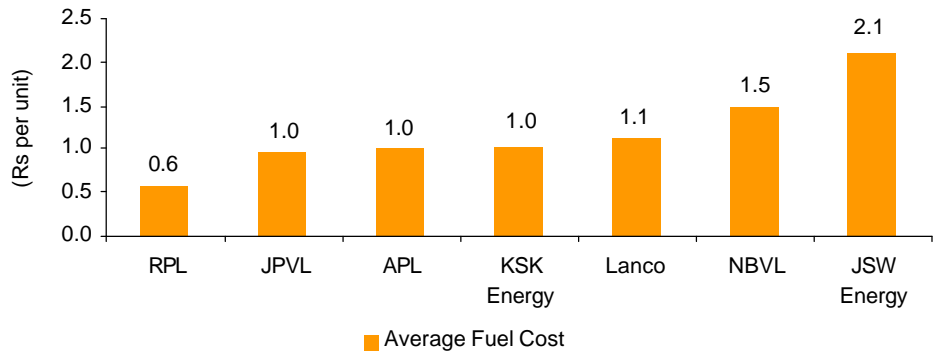
Sensitivity to our PT (Rs/share)	10% decrease in coal price	Assumed coal price	10% increase in coal price
0.5% decrease in Fuel Escalation	107	89	71
Current Fuel Escalation	100	78	66
0.5% increase in Fuel Escalation	94	74	55

Source: Company, Emkay Research

We believe keeping both the sides (off take and fuel) open is a very risky strategy. Consequently, it is very sensitive to fuel prices

JSW Energy to have the highest fuel cost per unit

Due to higher proportion of imported coal that too on spot basis coal, JSW Energy to have the highest fuel cost per unit amongst the power producers under our coverage

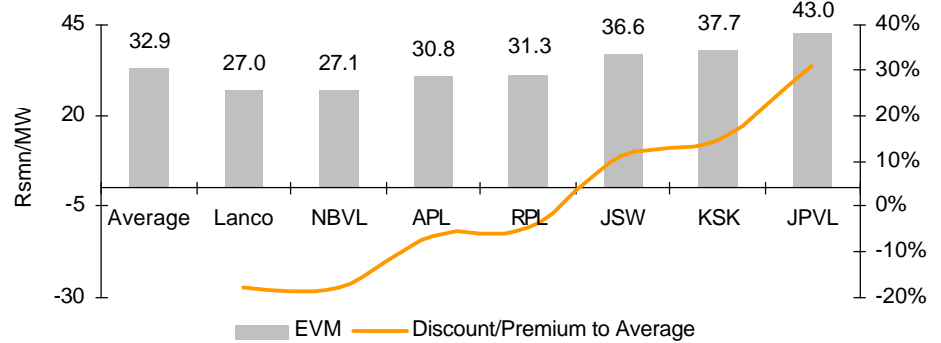


Source: Company, Emkay Research

Note: Fuel cost is for open/merchant capacity

Trades at a premium on EVM basis

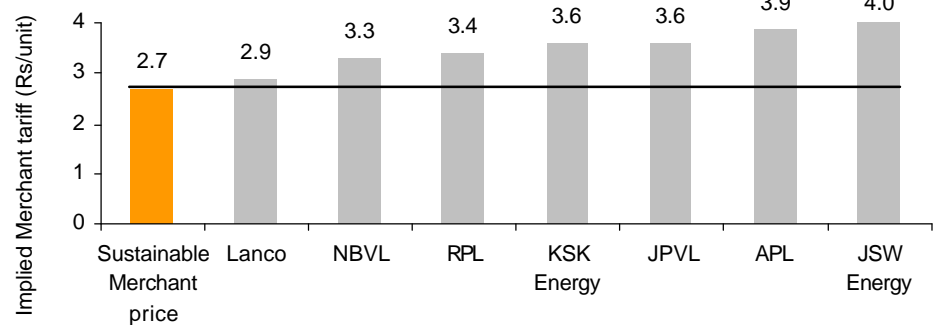
Current market price implies an EVM of Rs37mn a premium of 11% over our universe average of Rs33mn



Source: Company, Emkay Research

Valuations imply long term merchant rate of Rs4/unit

JSW Energy has the highest implied long term merchant rate of Rs4/unit



Source: Company, Emkay Research

Sum of parts valuation

	Total Capacity (MW)	Economic Interest	Cost Of Equity	NPV Rsmn	JSW's share milestone Adj. (Rsmn)	Rs per Share
SBU I	260	100.0%	15.6%	7533	7533	5
SBU II	600	100.0%	16.7%	12398	12398	8
Ratnagiri	1200	100.0%	15.1%	23621	23621	14
Raj West I	1080	98.0%	12.0%	19367	18980	12
Raj West II	270	98.0%	16.0%	1335	245	0
Salboni	1600	74.0%	14.6%	12907	9551	6
Raipur	1320	100.0%	16.9%	14595	14595	9
Ratnagiri II	3200	100.0%	16.5%	29492	14746	9
NPV Per Share						58
Add: Cash Per Share						7
Add: Value of Project Mgmt business (Rs/share)						13
Fair Value per share (Rs/share)						78

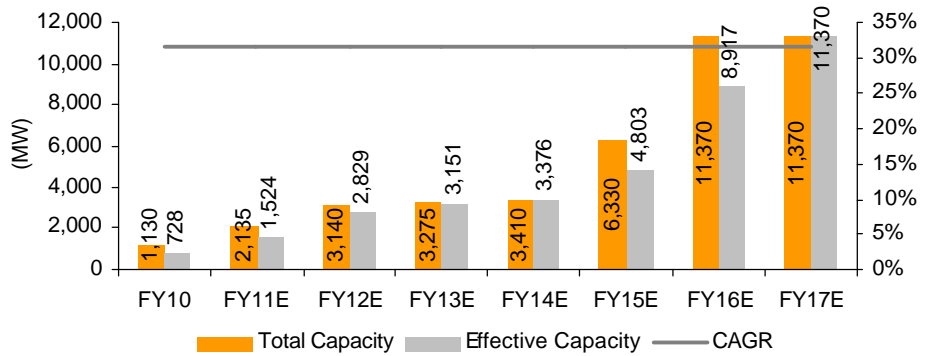
Fair value of Rs 78/share based on DCF

Source: Company, Emkay Research

Company Background

Plans to scale up to 11,370 MW by FY17E

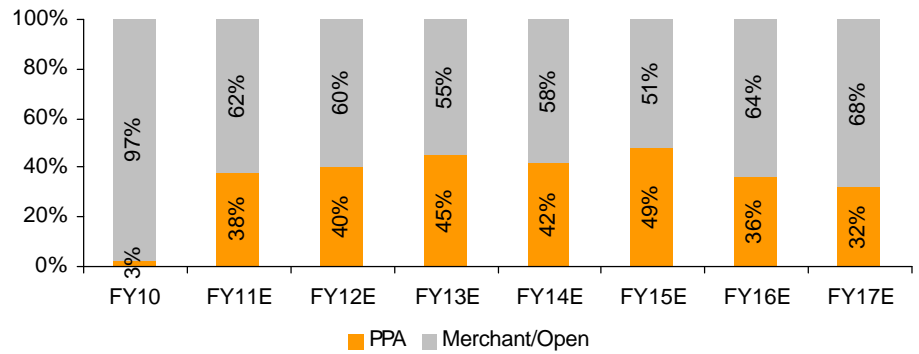
Company plans to reach installed capacity of 11,370 MW by FY17E



Source: Company, Emkay Research

Bulk of the capacity is open

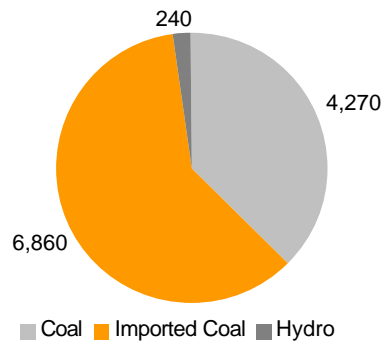
68% of the planned capacity is still to be tied up



Source: Company, Emkay Research

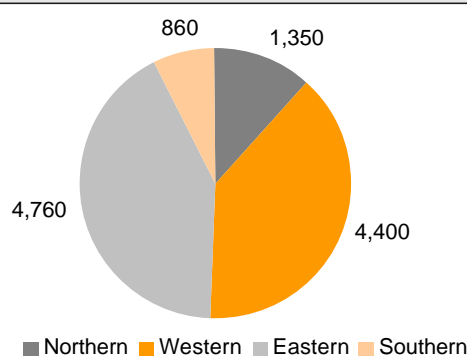
Fuel wise break up of the total planned capacity (MW)

11,130MW is coal based capacity



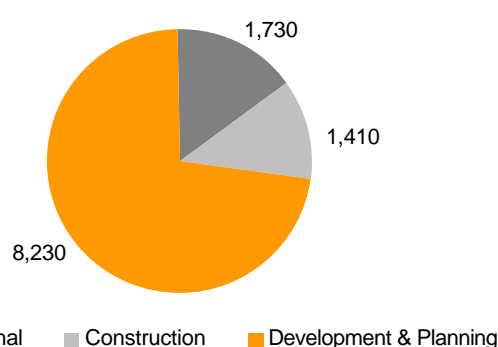
Source: Company, Emkay Research

Region wise planned installed capacity (MW)



Source: Company, Emkay Research

Status of the total planned capacity (MW)



Currently, out of the planned capacity of 11,370 MW, 1,730 MW is operational & 1,410 MW is under construction

Source: Company, Emkay Research

Assumptions

	SBU		Ratnagiri	Raj West		Salboni	Raipur	Ratnagiri	Baranda	Kutehr
	I	II		I	II					
Capacity (MW)	260	600	1200	1080	270	1600	1320	3200	1600	240
COD of 1st Unit	Mar-00	Jun-09	Sep-10	Oct-09	Feb-13	Aug-14	Jul-14	Apr-15	Aug-15	Sep-15
Capital Cost (Rsbn)	11	19	50	55	14	77	65	160	79	19
Equity (%)	25	25	25	25	25	25	25	25	25	43
Debt (%)	75	75	75	75	75	75	75	75	75	57
SHR (Kcal/Kwh)	2325	2250	2250	2622	2622	2200	2200	2200	2200	NA
PAF (%)	92	92	92	90	90	92	92	92	92	98
PLF (%)										
Tied Up Capacity	90	90	90	85	85	90	90	90	90	55
Merchant Capacity	80	80	80	80	80	80	80	80	80	45
Aux Consumption (%)	8.0	7.0	7.0	11.0	11.0	6.5	6.5	6.5	6.5	1.0
O&M (Rsmn/MW) or % of cap. cost	1.6	1.6	1.0	1.5	1.5	0.9	0.9	0.9	0.9	1.25%
Fuel Requirement (Mn MT)	0.9	1.8	3.8	8.3	1.9	5.4	5.4	8.1	4.0	NA
Fuel Tied Up (%)	0	43	47	100	0	37	31	0	0	NA
GCV (Kcal / Kg)	6200	5440	5250	2600	2600	5134	4000	6200	6200	NA
Landed Fuel Cost (Rs/MT)	5612	4876	4002	950	1150	1350	1750	5520	5520	NA
Fuel Escalation (%)	Imported Coal: 0.5 x Change in RB Index, Domestic Linkage/Captive Coal: 4%									
Off Take										
Tied Up (MW)	0	0*	300	1080	0	1200	462	0	0	NA
Merchant or Open (MW)	260	600	900	0	270	400	858	3200	1600	240
Levellized Tariff (Rs/Unit)	NA	NA	2.7	CERC	NA	NA	NA	NA	NA	NA

Source: Company, Emkay Research

*have not considered Karnataka Case I bid due to dispute on Bank guarantee

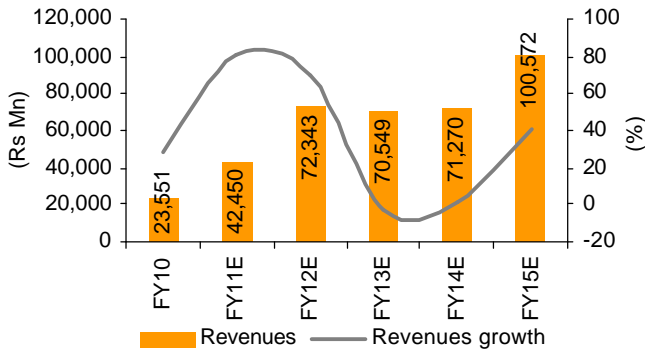
Per Unit Calculations

Rs/Unit	FY11E	FY12E	FY13E	FY14E	FY15E
Average PPA Tariff	2.54	2.56	2.61	2.64	2.59
Average Tariff	4.06	3.72	3.38	3.20	3.11
Average Fuel Cost	1.84	1.76	1.73	1.74	1.52
O&M Cost	0.22	0.20	0.22	0.24	0.22
Depreciation	0.31	0.32	0.33	0.33	0.34
Interest	0.44	0.49	0.48	0.46	0.46
PBT Per Unit	1.25	0.95	0.62	0.44	0.57
Tax per unit	0.25	0.19	0.12	0.09	0.11
PAT Per unit	1.00	0.76	0.49	0.35	0.46

Source: Company, Emkay Research

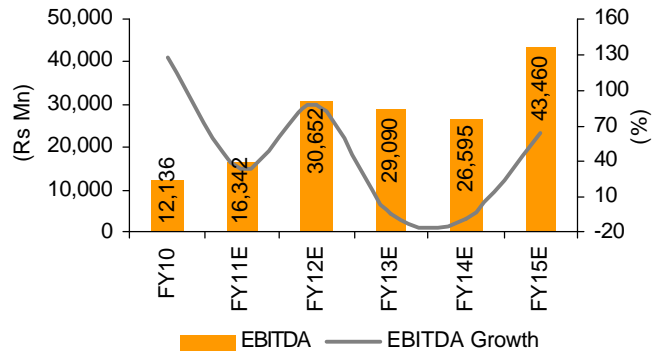
Financials

Revenue CAGR of 24.1% during FY11E-15E



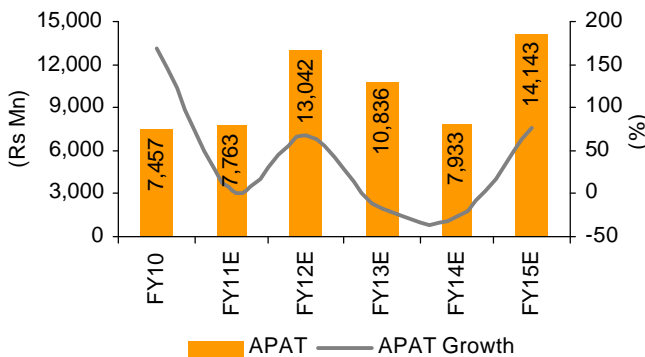
Source: Company, Emkay Research

EBITDA CAGR of 27.7% during FY11E-15E



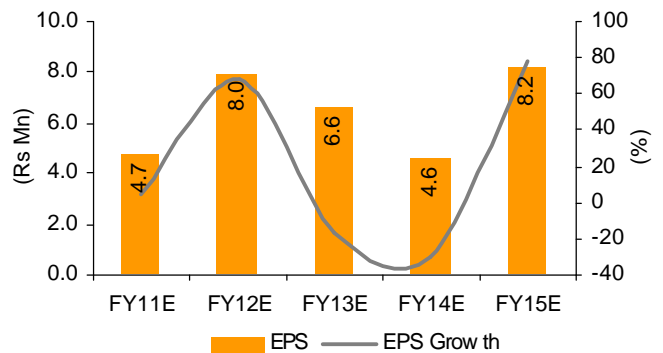
Source: Company, Emkay Research

APAT CAGR of 16.2% during FY11E-15E



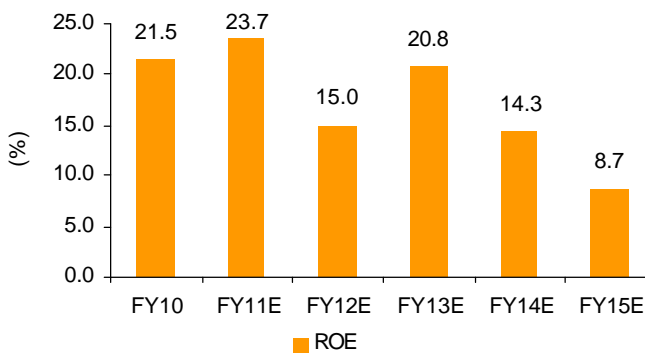
Source: Company, Emkay Research

Earnings per share CAGR of 14.7% during FY11E-15E



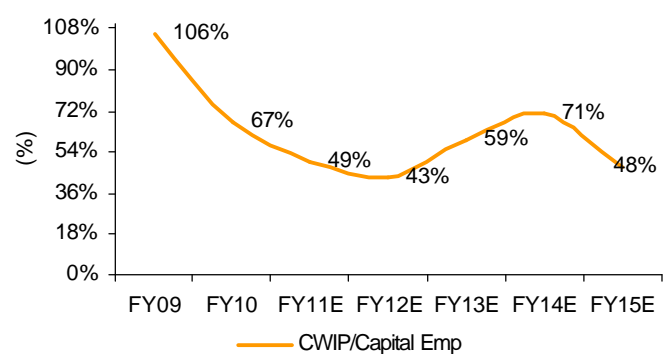
Source: Company, Emkay Research

Average ROE of 13.7% over FY11E-15E



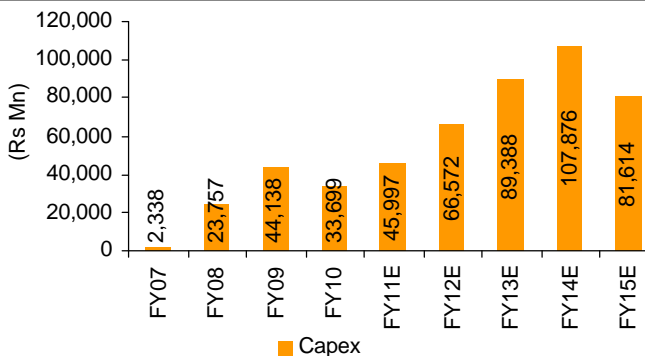
Source: Company, Emkay Research

CWIP/Total Capital Employed



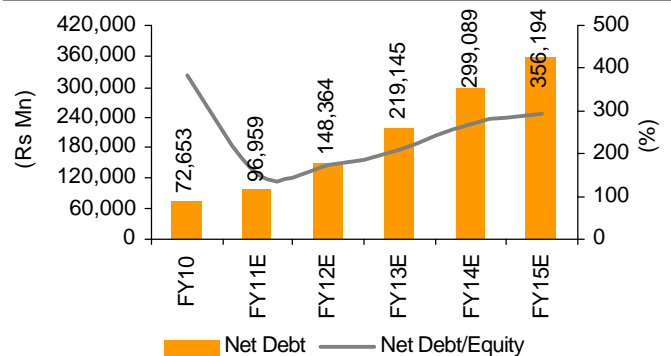
Source: Company, Emkay Research

Capex Plans



Source: Company, Emkay Research

Net-Debt Position



Source: Company, Emkay Research

Fund requirements (Rs mn)

Equity Dilution	FY11E	FY12E	FY13E	FY14E
OCF	6,636	13,311	17,492	15,402
Capex	45,997	66,572	89,388	107,876
Equity Requirement	23,420	8,655	19,276	27,659
Debt Repayment	1,853	1,853	7,700	7,700
FCFe	(16,046)	6,622	(9,737)	(20,089)
Cash in Hand at the beginning	20,393	8,640	17,118	8,495
Equity Dilution	0.0%	0.0%	0.0%	5.2%*

Source: Company, Emkay Research

*Considering CMP

EVM Calculation

Project	SBU I	SBU II	Ratnagiri	Raj West I	Raj West II	Salboni	Raipur	Ratnagiri II	Baranda	Kutehr	Total
Stage	Operational	Operational	Construction	Construction	Construction	Development	Development	Development	Development	Development	Development
Capacity (MW)	260	600	1,200	1,080	270	1,600	1,320	3,200	1,600	240	11,370
Fuel	Imported Coal	Imported Coal	Imported Coal	Coal	Coal	Coal	Coal	Imported Coal	Imported Coal	Hydro	Hydro
PRE CONSTRUCTION PHASE (Weight)	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
DPR Prepared	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	100%
Techno Economic Clearance (CEA)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	100%
Investment Approval CCEA	NA	NA	NA	✓	NA	x	x	NA	NA	NA	100%
Land Acquisition	NA	NA	✓	✓	✓	✓	✓	83%	x	x	100%
Environmental Clearance	NA	NA	✓	✓	x	✓	50%	x	x	x	x
Other Regulatory Clearances	NA	NA	✓	✓	x	x	x	x	x	x	x
Water Source Tie Up	NA	NA	✓	✓	✓	✓	x	x	x	x	x
Evacuation Arrangements	NA	NA	✓	✓	✓	x	x	x	x	x	x
Financial Closure	NA	NA	✓	✓	x	x	x	x	x	x	x
Equipment Ordering	NA	NA	✓	✓	x	x	x	x	x	x	x
Adjustment Factor (a)	1.0	1.0	1.0	1.0	0.4	0.3	0.2	0.1	0.0	0.4	0.4
CONSTRUCTION PHASE (Weight)	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Site Levelling (5%)	NA	NA	✓	✓	x	x	x	x	x	x	x
BTG Foundation (10%)	NA	NA	✓	✓	x	x	x	x	x	x	x
Boiler Erection (Not for Hydro) (20%)	NA	NA	✓	✓	x	x	x	x	x	NA	NA
Boiler Light up & Drum Lifting (5%)	NA	NA	✓	✓	x	x	x	x	x	x	x
Hydraulic Test (10%)	NA	NA	✓	✓	x	x	x	x	x	x	x
Condenser Erection (5%)	NA	NA	✓	✓	x	x	x	x	x	x	x
TG Erection (15%)	NA	NA	80%	53%	x	x	x	x	x	x	x
Synchronization (20%)	NA	NA	50%	25%	x	x	x	x	x	x	x
Commercialization (10%)	NA	NA	50%	20%	x	x	x	x	x	x	x
Adjustment Factor (b)	1.0	1.0	0.8	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Net Adjustment Factor (a*b) = (c)	1.0	1.0	0.9	0.8	0.2	0.2	0.1	0.0	0.0	0.2	0.3
Cost of Equity (CoE)	16%	17%	15%	12%	16%	15%	17%	17%	18%	14%	15%
Equity IRR (IRR)	80%	75%	23%	14%	20%	27%	29%	24%	24%	12%	33%
Potential Value Multiple (PVM) = (CoE/IRR)	5.1	4.5	1.5	1.2	1.3	1.8	1.7	1.5	1.4	0.8	2.2
PVM Adj. Capacity (d) = (PVM*(c)*capacity)	1,329	2,685	1,668	1,031	63	360	186	219	0	40	6,903
EV (Rs mn)											220,573
Adj Capex (adj. for milestone) (Rs mn)											31,764
Adj. EV (EV + Adjusted Capex) (Rs mn)											252,337
EVM (adj. EV/ (d)) (Rs mn/MW)											37

Source: Company, Enkay Research

Financial Tables

Income Statement (Rs. Mn)

(Year Ending Mar 31)	FY10	FY11E	FY12E	FY13E
Net Sales	23,551	42,450	72,343	70,549
Growth (%)	28.3	80.2	70.4	-2.5
Expenditure	11,415	26,108	41,692	41,459
Fuel Cost	9,828	23,425	37,015	36,111
O&M Cost	1,587	2,683	4,677	5,348
SG&A Expenses	0	0	0	0
Other Expenses	0	0	0	0
EBITDA	12,136	16,342	30,652	29,090
Growth (%)	128.2	34.7	87.6	-5.1
EBITDA margin (%)	51.5	38.5	42.4	41.2
Depreciation	1,361	3,236	6,289	6,846
EBIT	10,775	13,106	24,363	22,244
EBIT margin (%)	45.8	30.9	33.7	31.5
Other Income	742	1,016	902	896
Interest expenses	2,837	4,231	8,767	9,388
PBT	8,680	9,891	16,497	13,753
Tax	1,223	2,120	3,426	2,876
Effective tax rate (%)	14.1	21.4	20.8	20.9
Adjusted PAT	7,457	7,771	13,071	10,877
Growth (%)	169.3	4.1	68.0	-16.9
Net Margin (%)	31.7	18.3	18.1	15.4
E/O items	0	0	0	0
Reported PAT	7,457	7,771	13,071	10,877
(Profit)/loss from	0	-7	-29	-40
JV's/Ass/MI				
PAT after MI	7,457	7,763	13,042	10,836
Growth (%)	169.3	4.1	68.0	-16.9

Balance Sheet (Rs. Mn)

(Year Ending Mar 31)	FY10	FY11E	FY12E	FY13E
Equity share capital	16,401	16,401	16,401	16,401
Reserves & surplus	31,554	39,365	53,698	65,098
Net worth	47,954	55,766	70,099	81,498
Secured Loans	78,701	105,598	165,481	227,640
Unsecured Loans	0	0	0	0
Loan Funds	78,701	105,598	165,481	227,640
Net deferred tax liability	1,161	0	0	0
Total Liabilities	127,817	161,364	235,580	309,138
Gross Block	36,839	89,139	134,564	141,314
Less: Depreciation	-6,714	-9,950	-16,239	-23,085
Net block	30,125	79,189	118,325	118,229
Capital work in progress	86,026	79,723	100,870	183,508
Investment	0	0	0	0
Current Assets	30,673	22,569	37,611	28,551
Inventories	3,714	5,382	7,047	6,932
Sundry debtors	2,714	5,856	10,756	10,433
Cash & bank balance	20,393	8,640	17,118	8,495
Loans & advances	3,852	0	0	0
Other current assets	0	2,691	2,691	2,691
Current lia & Prov	19,006	20,119	21,229	21,153
Current liabilities	17,524	20,119	21,229	21,153
Provisions	1,482	0	0	0
Net current assets	11,666	2,450	16,382	7,398
Misc. exp	0	-2	-2	-2
Total Assets	127,817	161,364	235,580	309,138

Cash Flow (Rs. Mn)

(Year Ending Mar 31)	FY10	FY11E	FY12E	FY13E
PBT (Ex-Other income)	7,938	8,875	15,596	12,856
Depreciation	1,361	3,236	6,289	6,846
Interest Provided	2,837	4,231	8,767	9,388
Other Non-Cash items	-7,847	-1,161	0	0
Chg in working cap	-6,731	-1,055	-5,454	361
Tax paid	221	-3,602	-3,426	-2,876
Operating Cashflow	-2,221	10,524	21,772	26,575
Capital expenditure	-31,919	-45,997	-66,572	-89,388
Free Cash Flow	-34,140	-35,474	-44,801	-62,812
Other income	742	1,016	902	896
Investments	0	0	0	0
Investing Cashflow	-31,177	-44,981	-65,671	-88,491
Equity Capital Raised	35,177	-2	0	0
Loans Taken / (Repaid)	19,430	26,897	59,883	62,158
Interest Paid	-2,837	-4,231	-8,767	-9,388
Dividend paid (incl tax)	-1,434	0	0	0
Income from investments				
Others	0	41	1,262	523
Financing Cashflow	50,335	22,705	52,377	53,293
Net chg in cash	16,937	-11,752	8,478	-8,623
Opening cash position	3,456	20,393	8,640	17,118
Closing cash position	20,393	8,640	17,118	8,495

Key Ratios

(Year Ending Mar 31)	FY10	FY11E	FY12E	FY13E
Profitability (%)				
EBITDA Margin	51.5	38.5	42.4	41.2
Net Margin	31.7	18.3	18.1	15.4
ROCE	10.6	9.1	12.3	8.2
ROE	23.7	15.0	20.8	14.3
RoIC	10.3	7.9	10.4	6.8
Per Share Data (Rs)				
EPS	4.5	4.7	8.0	6.6
CEPS	5.4	6.7	11.8	10.8
BVPS	29.2	34.0	42.7	49.7
DPS	0.7	0.8	1.3	1.1
Valuations (x)				
PER	19.4	18.6	11.1	13.3
P/CEPS	16.4	13.1	7.5	8.2
P/BV	3.0	2.6	2.1	1.8
EV / Sales	8.6	5.7	4.0	5.2
EV / EBITDA	16.7	14.8	9.5	12.5
Dividend Yield (%)	0.9	0.9	1.5	1.2
Gearing Ratio (x)				
Net Debt/ Equity	1.5	1.7	2.1	2.7
Net Debt/EBITDA	6.0	5.9	4.8	7.5
Working Cap Cycle (days)*	75	31	4	6

Source: Company, Emkay Research

*Assuming rebate & intentionally lower cycle due to buyers credit

25 January, 2011

Reco
Hold

CMP	Target Price
Rs124	Rs116
EPS change FY11E/12E (%)	NA
Target price change (%)	NA
Nifty	5,697
Sensex	19,008

Price Performance

(%)	1M	3M	6M	12M
Absolute	(1)	(8)	(3)	23
Rel. to Nifty	4	(1)	(7)	10

Source: Bloomberg

Relative price chart



Source: Bloomberg

Stock details

Sector	Power
Bloomberg	ADANI@IN
Equity Capital (Rs mn)	21800
Face Value (Rs)	10
No of shares o/s (mn)	2180
52 Week H/L (Rs)	145/97
Market Cap (Rs bn/USD mn)	270/5,913
Daily Avg Vol (No of shares)	1235352
Daily Avg Turnover (US\$ mn)	3.6

Shareholding Pattern (%)

	Dec-10	Sep-10	Jun-10
Promoters	73.5	73.5	73.5
FIINRI	18.5	17.7	16.3
Institutions	1.4	2.1	2.5
Private Corp	3.7	3.9	5.0
Public	2.8	2.8	2.7

Source: Capitaline

- **Balanced utility with right off-take mix (63% of power tied up) and higher exposure to early merchant power opportunity (short term sales at 64% and 46% of overall volumes in FY12E and FY13E respectively)**
- **Fuel security with access to cheap imported coal; 100% fuel supply security till FY13E and 50% for long term requirements**
- **Valuations already factor in (1) early merchant power opportunity (6% of NPV) & (2) cheap fuel (33% of NPV). Further, valuations imply relatively higher long term merchant prices of Rs3.9/unit and EVM of Rs31mn/MW**
- **Negative surprises in store (delay in execution or alterations in fuel contract); Do not see significant upside. Initiate coverage with 'Hold' rating and a price target of Rs116/Share**

Balanced utility with right off-take mix and fuel security

APL is a balanced utility with right off-take mix (63% of planned capacity tied up), higher exposure to early merchant power opportunity due to commissioning ahead of PPA schedules. Its short term sales are likely to be 64% and 46% of overall power generation in FY12E and FY13E respectively. Secondly, it has tied up 23mn MT (9mn MT - imported, 14mn MT - linkage and tapering linkage) of coal to meet all its fuel requirements till FY13E. Also, it has secured imported coal supply at a very cheap landed cost of USD 44/MT (15% cheaper than even domestic coal with quality adjusted).

Valuations already factor in both cheap fuel and early merchant power opportunity

The current valuations are factoring in (1) seamless execution with early merchant power opportunity (as guided), (2) 9mn MT of coal at USD 44/MT and (3) 80% merchant capacity utilizations. We highlight that in our NPV, significant value is derived from (1) cheap fuel (Rs38/share or 33% of NPV) and (2) early merchant power opportunity (Rs8/Share or 6% of NPV). Further, we highlight that at the time of its IPO, its coal contract with AEL was for 15mn MT (contributing Rs70/Share to NPV) which has been brought down to 9mn MT. Thus, further reduction in the contract quantity could be a big negative trigger for APL. Also, any delay in execution (already evident in Mundra II) is likely to wipe out the NPV contributed from early merchant power opportunity.

Plus, valuations do not provide margin of safety in merchant prices; initiate coverage with 'Hold' rating

Valuations imply a long-term merchant price of Rs3.9/unit, 44% higher than our estimate (Rs2.7/unit) - low margin of safety. Further, even though it has fuel security for 50% of its capacity, it would require significant domestic linkages FY14E onwards. At CMP of Rs124/Share, APL is trading at 2.5x FY12E Book value with expected FY11E-15E average ROE of 29%. We initiate coverage with 'Hold' rating and a DCF based price target of Rs116/Share. Key risks - higher cheap imported coal (> 9mn MT), higher merchant rates, especially in FY12E-FY14E period.

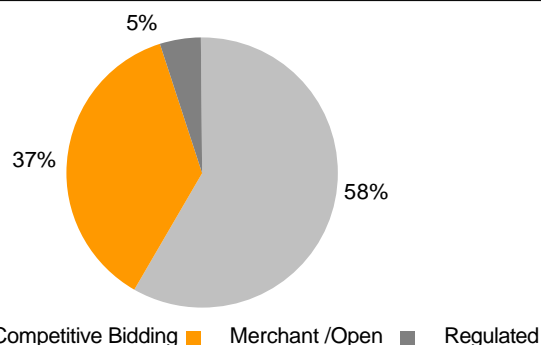
Valuation table

Y/E, Mar	Net Sales	EBIDTA (Core)	EBIDTA (%)	APAT	AEPS (Rs)	EPS % chg	RoE (%)	P/E (x)	EV / EBITDA	P/BV (x)
FY10	4,349	2,438	56.1	1,700	0.8	NA	4.1	159.3	149.8	4.6
FY11E	24,992	15,573	62.3	8,766	4.0	415.2	13.7	30.9	27.4	3.9
FY12E	96,674	67,461	69.8	37,010	17.0	322.2	43.2	7.3	7.8	2.5
FY13E	144,393	92,109	63.8	43,208	19.8	16.7	34.9	6.3	6.2	1.7

Source: Emkay Research

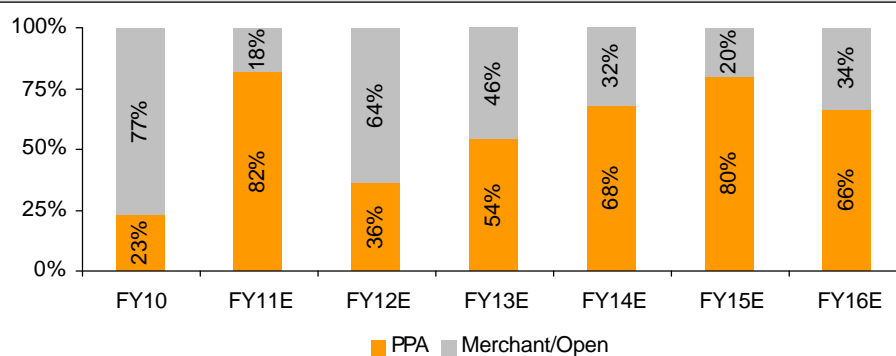
Theme Charts

Balanced utility with right mix of PPA, merchant/open and cost plus capacity



Source: Company, Emkay Research

Window of opportunity to trade higher merchant power in FY11E-13E



37,076mn units of power available for merchant sale during FY11E-13E period

Source: Company, Emkay Research

Plant-wise merchant power opportunity

	Mundra			Tiroda		Kawai
	I	III	IV	I & II	III	
Capacity (mw)	660	1,320	1,980	1,980	1,320	1,320
No of Units	2	2	3	3	2	2
COD of First Unit	Sep-09	Jan-11	Aug-11	Sep-11	Jun-13	Mar-13
PPA Commencement Date	Feb-10	Jan-12	Sep-12	Jul-12	Mar-14	Aug-13
Merchant Window (Mths)	5	12	13	10	9	5

Source: Company, Emkay Research

Good fuel security

Mn MT	FY10	FY11E	FY12E	FY13E	FY14E	FY15E	FY16E	FY20E
Fuel Requirement								
Imported Coal	0.4	2.8	6.6	8.3	8.4	8.5	8.5	8.5
Coal	0.2	1.2	5.8	14.5	22.4	29.4	39.6	40.2
Requirement	0.6	4.0	12.4	22.8	30.9	37.8	48.0	48.6
Fuel Availability								
Imported Coal	0.4	2.8	6.6	8.3	8.4	8.5	8.5	8.5
Coal	0.2	1.2	5.8	14.5	15.0	15.1	15.1	15.1
Availability	0.6	4.0	12.4	22.8	23.4	23.5	23.5	23.5
Net Shortfall	0.0	0.0	0.0	0.0	7.4	14.3	24.5	25.1
% Shortfall	0.0%	0.0%	0.0%	0.0%	24.1%	37.8%	51.0%	51.6%

Source: Company, Emkay Research

APL has access to 100% of its fuel requirement till FY13E & 51% for long term requirement - (1) imported coal of 9mn MT from AEL and (2) coal linkages of 14mn MT.

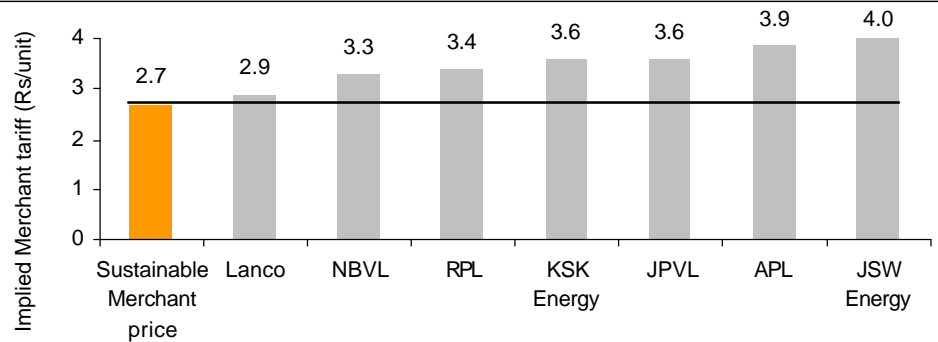
Imported coal contract at \$44/MT with AEL

	Domestic Coal	Imported Coal
Landed Cost (Rs/MT)	1,609	2,025
NCV (Kcal/kg)	3,500*	5,200
Quality Adjusted Cost (Rs/1000 kcal)	0.46	0.39
Quality Adjusted Cost Difference		-15%

Source: Company, Emkay Research

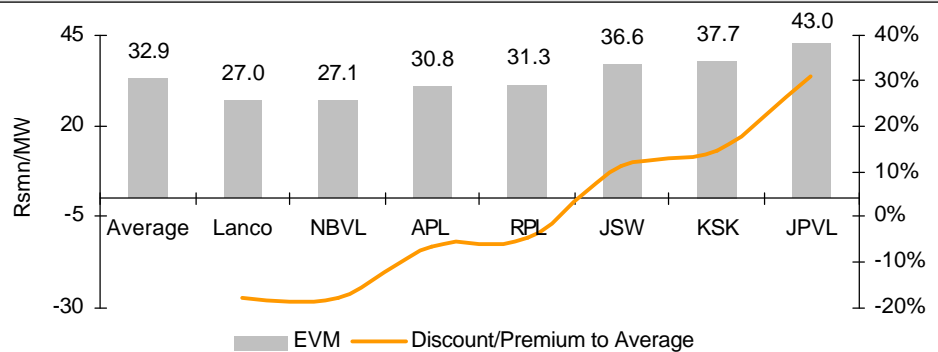
*grade E&F

Imported coal contracted with AEL is almost 15% cheaper than domestic coal after adjusting for quality

However, current valuations imply relatively higher merchant rates

But current valuations price in all the positives and implies higher merchant rate of Rs3.9/unit

Source: Company, Emkay Research

On EVM basis APL is trading at slight discount to our universe average

EVM of Rs31mn, slight discount

Source: Company, Emkay Research

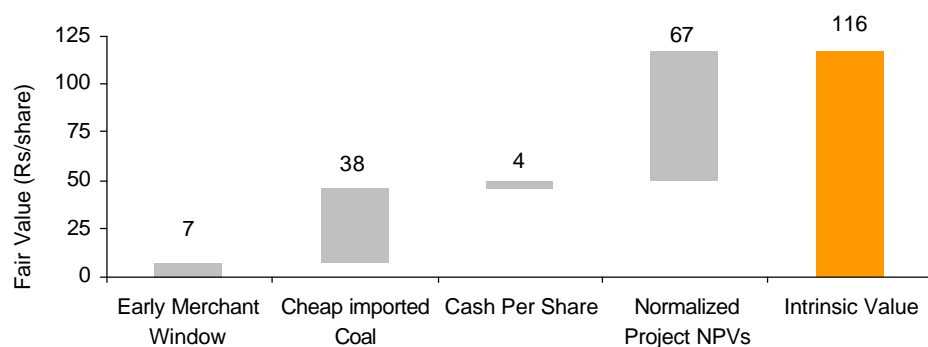
Sum of parts valuation

	Total Capacity (MW)	Economic Interest	Cost Of Equity	NPV Rsmn	APL's share milestone Adj. (Rsmn)	Rs per Share
Mundra I	660	100.0%	12.8%	25837	25837	12
Mundra II	660	100.0%	12.8%	25858	25858	12
Mundra III	1320	100.0%	12.8%	36846	36846	17
Mundra IV	1980	100.0%	13.6%	63508	63508	29
Tiroda I	1980	74.0%	13.8%	58584	43352	20
Tiroda II	1320	74.0%	14.3%	29953	22165	10
Dahej	2640	100.0%	18.2%	15298	2868	1
Kawai	1320	100.0%	14.3%	22363	22363	10
Chhindwara	1320	100.0%	17.2%	12590	1574	1
NPV Per Share						112
Add: Cash Per Share						4
Fair value per share						116

Source: Company, Emkay Research

Fair value of Rs 116/share based on DCF valuation.

Normalized project NPV of Rs67/Share



Early merchant power opportunity and cheap imported coal constitutes ~39% of APL's fair value

Source: Company, Emkay Research

Sensitivity of APL's NPV per share to imported coal prices (USD/ton) and fuel escalation

		Price of Imported Coal (USD/Ton)				
		44.0	54.0	64.0	74.0	84.0
Fuel escalation	2%	134	121	109	96	84
	3%	122	116	97	85	72
	4%	114	97	84	71	59
	5%	95	82	69	57	44
	6%	79	66	53	40	27

Source: Company, Emkay Research

Very high sensitivity to merchant prices and imported fuel cost

Sensitivity of APL's NPV per share to inflation and changes in merchant tariff rates

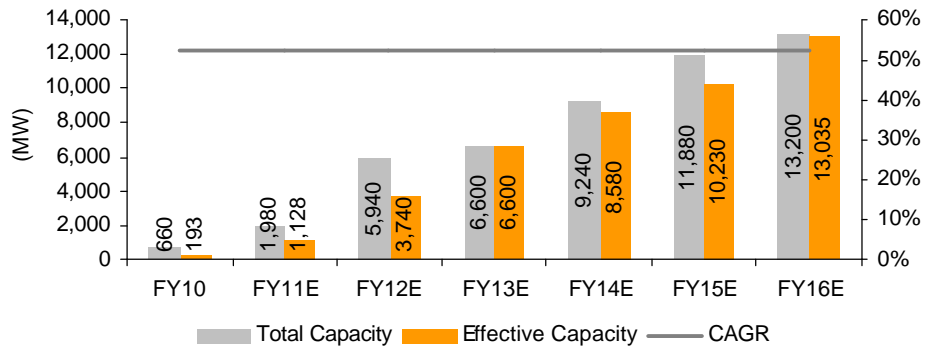
		Merchant tariff rate (Rs/kWh)				
		2.0	2.5	3.0	3.5	4.0
Inflation	-1.0%	66	85	103	122	141
	-0.5%	68	87	106	126	145
	0.0%	70	90	116	129	149
	0.5%	72	92	113	133	154
	1.0%	74	95	116	137	158

Source: Company, Emkay Research

Company Background

Plans to scale up to 13,200MW by FY16E

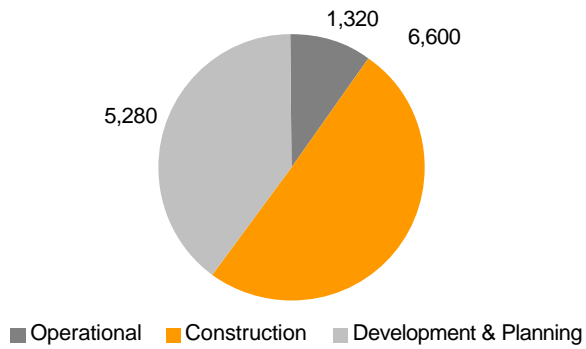
From current capacity of 1,320MW, APL plans to scale up to 13,200MW by FY16E, a 51% CAGR over FY10-FY16E



Source: Company, Emkay Research

Status of planned capacity (MW)

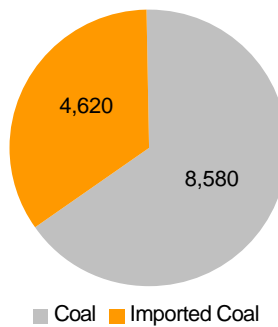
Of which 6,600MW is under construction



Source: Company, Emkay Research

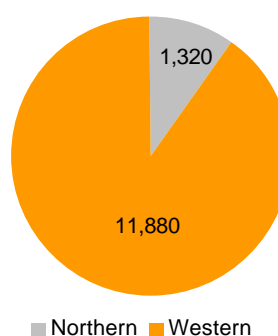
Coal based capacity only (MW)

All the projects are coal based – (1) 4620 MW on imported coal and (2) balance 8580 MW domestic coal



Source: Company, Emkay Research

Most of the capacity in western region (MW)



Presence in power deficit western region gives APL an advantage over its peers

Source: Company, Emkay Research

Assumptions

	Mundra I	Mundra II	Mundra III	Mundra IV	Tiroda I & II	Tiroda III	Dahej	Kawai	Chhindwara
Capacity (MW)	660	660	1320	1980	1980	1320	2640	1320	1320
COD of 1st Unit	Sep-09	Jul-10	Jan-11	Aug-11	Sep-11	Jun-13	Sep-14	Mar-13	Sep-14
Capital Cost (Rsbn)	23	21	58	78	93	63	148	70	74
Equity (%)	20	20	20	20	20	20	20	20	30
Debt (%)	80	80	80	80	80	80	80	80	70
SHR (Kcal/Kwh)	2,250	2,250	2,050	2,050	2,050	2,050	2,050	2,050	2,050
PAF (%)	92	92	92	92	92	92	92	92	92
PLF (%)									
Tied Up Capacity	90	90	90	90	90	90	90	90	90
Merchant Capacity	80	80	80	80	80	80	80	80	80
Aux Consumption (%)	7.5	7.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
O&M (Rsmn/MW)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Fuel Requirement (Mn MT)	2.4	2.4	4.3	7.1	7.3	5.3	9.5	5.3	5.0
Fuel Tied Up (%)	100	100	100	100	100	0	0	0	0
GCV (Kcal/Kg)	4,840	4,840	4,840	4,360	4,208	4,000	4,000	4,000	4,000
Landed Fuel Cost (Rs/MT)	1,975	1,975	1,975	1,975	1,435	1,435	1,809	1,609	1,435
Fuel Escalation (%)	Imported Coal: 10% in every five years, Linkage Coal : 4%								
Off Take									
Tied Up (MW)	541	541	1,070	1,523	1,412	1,283	0	1,283	660
Merchant or Open (MW)	119	119	250	457	568	37	2,640	37	660
Levellized Tariff (Rs/Unit)	2.89	2.89	2.34	2.94	2.64	3.28	NA	3.24	NA

Source: Company, Emkay Research

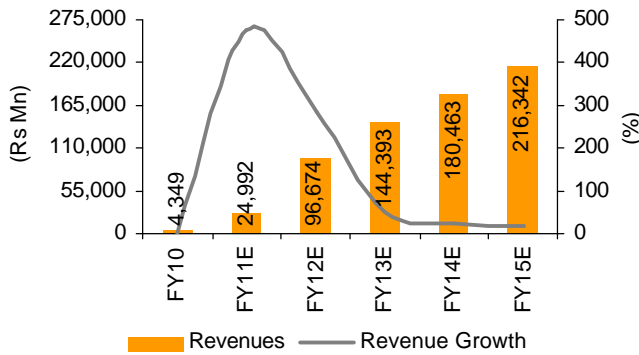
Higher PAT per unit in FY11E-13E, due to higher merchant power prices

Rs/Unit	FY11E	FY12E	FY13E	FY14E	FY15E
Average PPA Tariff	2.68	2.63	2.47	2.70	2.80
Average Tariff	3.11	3.82	3.17	2.99	2.96
Average Fuel Cost	1.00	0.96	0.96	0.98	1.03
O&M Cost	0.14	0.16	0.16	0.16	0.17
Depreciation	0.25	0.31	0.32	0.33	0.33
Interest	0.43	0.52	0.50	0.50	0.48
PBT Per Unit	1.29	1.87	1.24	1.03	0.95
Tax per unit	0.26	0.37	0.25	0.21	0.19
PAT Per unit	1.03	1.50	0.99	0.82	0.76

Source: Company, Emkay Research

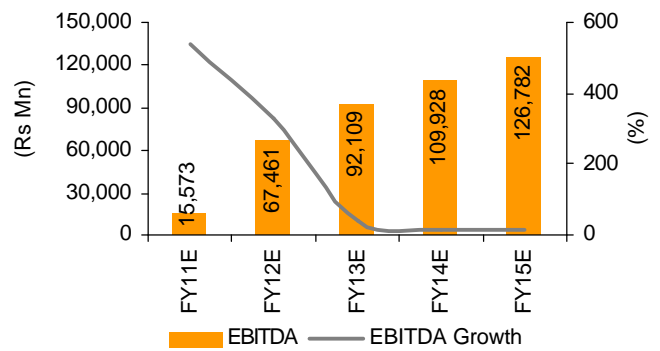
Financials

Revenue CAGR of 71.5% during FY11E-15E



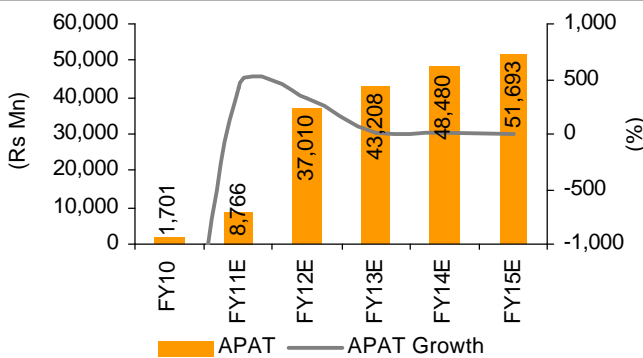
Source: Company, Emkay Research

EBITDA CAGR of 68.9% during FY11E-15E



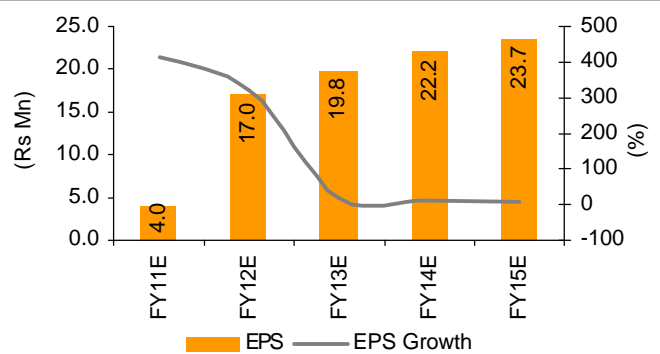
Source: Company, Emkay Research

APAT CAGR of 55.8% during FY11E-15E



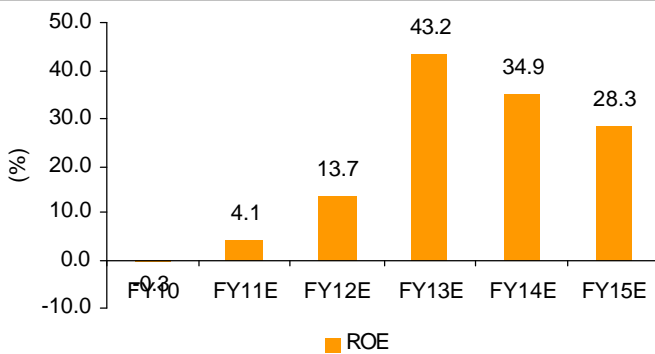
Source: Company, Emkay Research

Earnings per share CAGR of 55.8% during FY11E-15E



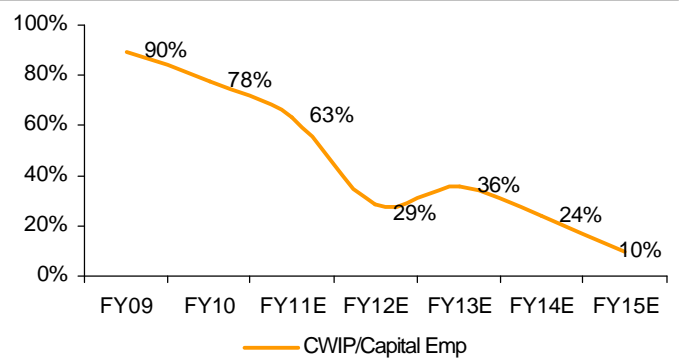
Source: Company, Emkay Research

Average ROE of 26.4% over FY11E-15E



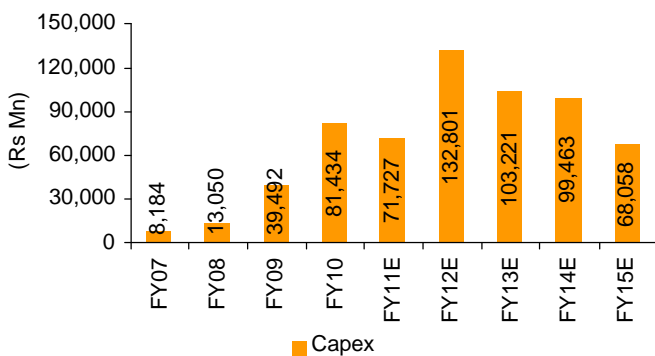
Source: Company, Emkay Research

CWIP/Total Capital Employed



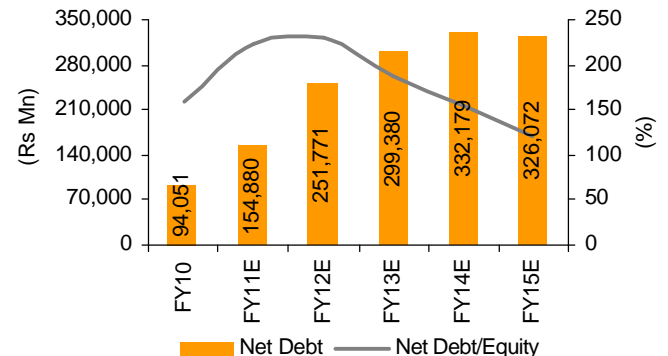
Source: Company, Emkay Research

Capex Plans



Source: Company, Emkay Research

Net-Debt Position



Source: Company, Emkay Research

EVM Calculation

Project	Mundra I	Mundra II	Mundra III	Mundra IV	Tiroda I	Tiroda II	Dahej	Kawai	Chhindwara	Total
Stage	Operational	Construction	Construction	Construction	Construction	Construction	Construction	Construction	Construction	Construction
Capacity (MW)	660	660	1,320	1,980	1,980	1,320	2,640	1,320	1,320	13,200
Fuel	Imported Coal	Imported Coal	Imported Coal	Imported Coal	Coal	Coal	Coal	Coal	Coal	Coal
PRE CONSTRUCTION PHASE (Weight)	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
DPR Prepared	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Techno Economic Clearance (CEA)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Investment Approval CCEA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Land Acquisition	NA	NA	✓	✓	✓	✓	✓	✓	✓	✓
Environmental Clearance	NA	NA	✓	✓	✓	✓	x	x	x	x
Other Regulatory Clearances	NA	NA	✓	✓	✓	50%	x	✓	50%	50%
Water Source Tie Up	NA	NA	✓	✓	✓	✓	✓	✓	✓	50%
Evacuation Arrangements	NA	NA	✓	✓	✓	✓	✓	0.0	x	x
Financial Closure	NA	NA	✓	✓	✓	✓	x	✓	x	x
Equipment Ordering	NA	NA	✓	✓	✓	✓	x	✓	x	x
Adjustment Factor (a)	1.0	1.0	1.0	1.0	1.0	0.9	0.4	0.8	0.3	0.8
CONSTRUCTION PHASE (Weight)	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Site Levelling (5%)	NA	NA	✓	✓	✓	x	x	x	x	x
BTG Foundation (10%)	NA	NA	✓	✓	✓	x	x	x	x	x
Boiler Erection (Not for Hydro) (20%)	NA	NA	75%	x	50%	x	x	x	x	x
Boiler Light up & Drum Lifting (5%)	NA	NA	✓	x	✓	x	x	x	x	x
Hydraulic Test (10%)	NA	NA	✓	x	x	x	x	x	x	x
Condenser Erection (5%)	NA	NA	60%	x	x	x	x	x	x	x
TG Erection (15%)	NA	NA	33%	x	x	x	x	x	x	x
Synchronization (20%)	NA	NA	30%	x	x	x	x	x	x	x
Commercialization (10%)	NA	NA	✓	✓	✓	✓	✓	✓	✓	✓
Adjustment Factor (b)	1.0	1.0	0.6	0.1	0.3	0.0	0.0	0.0	0.0	0.2
Net Adjustment Factor (a*b) (c)	1.0	1.0	0.8	0.5	0.7	0.5	0.2	0.4	0.1	0.49
Cost of Equity (CoE)	13%	13%	13%	14%	14%	14%	18%	14%	17%	13.9%
Equity IRR (IRR)	49%	45%	34%	47%	38%	44%	32%	37%	24%	41.3%
Potential Value Multiple (PVM) = (CoE/IRR)	3.8	3.6	2.7	3.5	2.8	3.1	1.8	2.6	1.4	3.0
PVM Adj. Capacity (d) = (PVM*(c)*capacity)	2523	2345	2810	3598	2624	1416	876	1294	235	17721
EV (Rs mn)										425,967
Adj Capex (adj. for milestone) (Rs mn)										119,777
Adj. EV (EV + Adjusted Capex) (Rs mn)										545,744
EVM (adj. EV (d)) (Rs mn/MW)										31

Source: Company, Emkay Research

Financial Tables

Income Statement (Rs. Mn)

(Year Ending Mar 31)	FY10	FY11E	FY12E	FY13E
Net Sales	4,349	24,992	96,674	144,393
Growth (%)		474.7	286.8	49.4
Expenditure	1,911	9,420	29,213	52,284
Fuel Cost	1,667	8,044	24,322	43,570
O&M Cost	243	1,375	4,891	8,714
SG&A Expenses	0	0	0	0
Other Expenses	0	0	0	0
EBITDA	2,438	15,573	67,461	92,109
Growth (%)		538.7	333.2	36.5
EBITDA margin (%)	56.1	62.3	69.8	63.8
Depreciation	354	2,051	7,823	14,359
EBIT	2,084	13,522	59,638	77,750
EBIT margin (%)	47.9	54.1	61.7	53.8
Other Income	320	739	1,287	2,782
Interest expenses	377	3,173	12,303	21,276
PBT	2,027	11,087	48,623	59,257
Tax	327	2,321	9,905	12,241
Effective tax rate (%)	16.1	20.9	20.4	20.7
Adjusted PAT	1,700	8,766	38,718	47,016
Growth (%)	-3,511.9	415.2	322.2	16.7
Net Margin (%)	39.1	35.1	40.0	32.6
E/O items	0	0	0	0
Reported PAT	1,700	8,766	38,718	47,016
(Profit)/loss from JV's/Ass/MI	1	0	-1,708	-3,808
PAT after MI	1,701	8,766	37,010	43,208
Growth (%)	-3511.9	415.2	322.2	16.7

Balance Sheet (Rs. Mn)

(Year Ending Mar 31)	FY10	FY11E	FY12E	FY13E
Equity share capital	21,800	21,800	21,800	21,800
Reserves & surplus	37,003	47,532	88,056	137,880
Net worth	58,803	69,332	109,856	159,680
Secured Loans	105,705	164,330	279,097	351,545
Unsecured Loans	0	0	0	0
Loan Funds	105,705	164,330	279,097	351,545
Net deferred tax liability	120	0	0	0
Total Liabilities	164,628	233,662	388,954	511,225
Gross Block	28,549	78,229	246,823	277,699
Less: Depreciation	-678	-2,729	-10,551	-24,910
Net block	27,871	75,500	236,271	252,789
Capital work in progress	127,691	147,685	111,893	184,237
Investment	0	0	0	0
Current Assets	23,718	25,658	57,300	92,281
Inventories	95	876	2,869	5,226
Sundry debtors	2,563	5,925	17,698	25,484
Cash & bank balance	11,654	9,450	27,326	52,164
Loans & advances	9,406	9,406	9,406	9,406
Other current assets	0	0	0	0
Current lia & Prov	14,652	15,172	16,501	18,072
Current liabilities	14,652	15,172	16,501	18,072
Provisions	0	0	0	0
Net current assets	9,067	10,485	40,799	74,208
Misc. exp	0	0	0	0
Total Assets	164,628	233,662	388,954	511,225

Cash Flow (Rs. Mn)

(Year Ending Mar 31)	FY10	FY11E	FY12E	FY13E
PBT (Ex-Other income)	1,707	10,348	47,335	56,475
Depreciation	354	2,051	7,823	14,359
Interest Provided	377	3,173	12,303	21,276
Other Non-Cash items	0	-299	0	0
Chg in working cap	1,131	-3,623	-12,437	-8,572
Tax paid	-327	-2,321	-9,905	-12,241
Operating Cashflow	3,242	9,330	45,119	71,297
Capital expenditure	-86,659	-69,675	-132,801	-103,221
Free Cash Flow	-83,416	-60,344	-87,682	-31,924
Other income	320	739	1,287	2,782
Investments	0	0	0	0
Investing Cashflow	-86,339	-68,936	-131,513	-100,439
Equity Capital Raised	33,289	188	0	0
Loans Taken / (Repaid)	55,928	58,625	114,767	72,447
Interest Paid	-377	-3,173	-12,303	-21,276
Dividend paid (incl tax)	0	0	0	0
Income from investments				
Others	325	1,763	1,807	2,808
Financing Cashflow	89,165	57,402	104,271	53,980
Net chg in cash	6,069	-2,204	17,877	24,838
Opening cash position	5,585	11,654	9,450	27,326
Closing cash position	11,654	9,450	27,326	52,164

Key Ratios

(Year Ending Mar 31)	FY10	FY11E	FY12E	FY13E
Profitability (%)				
EBITDA Margin	56.1	62.3	69.8	63.8
Net Margin	39.1	35.1	40.0	32.6
ROCE	1.8	6.8	19.2	17.3
ROE	4.1	13.7	43.2	34.9
RoIC	1.6	5.7	16.2	15.0
Per Share Data (Rs)				
EPS	0.8	4.0	17.0	19.8
CEPS	0.9	5.0	20.6	26.4
BVPS	27.0	31.8	50.4	73.2
DPS	0.0	0.0	0.0	0.0
Valuations (x)				
PER	159.3	30.9	7.3	6.3
P/CEPS	131.9	25.1	6.0	4.7
P/BV	4.6	3.9	2.5	1.7
EV / Sales	84.0	17.0	5.4	4.0
EV / EBITDA	149.8	27.4	7.8	6.2
Dividend Yield (%)	0.0	0.0	0.0	0.0
Gearing Ratio (x)				
Net Debt/ Equity	1.6	2.2	2.3	1.9
Net Debt/EBIDTA	38.6	9.9	3.7	3.3
Working Cap Cycle (days)	-38	4	34	45

Source: Company, Emkay Research

Note: We have not assumed any dividend payout

25 January, 2011

Reco
Hold

CMP Target Price
Rs50 Rs49

EPS change FY11E/12E (%) NA
Target price change (%) NA
Nifty 5,697
Sensex 19,008

Price Performance

(%)	1M	3M	6M	12M
Absolute	(4)	(23)	(32)	(34)
Rel. to Nifty	0	(17)	(35)	(41)

Source: Bloomberg

Relative price chart



Source: Bloomberg

Stock details

Sector	Power
Bloomberg	JPVL@IN
Equity Capital (Rs mn)	20957
Face Value (Rs)	10
No of shares o/s (mn)	2096
52 Week H/L (Rs)	79/47
Market Cap (Rs bn/USD mn)	104/2,278
Daily Avg Vol (No of shares)	1137254
Daily Avg Turnover (US\$ mn)	1.5

Shareholding Pattern (%)

	Sep-10	Jun-10	Mar-10
Promoters	87.6	87.7	87.7
FIINRI	1.4	1.1	0.8
Institutions	3.4	3.4	3.2
Private Corp	1.6	1.7	1.9
Public	6.0	6.1	6.4

Source: Capitaline

- **80% of fuel requirements for FY11E-15E secured & average off-take with 6.5GW (50% of planned capacity) tied up in regulated & case II**
- **But capacity additions are back ended with no additions in FY11E and major additions scheduled in FY14E, denying it the benefit of early merchant power opportunity (except Karcham, that too is under dispute)**
- **Significant equity dilution requirement to remain an overhang on the stock- Due to low internal accruals in FY10-FY14E and huge capex plans, the company will have to dilute significant equity (~14% dilution in FY12E-FY13E)**
- **Valuations do not leave significant upside - (1) imply merchant power price of Rs3.6/unit, 33% higher than Rs2.7/unit & (2) factors Karcham as a merchant plant; Initiate coverage with 'Hold' rating**

Fuel security and average off-take tie-ups

JPVL has good fuel security with 80% of its coal requirements during FY11-15E tied up through linkages (14mn MT) and captive mines (5.5mn MT) under its belt. It has also tied up 6,500MW or 50% of planned capacity in case II and cost plus with fuel cost being a pass through in all the contracts. With fuel security and escalations in fuel being a pass through, the company is protected from abnormal volatility in fuel prices.

But, back-ended capacities, lower IRRs & possible equity dilution negate positives

JPVL's capacity additions are back ended with no additions in FY11E and major additions scheduled in FY14E, denying it the benefit of early merchant power opportunity (except Karcham- that too, is under dispute). Further, owing to its capital cost being on the higher side at Rs63mn/MW (41% - hydro projects) compared to our universe average of Rs51mn/MW, the equity IRRs are expected to be on the lower side at 19% as compared to our universe average of 26%. Due to (1) low internal accruals in FY10-FY14E, (2) huge capex plans already under implementation and (3) significantly higher capital cost - we believe that the company will have to dilute significant equity (~14%) in FY12E-FY13E. This will remain an overhang on the stock.

Trading at fair value; Initiate coverage with 'Hold' rating

On EVM, JPVL is the costliest stock in our universe with EVM of Rs43mn/MW (31% premium) compared to the universe average of Rs33mn/MW. Further, valuations (1) imply merchant power price of Rs3.6/unit, 33% higher than Rs2.7/unit & (2) factors Karcham as a merchant plant, leaving no upside on the table. At CMP of Rs50/Share, stock is trading at 1.9x FY12E Book value with expected FY11E-15E average ROE of 10% (High CWIP). We initiate coverage with 'Hold' rating and DCF based PT of Rs49/Share. Key risk - court ruling against Karcham being a merchant power plant.

Valuation table

Y/E, Mar	Net Sales	EBIDTA (Core)	EBIDTA (%)	APAT	AEPS (Rs)	EPS % chg	RoE (%)	P/E (x)	EV/ EBITDA	P/BV (x)
FY10	6,496	5,645	86.9	2,418	1.2	-61.5	10.6	43.3	26.0	3.1
FY11E	6,299	5,587	88.7	1,843	0.9	-23.8	5.1	56.9	30.0	2.7
FY12E	22,022	18,648	84.7	4,488	2.1	143.6	13.4	23.3	13.9	1.9
FY13E	35,262	28,001	79.4	5,934	2.5	16.3	11.8	20.1	13.5	1.5

Source: Emkay Research

Theme Charts

JPVL has one of the best fuel security in our coverage universe

Mn MT	FY10	FY11E	FY12E	FY13E	FY14E	FY15E	FY16E	FY17E
Fuel Requirement								
Coal	0.0	0.0	1.0	2.7	8.0	16.8	27.8	33.3
Total Requirement	0.0	0.0	1.0	2.7	8.0	16.8	27.8	33.3
Fuel Availability								
Coal			1.0	2.0	7.0	15.1	19.8	19.8
Total Availability	0.0	0.0	1.0	2.0	7.0	15.1	19.8	19.8
Net Shortfall			0.0	0.7	1.0	1.7	8.1	13.5
% Shortfall			0.0%	25.9%	12.5%	9.8%	28.9%	40.5%

Source: Company, Emkay Research

Jaiprakash Power Ventures (JPVL) has very good fuel security with 60% of long term coal requirements tied up through linkages (14mn MT) and 5.5mn MT captive mines under its belt. (Note that captive mines are in a separate promoter company & JPVL still to enter into contract)

All the PPAs have fuel cost pass through

Project	Tied up Capacity (MW)	Off Take type	Tariffs (Rs/unit)	COD of first unit	Fuel Cost Pass through
Bina I	300	Regulated	Cost plus	September-11	Yes
Nigrie	660	Regulated	Cost plus	April-13	Yes
Bara I	1,782	Case II	3.02	October-13	Yes
Karchana I	1,188	Case II	2.97	December-14	Yes
Bara II	264	Case I		September-15	Yes
Karchana II	40	Case I		March-16	Yes
Total Coal based	4,234				
Baspa II	300	Regulated	Cost plus	March-03	NA
VishnuPrayag	400	Regulated	Cost plus	July-02	NA
Lower Siang	1,350	Regulated	Cost plus	December-16	NA
Hirong	250	Regulated	Cost plus	August-17	NA
Total Hydro based	2,300				
Total tied up	6,534				

Source: Company, Emkay Research

With fuel security and escalations in fuel being a pass through, the company is protected from abnormal volatility in fuel prices.

JPVL's capacity additions are back ended with no additions in FY11E and major additions scheduled in FY14E – denying it the benefit of early merchant power opportunity

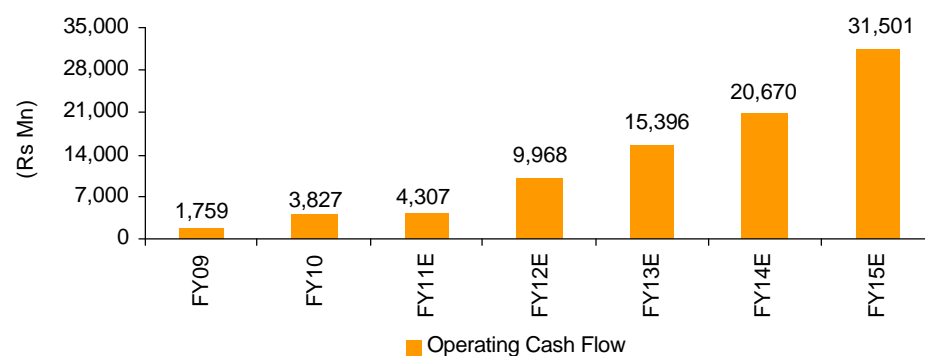


	FY10	FY11E	FY12E	FY13E	FY14E	FY15E	FY16E	FY17E	FY18E	FY19E	FY20E
PPA/Regulated (MW)	700	700	813	1,000	1,952	3,541	4,762	5,009	6,242	6,534	6,534
Merchant/Open (MW)	0	0	700	1,400	1,769	2,394	3,753	5,141	6,518	7,263	7,386
Total (MW)	700	700	1,513	2,400	3,720	5,935	8,515	10,150	12,760	13,796	13,920

Source: Company, Emkay Research

Resulting in back ended cash accruals

Cash flows to be back ended



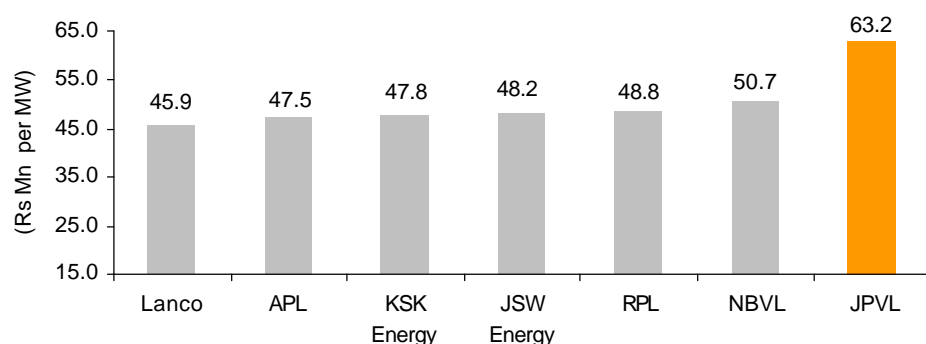
Source: Company, Emkay Research

Huge Capex plans...to lead to equity dilution

Project	Capex Planned (Rs mn)	Capex Incurred (Rs mn)	Future Capex (Rs mn)
Bina I	27,530	7,800	19,730
Nigrie	81,000	8,840	72,160
Bara I	115,000	7,000	108,000
Karchana I	76,000	1,520	74,480
Bina II	55,000	0	55,000
Bara II	73,920	0	73,920
Karchana II	36,960	0	36,960
Karcham	85,000	44,000	41,000
Lower Siang	200,000	1,460	198,540
Hirong	40,000	190	39,810
Kynshi II	35,000	20	34,980
Umngot I	21,000	10	20,990
Total	846,410	70,840	775,570

The company has huge capex plans already under implementation....

Source: Company, Emkay Research

Capital cost per MW highest amongst our coverage universe

...and has the highest capital cost per MW (Rs63 mn/MW) as compared to other companies under our coverage

Source: Company, Emkay Research

Huge equity dilution going forward

Equity Dilution (Rs mn)	FY11E	FY12E	FY13E
Operating Cash Flow	4,307	9,968	15,396
Capex	34,043	110,721	135,666
Equity Requirement	17,325	34,363	30,689
Debt Repayment	1,905	1,905	8,469
FCFe	(14,985)	(24,693)	(22,192)
Cash in Hand at the beginning	25,872	22,656	5,916
Equity Dilution	0.0%	0.0%	13.7%*

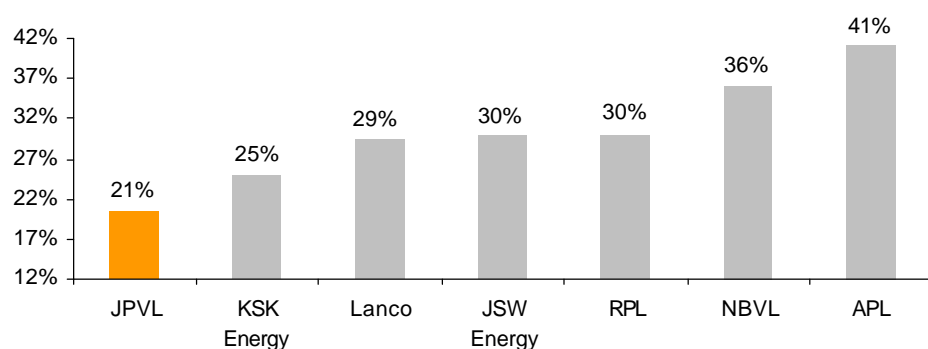
...leading to equity dilution going forward

Source: Company, Emkay Research

*Considering CMP

Lowest Equity IRRs due to high capital costs

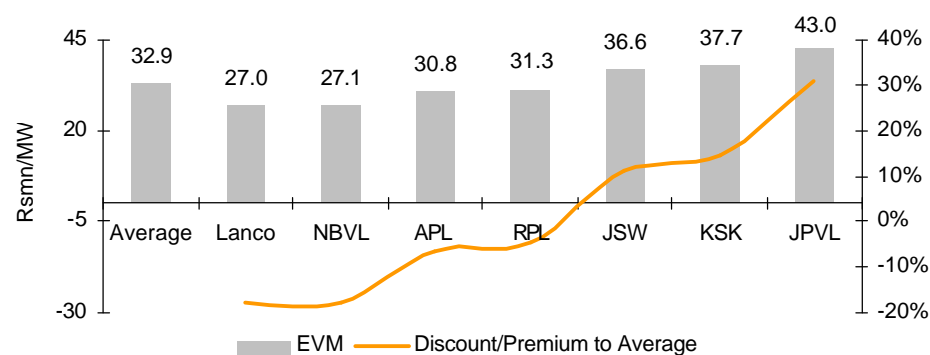
High capital cost and competitive PPA rates to result in lower equity IRR ...



Source: Company, Emkay Research

JPVL has the highest EVM in our coverage universe

...and consequently highest EVM of Rs43mn/mw in our coverage universe



Source: Company, Emkay Research

Sum of parts valuation

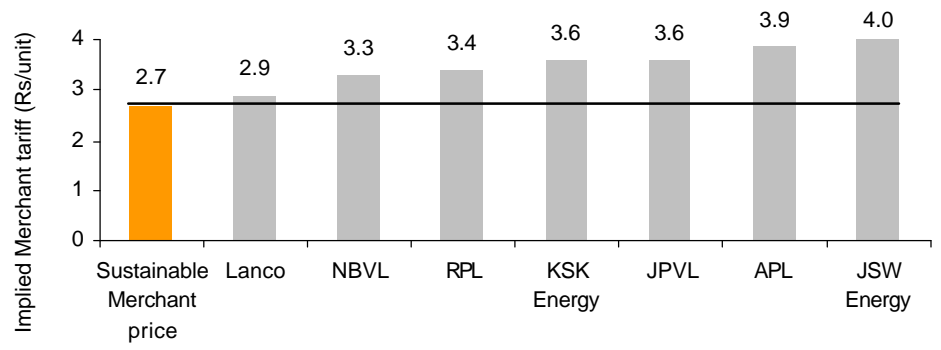
	Total Capacity (MW)	Economic Interest	Cost Of Equity	NPV Rsmn	JPVL's share milestone Adj. (Rsmn)	Rs per Share
Bina I	500	100.0%	13.5%	11153	11153	5
Nigrie	1320	100.0%	12.5%	21250	21250	10
Bara I	1980	100.0%	12.7%	15096	15096	7
Karchana I	1320	100.0%	12.7%	8346	8346	4
Karchana II	660	100.0%	18.8%	1835	115	0
Baspa II	300	100.0%	12.0%	11377	11377	5
VishnuPrayag	400	100.0%	12.0%	13022	13022	6
Karcham	1200	56.9%	14.0%	30990	17624	8
Lower Siang	2700	89.0%	12.5%	15359	4101	2
NPV Per Share						50
Add: Less Net Cash Per Share						(3)
Add: Value of Jaypee Transmission (Rs/share)						2
Fair Value per share						49

Source: Company, Emkay Research

Fair value of Rs 49/share based on DCF

Trades at implied long term merchant rate of Rs3.6/per unit

The current valuations factor in merchant power prices of Rs3.6/unit, 33% higher than Rs2.7/unit

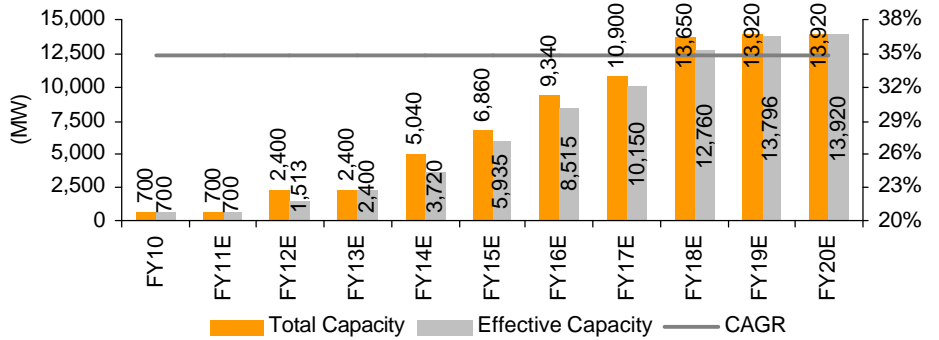


Source: Company, Emkay Research

Company Background

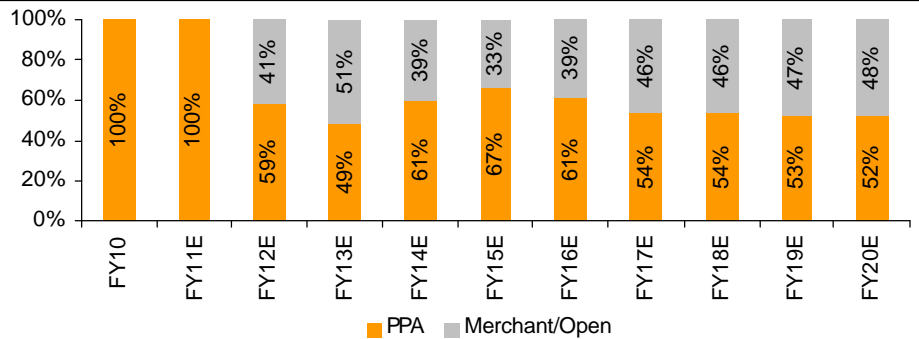
Plans to scale up to 13,920MW

Major capacity additions starting FY14E



Source: Company, Emkay Research

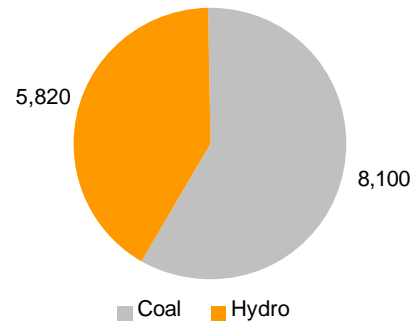
50% of the planned capacity is not tied up



Source: Company, Emkay Research

Fuel wise break up of the total planned capacity (MW)

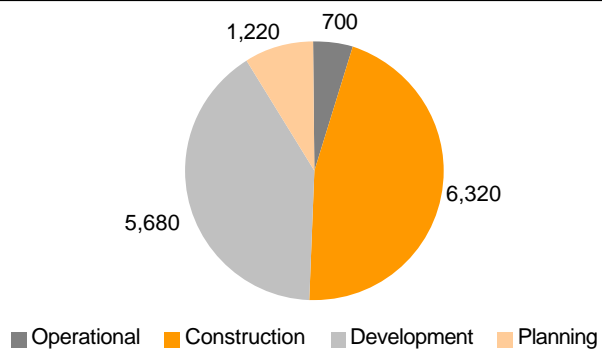
5,820 MW are hydro based capacities



Source: Company, Emkay Research

700 MW operational since FY03

Under construction capacity of 6,320MW



Source: Company, Emkay Research

Assumptions

	Bina I	Nigrie I	Baral I	Karchana I	Bina II	Bara II	Karchana II	Baspa II	Vishnu Prayag	Karcham	Lower Siang	Hirong	Kynshi II	Umngot I
Capacity (MW)	500	1320	1980	1320	1000	1320	660	300	400	1200	2700	500	450	270
COD of 1st Unit	Sep-11	Apr-13	Oct-13	Dec-14	Dec-14	Sep-15	Mar-16	Mar-03	Jul-02	Mar-11	Dec-16	Aug-17	Aug-17	Jul-18
Capital Cost (Rsbn)	28	81	115	76	55	74	37	15	17	85	200	40	35	21
Equity (%)	30	30	25	25	30	25	25	30	30	30	30	30	30	30
Debt (%)	70	70	75	75	70	75	75	70	70	70	70	70	70	70
SHR (Kcal/Kwh)	2,350	2,250	2,250	2,250	2,350	2,250	2,250	0	0	0	0	0	0	0
PAF (%)	92	93	93	93	92	92	92	99	99	99	99	99	99	99
PLF (%)														
Tied Up Capacity	90	90	90	90	90	90	90	53	56	55	55	55	55	55
Merchant Capacity	80	80	80	80	80	80	80	NA	NA	45	45	45	45	45
Aux Consumption and Free Power (%)	7.5	6.0	6.0	6.0	7.5	6.0	6.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0
O&M (Rs/mn/MW or % of Cap. Cost)	1.1	1.0	1.0	1.0	1.1	1.0	1.0	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Fuel Requirement (Mn MT)	2.7	5.3	7.7	5.1	5.0	4.7	2.3	NA	NA	NA	NA	NA	NA	NA
Fuel Tied Up (%)	74	100	91	91	0	0	0	NA	NA	NA	NA	NA	NA	NA
GCV (Kcal/Kg)	3,330	4,200	4,550	4,550	3,330	4,550	4,550	NA	NA	NA	NA	NA	NA	NA
Landed Fuel Cost (Rs/MT)	1,269	1,011	1,521	1,521	1,327	1,642	1,642	NA	NA	NA	NA	NA	NA	NA
Fuel Escalation (%)														
Coal (%)	4	4	4	4	4	4	4	NA	NA	NA	NA	NA	NA	NA
Off Take														
Tied Up (MW)	300	660	1,782	1,188	0	264	40	300	400	0	1,350	250	0	0
Merchant or Open (MW)	200	660	198	132	1,000	1,056	620	0	0	1,200	1,350	250	450	270
Levelized Tariff (Rs/Unit)	Cost Plus	Cost Plus	3.02	2.97	NA	NA	NA	Cost Plus	Cost Plus	NA*	Cost Plus	Cost Plus	NA	NA

Source: Company, Emkay Research

*has contracted with PTC at CERC tariff but now under dispute in the court

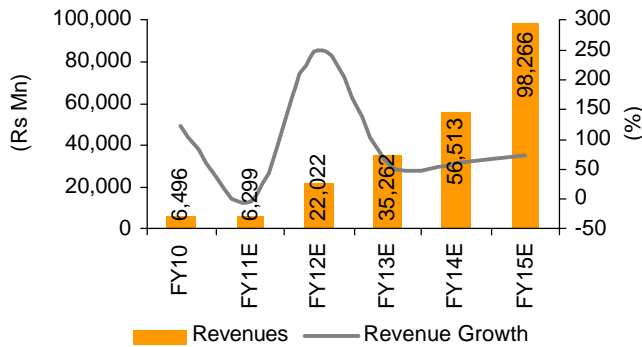
Per unit Calculations

Rs/Unit	FY11E	FY12E	FY13E	FY14E	FY15E
Average PPA Tariff	2.03	2.15	2.30	2.26	2.29
Average Tariff	2.03	3.10	3.14	2.72	2.68
Average Fuel Cost	0.00	0.21	0.36	0.54	0.68
O&M Cost	0.22	0.29	0.31	0.25	0.22
Depreciation	0.59	0.73	0.73	0.60	0.52
Interest	0.28	0.74	0.78	0.68	0.64
PBT Per Unit	0.94	1.14	0.96	0.66	0.63
Tax per unit	0.21	0.30	0.24	0.16	0.14
PAT Per unit	0.72	0.83	0.73	0.51	0.49

Source: Company, Emkay Research

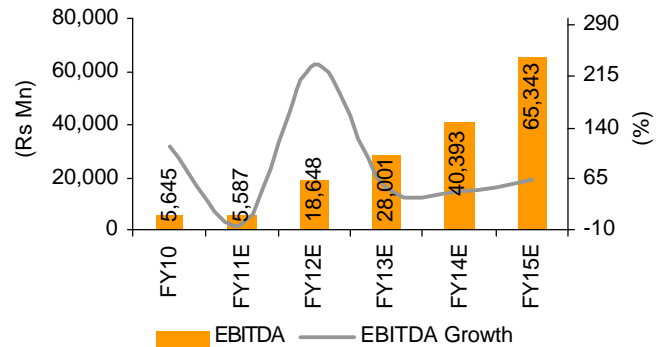
Financials

Revenue CAGR of 98.7% during FY11E-15E



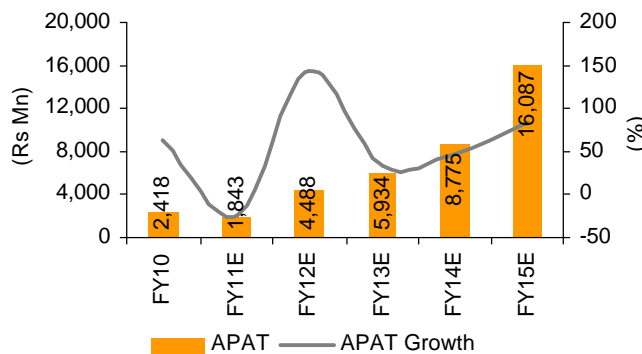
Source: Company, Emkay Research

EBITDA CAGR of 84.9% during FY11E-15E



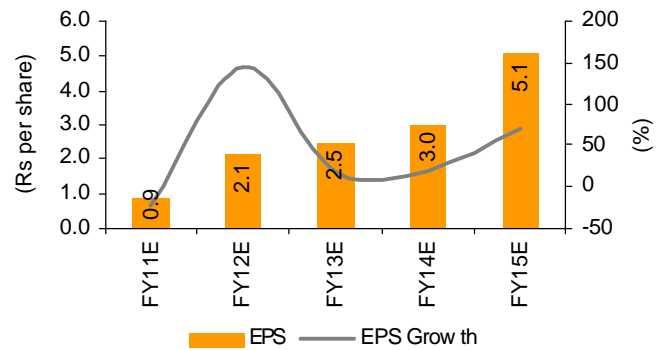
Source: Company, Emkay Research

APAT CAGR of 71.9% during FY11E-15E



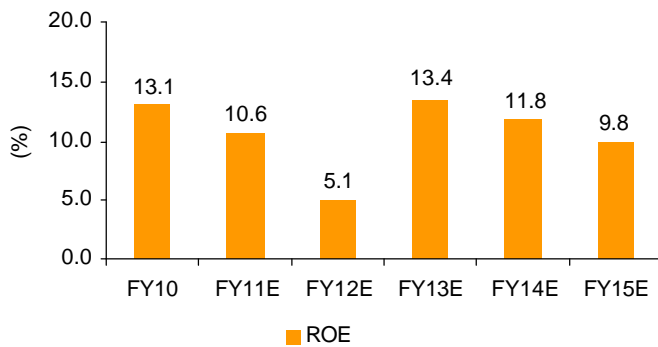
Source: Company, Emkay Research

Earnings per share CAGR of 54.9% during FY11E-15E



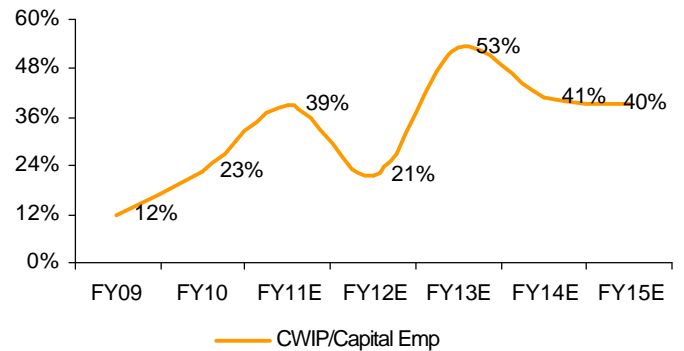
Source: Company, Emkay Research

Average ROE of 9.2% over FY11E-15E



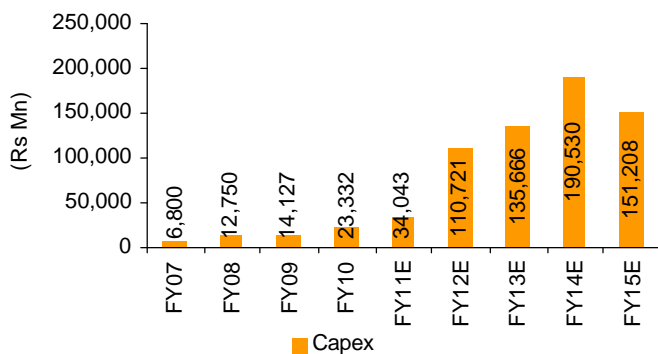
Source: Company, Emkay Research

CWIP/Total Capital Employed



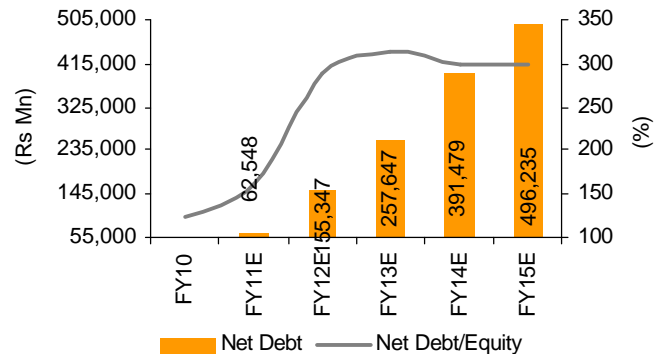
Source: Company, Emkay Research

Capex Plans



Source: Company, Emkay Research

Net Debt Position



Source: Company, Emkay Research

EVM Calculation

Project	Bina I	Nigrie	Bara I	Karchana I	Bina II	Bara II	Karchana II	Baspa II	VishnuPrayag	Karcham	Lower Siang	Hirong	Kynshi II	Umngot I	Total
Stage	Constru- ction	Constru- ction	Constru- ction	Constru- ction	Develop- ment	Develop- ment	Develop- ment	Opera- tional	Opera- tional	Constru- ction	Constru- ction	Planning	Planning	Planning	Planning
Capacity (MW)	500	1,320	1,980	1,320	1,000	1,320	1,320	660	400	1200	2,700	500	450	270	13,920
Fuel	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Hydro	Hydro	Hydro	Hydro	Hydro	Hydro	Hydro
PRE CONSTRUCTION PHASE (Weight)	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
DPR Prepared	NA	NA	NA	NA	NA	NA	NA	NA	NA	✓	80%	x	x	x	x
Techno Economic Clearance (CEA)	NA	NA	NA	NA	NA	NA	NA	NA	NA	✓	80%	x	x	x	x
Investment Approval CCEA	✓	✓	✓	✓	x	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Land Acquisition	✓	✓	✓	89%	✓	x	x	NA	NA	✓	x	x	x	x	x
Environmental Clearance	✓	✓	✓	✓	✓	x	x	NA	NA	✓	40%	40%	x	x	x
Other Regulatory Clearances	✓	✓	✓	✓	✓	✓	✓	NA	NA	✓	80%	x	x	x	x
Water Source Tie Up	✓	✓	✓	✓	✓	✓	✓	NA	NA	✓	80%	80%	x	x	x
Evacuation Arrangements	✓	✓	✓	✓	✓	✓	✓	NA	NA	✓	80%	x	x	x	x
Financial Closure	✓	✓	✓	✓	x	x	x	NA	NA	✓	x	x	x	x	x
Equipment Ordering	✓	✓	✓	✓	x	x	x	NA	NA	✓	x	x	x	x	x
Adjustment Factor (a)	1.0	1.0	1.0	1.0	0.5	0.4	0.1	1.0	1.0	1.0	0.6	0.2	0.0	0.0	0.7
CONSTRUCTION PHASE (Weight)	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Site Levelling (5%)	✓	✓	✓	x	x	x	x	x	NA	✓	✓	x	x	x	x
BTG Foundation (10%)	✓	✓	✓	x	x	x	x	NA	NA	✓	x	x	x	x	x
Boiler Erection (Not for Hydro) (20%)	✓	x	x	x	x	x	x	NA	NA	✓	x	x	x	x	x
Boiler Light up & Drum Lifting (5%)	✓	x	x	x	x	x	x	NA	NA	✓	x	x	x	x	x
Hydraulic Test (10%)	✓	x	x	x	x	x	x	NA	50%	✓	x	x	x	x	x
Condenser Erection (5%)	x	x	x	x	x	x	x	NA	x	x	x	x	x	x	x
TG Erection (15%)	x	x	x	x	x	x	x	NA	x	x	x	x	x	x	x
Synchronization (20%)	x	x	x	x	x	x	x	NA	x	x	x	x	x	x	x
Commercialization (10%)	x	x	x	x	x	x	x	NA	x	x	x	x	x	x	x
Adjustment Factor (b)	0.5	0.2	0.1	0.0	0.0	0.0	0.0	1.0	1.0	0.7	0.1	0.0	0.0	0.0	0.2
Net Adjustment Factor (a*b) (c)	0.7	0.6	0.5	0.3	0.2	0.2	0.1	1.0	1.0	0.8	0.3	0.1	0.0	0.0	0.42
Cost of Equity (CoE)	13%	13%	13%	13%	19%	18%	19%	12%	12%	14%	13%	13%	15%	15%	13.3%
Equity IRR (IRR)	23%	24%	17%	16%	22%	24%	24%	27%	27%	16%	15%	15%	10%	10%	19.9%
Potential Value Multiple (PVM) = (CoE/IRR)	1.7	1.9	1.3	1.1	1.1	1.3	1.3	2.0	2.3	1.1	1.2	1.2	0.7	0.7	1.5
PVM Adj. Capacity (d) = (PVM*(c)*capacity)	621	1,442	1,392	832	287	328	328	586	911	641	890	41	0	0	8257
EV (Rs mn)															167,332
Adj Capex (adj. for milestone) (Rs mn)															187,545
Adj. EV (EV + Adjusted Capex) (Rs mn)															354,877
EVM (adj. EV (d)) (Rs mn/MW)															43

Source: Company, Emkay Research

Financial Tables

Income Statement (Rs. Mn)

(Year Ending Mar 31)	FY10	FY11E	FY12E	FY13E
Net Sales	6,496	6,299	22,022	35,262
Growth (%)	124.9	-3.0	249.6	60.1
Expenditure	851	712	3,374	7,261
Fuel Cost	0	0	1,347	3,734
O&M Cost	851	712	2,027	3,527
SG&A Expenses	0	0	0	0
Other Expenses	0	0	0	0
EBITDA	5,645	5,587	18,648	28,001
Growth (%)	112.6	-1.0	233.8	50.2
EBITDA margin (%)	86.9	88.7	84.7	79.4
Depreciation	1,026	1,724	4,607	7,666
EBIT	4,619	3,863	14,041	20,336
EBIT margin (%)	71.1	61.3	63.8	57.7
Other Income	682	-985	-2,184	-2,917
Interest expenses	2,364	747	4,470	7,870
PBT	2,936	2,131	7,387	9,549
Tax	519	288	1,172	1,501
Effective tax rate (%)	17.7	13.5	15.9	15.7
Adjusted PAT	2,418	1,843	6,215	8,047
Growth (%)	64.4	-23.8	143.6	32.2
Net Margin (%)	37.2	29.3	28.2	22.8
E/O items	0	0	0	0
Reported PAT	2,418	1,843	6,215	8,047
(Profit)/loss from JV's/Ass/MI	0	0	-1,727	-2,114
PAT after MI	2,418	1,843	4,488	5,934
Growth (%)	64.4	-23.8	143.6	32.2

Balance Sheet (Rs. Mn)

(Year Ending Mar 31)	FY10	FY11E	FY12E	FY13E
Equity share capital	20,957	20,957	20,957	23,823*
Reserves & surplus	13,309	17,571	33,181	58,257
Net worth	34,266	38,528	54,138	82,081
Secured Loans	70,454	85,204	161,263	259,341
Unsecured Loans	0	0	0	0
Loan Funds	70,454	85,204	161,263	259,341
Net deferred tax liability	0	0	0	0
Total Liabilities	104,720	123,732	215,401	341,422
Gross Block	48,303	48,303	160,833	160,833
Less: Depreciation	-6,025	-7,749	-12,355	-20,021
Net block	42,278	40,554	148,477	140,812
Capital work in progress	23,924	47,966	46,157	181,822
Investment	4,000	4,000	4,000	4,000
Current Assets	38,260	34,954	20,616	18,827
Inventories	217	217	378	663
Sundry debtors	2,039	1,949	4,190	6,337
Cash & bank balance	25,872	22,656	5,916	1,694
Loans & advances	9,206	9,206	9,206	9,206
Other current assets	927	927	927	927
Current lia & Prov	3,760	3,760	3,867	4,058
Current liabilities	3,760	3,760	3,867	4,058
Provisions	0	0	0	0
Net current assets	34,500	31,194	16,749	14,769
Misc. exp	-18	-18	-18	-18
Total Assets	104,720	123,732	215,401	341,422

Cash Flow (Rs. Mn)

(Year Ending Mar 31)	FY10	FY11E	FY12E	FY13E
PBT (Ex-Other income)	2,254	3,116	9,571	12,466
Depreciation	1,026	1,724	4,607	7,666
Interest Provided	2,364	747	4,470	7,870
Other Non-Cash items	1,276	-1,354	0	0
Chg in working cap	-7,106	91	-2,295	-2,243
Tax paid	-519	-288	-1,172	-1,501
Operating Cashflow	-704	4,035	15,181	24,257
Capital expenditure	-49,347	-24,043	-110,721	-135,666
Free Cash Flow	-50,051	-20,007	-95,540	-111,408
Other income	682	-985	-2,184	-2,917
Investments	-4,000	0	0	0
Investing Cashflow	-52,665	-25,028	-112,904	-138,583
Equity Capital Raised	19,715	-986	0	18,633
Loans Taken / (Repaid)	60,566	17,089	76,059	98,078
Interest Paid	-2,364	-747	-4,470	-7,870
Dividend paid (incl tax)	0	0	0	0
Income from investments				
Others	88	2,420	9,395	1,263
Financing Cashflow	78,004	17,776	80,983	110,103
Net chg in cash	24,635	-3,216	-16,740	-4,222
Opening cash position	1,237	25,872	22,656	5,916
Closing cash position	25,872	22,656	5,916	1,694

Key Ratios

(Year Ending Mar 31)	FY10	FY11E	FY12E	FY13E
Profitability (%)				
EBITDA Margin	86.9	88.7	84.7	79.4
Net Margin	37.2	29.3	28.2	22.8
ROCE	7.3	3.4	8.3	7.3
ROE	10.6	5.1	13.4	11.8
RoIC	8.0	3.9	7.8	6.3
Per Share Data (Rs)				
EPS	1.2	0.9	2.1	2.5
CEPS	1.6	1.7	4.3	5.7
BVPS	16.3	18.4	25.8	34.4
DPS	0.0	0.0	0.0	0.0
Valuations (x)				
PER	43.3	56.9	23.3	20.1
P/CEPS	30.4	29.4	11.5	8.8
P/BV	3.1	2.7	1.9	1.5
EV / Sales	22.6	26.6	11.8	10.7
EV / EBITDA	26.0	30.0	13.9	13.5
Dividend Yield (%)	0.0	0.0	0.0	0.0
Gearing Ratio (x)				
Net Debt/ Equity	1.2	1.6	2.9	3.1
Net Debt/EBIDTA	7.5	11.2	8.3	9.2
Working Cap Cycle (days)	500	142	112	84

Source: Company, Emkay Research

* We have taken equity dilution

25 January, 2011

Reco
Accumulate

CMP Target Price
Rs142 Rs157

EPS change FY11E/12E (%) NA
Target price change (%) NA
Nifty 5,697
Sensex 19,008

Price Performance

(%)	1M	3M	6M	12M
Absolute	(5)	(11)	(18)	(7)
Rel. to Nifty	0	(5)	(21)	(17)

Source: Bloomberg

Relative price chart



Source: Bloomberg

Stock details

Sector	Power
Bloomberg	RPWR@IN
Equity Capital (Rs mn)	28051
Face Value (Rs)	10
No of shares o/s (mn)	2805
52 Week H/L (Rs)	191/130
Market Cap (Rs bn/USD mn)	398/8,717
Daily Avg Vol (No of shares)	4378150
Daily Avg Turnover (US\$ mn)	16.0

Shareholding Pattern (%)

	Sep-10	Jun-10	Mar-10
Promoters	84.8	84.8	84.8
FIINRI	3.9	3.9	3.8
Institutions	1.9	1.8	1.7
Private Corp	1.6	1.8	1.9
Public	7.9	7.7	7.8

Source: Capitaline

- **Cheap fuel with large captive mines under its belt and balanced off-take with almost 15,000MW of capacity already tied up**
- **Captive mine with Sasan/Tilaiya UMPP a value creator- Its captive mines have high quality cheap coal, which the company also plans to use at Chitrangi/Sasan-II projects to take advantage of low cost of generation**
- **But most of the open or merchant power capacity is coming at the end of the curve, therefore no big advantage of early merchant power opportunity**
- **Imply long term merchant power prices of Rs3.4/unit and EVM of Rs31mn/MW (5% lower than average); lowest cost of generation (Rs0.58/unit) makes it most sustainable business model; Initiate coverage with 'Accumulate' rating**

Large captive mines; balanced off take

Reliance Power has large captive mines (Sasan - 25mn MT p.a. and Tilaiya - 40mn MT p.a.) under its belt ensuring fuel security for most of its plants, except Krishnapatnam (for which it has acquired mines in Indonesia). With almost 15,000MW of capacity already tied up under regulated, case I and Case II bids, the company is largely insulated from volatilities in prices (both fuel and power). Further, captive pit head mines would result in RPL having lowest fuel cost of Rs0.58/unit (universe average Rs1.2./unit). Making it one of the most sustainable business model in our coverage universe.

But merchant capacities are back ended

However, we highlight that most of the open or merchant power capacity is coming at the end of the curve - so, no big advantage of early merchant power opportunity. RPL's first set of merchant/open power capacities will come on stream in FY13E and then pick up traction from FY14E till FY18E to reach 10,667MW. This effectively means that the company will miss out on the merchant power opportunity window.

Most sustainable business model; Initiate coverage with 'Accumulate' rating

At CMP of Rs142/Share, RPL is trading at 2.3x FY12E Book value with expected FY11E-15E average ROE of 12%. The current valuations imply (1) long term merchant price of Rs3.4/unit, a premium of 26% to Rs2.7/unit, and (2) EVM of Rs31mn/MW, 5% discount. However, we like RPL for its most sustainable business model. We initiate coverage on RPL with an 'Accumulate' rating and DCF based PT of Rs157/Share. We have (1) considered an OPEX of Rs303/MT for Sasan captive mine and (2) not considered any value of RNRL except net cash. Key risk to our call - Chitrangi and Sasan II project contributes to the bulk of the value (47%), thereby any delay or restrictions on use of Sasan/Tilaiya coal would be a negative trigger.

Valuation table

Y/E, Mar	Net Sales	EBIDTA (Core)	EBIDTA (%)	APAT	AEPS (Rs)	EPS % chg	RoE (%)	P/E (x)	EV / EBITDA	P/BV (x)
FY10	207	-1,073	-518.4	6,840	2.9	179.8	4.8	49.8	-263.1	2.4
FY11E	14,931	5,658	37.9	5,998	2.1	-24.9	3.9	66.2	73.2	2.4
FY12E	34,707	15,727	45.3	8,793	3.1	46.6	5.2	45.2	37.8	2.3
FY13E	115,423	61,105	52.9	30,004	10.6	238.2	15.7	13.4	13.1	1.9

Source: Emkay Research

Theme Charts

Best fuel security

Mn MT	FY10	FY11E	FY12E	FY13E	FY14E	FY15E	FY16E	FY17E
Fuel Requirement								
Imported Coal	0.0	0.0	0.0	0.0	2.1	11.0	15.8	15.8
Coal	0.1	1.7	3.3	8.0	15.9	32.1	45.5	54.6
Gas	0.0	1.2	2.7	10.4	11.0	11.0	11.0	11.0
Coal Requirement	0.1	1.7	3.3	8.0	18.0	43.2	61.3	70.4
Gas Requirement	0.0	1.2	2.7	10.4	11.0	11.0	11.0	11.0
Fuel Availability								
Imported Coal	0	0	0	0	2.1	11.0	15.8	15.8
Coal	0.1	1.7	3.3	7.0	14.7	32.1	45.5	54.6
Gas		1.2	1.8	1.8	1.8	1.8	1.8	1.8
Coal Availability	0.1	1.7	3.3	7.0	16.8	43.2	61.3	70.4
Gas Availability		1.2	1.8	1.8	1.8	1.8	1.8	1.8
Shortfall (Coal)	0.0	0.0	0.0	1.0	1.2	0.0	0.0	0.0
Shortfall (Gas)	0.00	0.00	0.90	8.60	9.18	9.19	9.20	9.22
% Shortfall (Coal)	0%	0%	0%	13%	7%	0%	0%	0%
% Shortfall (Gas)		0%	33%	83%	84%	84%	84%	84%

Reliance Power has best fuel security (100% of the total coal requirement tied up).

Source: Company, Emkay Research

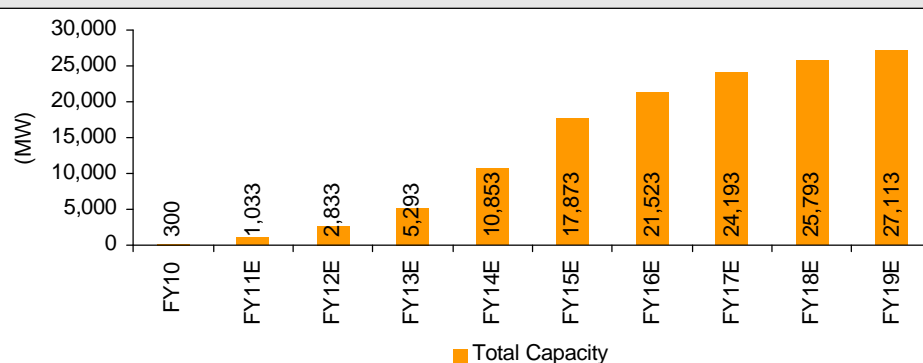
RPL has good mix of off take arrangements for its capacity

Project	Tied up Capacity (MW)	Off Take type	Tariffs (Rs/unit)	Commissioning Date of first unit
Rosa I	600	Regulated	Cost plus	Feb-10
Rosa II	150	Regulated	Cost plus	Dec-11
Rosa II	150	Regulated	Cost plus	Mar-12
Butibori	153	Group Captive	28 paisa discount to industrial tariffs	Dec-11
Sasan	3,960	Case II	1.19	Jan-13
Tilaiya	3,960	Case II	1.77	May-15
K'ptnm	4,000	Case II	2.33	Sep-13
Chitrgi	1,320	Case I	2.45	Dec-13
Samalkot	220	Regulated	Cost plus	NA
Kochi	165	Regulated	Cost plus	NA
Goa	48	Regulated	Cost plus	NA
Total Off take tied up	14,726			

14,726 MW (54% of the total capacity) tied up in firm PPA off-take arrangements

Source: Company, Emkay Research

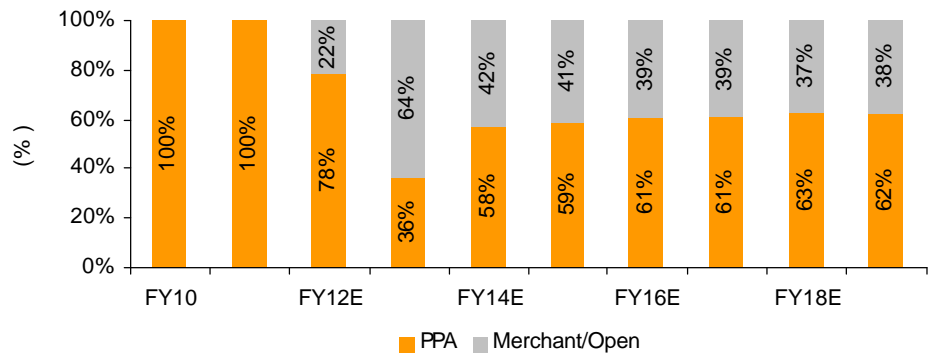
Major additions during FY13E-FY16E



Source: Company, Emkay Research

And merchant capacity is back-ended

Most of the open or merchant power capacity is coming at the end of the curve (FY13E onwards)– no big advantage of early merchant power opportunity



Source: Company, Emkay Research

Captive mine with Sasan UMPP and Tilaiya; a value creating proposition

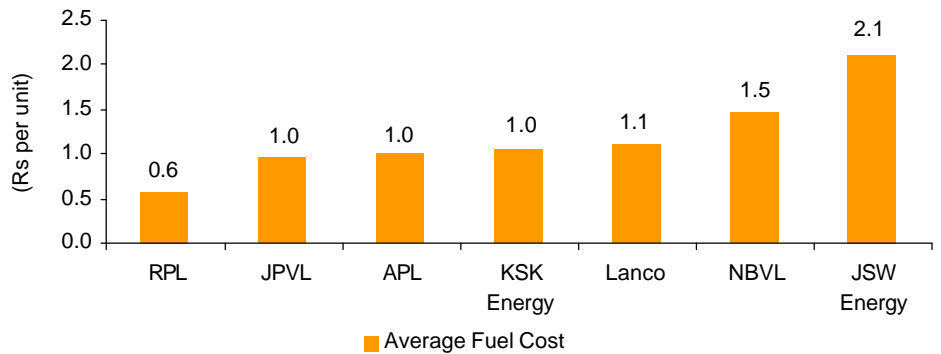
Captive mine with Sasan UMPP and Tilaiya to ensure high quality coal at a competitive rate. RPL plans to use this coal at its Chitrangi & Sasan II project also, which has been kept open in terms of off-take to take advantage of low cost of generation.

	Moher and Moher Amlohri	Chhatrasal	Tilaiya
Reserves (mn MT)	700	112	1,200
Gross Calorific Value	4,700	4,700	4,400
Peak Production	25 MT		40 MT
	Sasan's Peak Requirement	Chitrgi + Sasan II Requirement	Tilaiya's Requirement
	14 MT	20 MT	14 MT
Variable cost of generation	Rs 0.17 per unit		Rs 0.31 per unit

Source: Company, Emkay Research

Has the lowest fuel cost per unit

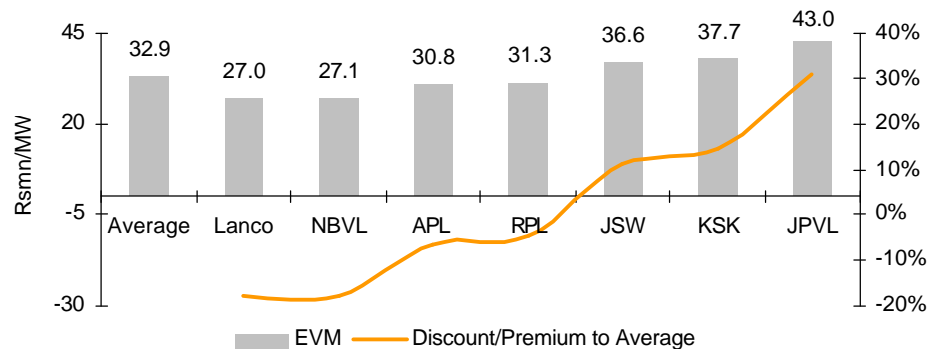
Fuel cost per unit of Rs0.58/unit lowest in our coverage universe



Source: Company, Emkay Research

Trades at a 5% discount to our universe average EVM of Rs 33MW

Current valuations imply EVM of Rs31mn/mw



Source: Company, Emkay Research

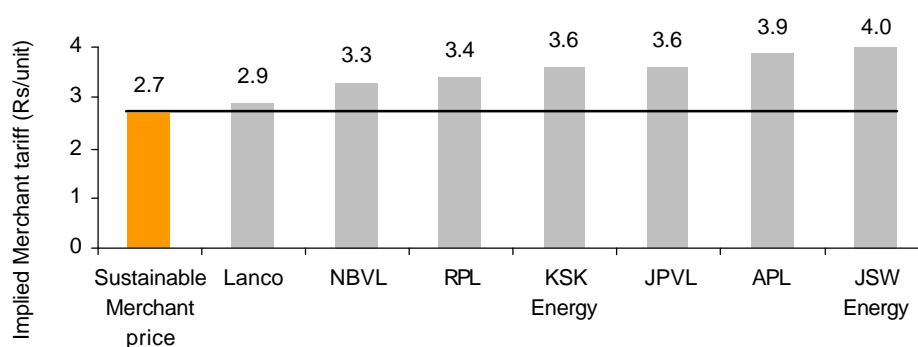
Sum of parts valuation

	Total Capacity (MW)	Economic Interest	Cost Of Equity	NPV Rsmn	RPL's share milestone Adj. Rsmn	Rs per Share
Rosa I	600	100.0%	13.0%	16263	16263	6
Rosa II	300	100.0%	14.5%	6026	6026	2
Rosa II	300	100.0%	14.5%	6026	6026	2
Butibori	600	100.0%	16.5%	22556	22556	8
Sasan	3960	100.0%	10.0%	33546	33546	12
Tilaiya	3960	100.0%	10.6%	43170	43170	15
Chtgi+SasnII	5940	100.0%	15.4%	205723	205723	74
Samalkot	220	100.0%	12.1%	2771	2771	1
Samalkot - II	2400	100.0%	18.1%	35146	35146	13
Tato II	700	100.0%	14.1%	5572	5572	2
NPV Per Share						134
Add: Cash Per Share						23
Fair Value per share						157

Fair value of Rs 157/share based on DCF

Source: Company, Emkay Research

Current stock price implies a long term merchant rate of Rs3.4/unit



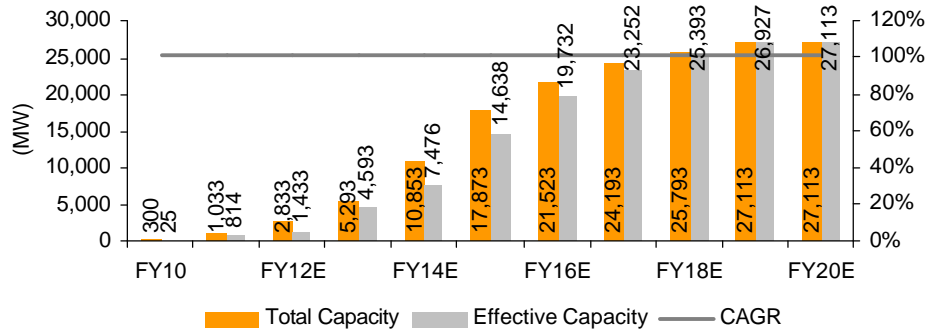
Current valuation implies long term merchant tariff of Rs 3.4 per unit

Source: Company, Emkay Research

Company background

Plans to scale up to 27,113 MW

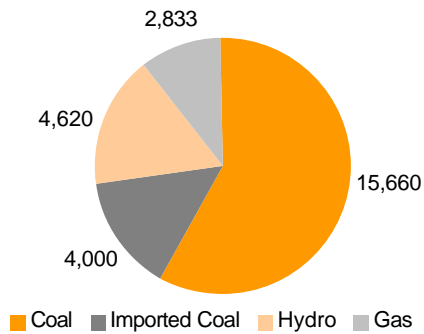
Major additions planned in FY13E - 16E



Source: Company, Emkay Research

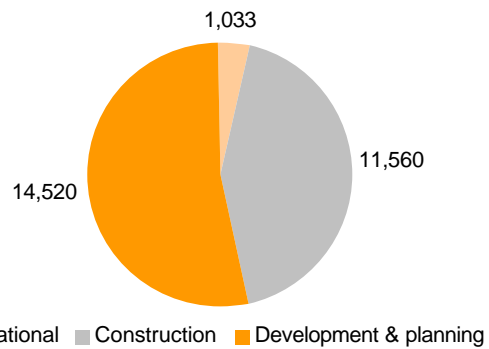
Majority of the capacity is coal based (MW)

Coal based capacity at 15,660 MW



Source: Company, Emkay Research

Status of planned capacity (MW)



Source: Company, Emkay Research

Per unit Calculations

Rs/Unit	FY11E	FY12E	FY13E	FY14E	FY15E
Average PPA Tariff	3.32	3.28	3.13	2.06	1.79
Average Tariff	3.32	3.55	3.69	2.72	2.54
Average Fuel Cost	1.86	1.77	1.55	1.12	0.84
O&M Cost	0.16	0.14	0.15	0.15	0.15
Depreciation	0.39	0.31	0.32	0.33	0.34
Interest	0.55	0.45	0.49	0.45	0.46
PBT Per Unit	0.35	0.88	1.18	0.67	0.74
Tax per unit	0.07	0.18	0.24	0.13	0.15
PAT Per unit	0.28	0.70	0.94	0.53	0.60

Source: Company, Emkay Research

Fund requirements

Equity Dilution (Rs mn)	FY11E	FY12E	FY13E
OCF	336	6,340	25,122
Capex	82,850	188,986	229,490
Equity Requirement	27,491	51,674	52,874
Debt Repayment	0	2,206	6,540
FCFe	(25,265)	(45,021)	(24,141)
Cash in Hand at beginning	80,490	62,948	19,840
Equity Dilution	0.0%	0.0%	0.9%*

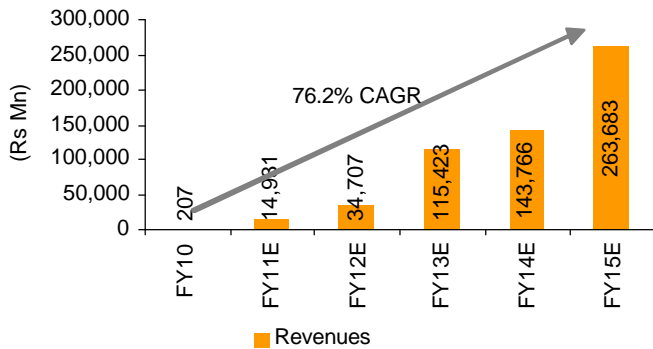
Source: Company, Emkay Research

*Considering CMP

Small funding needed in FY13E

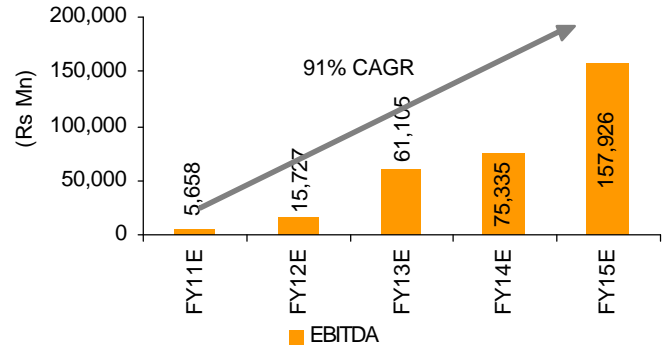
Financials

Revenue CAGR of 76.2% during FY11E-15E



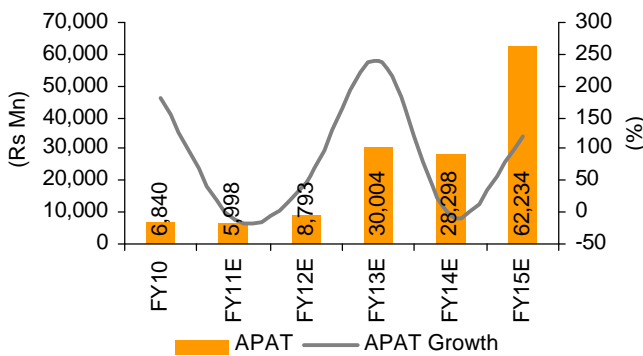
Source: Company, Emkay Research

EBITDA CAGR of 91% during FY11E-15E



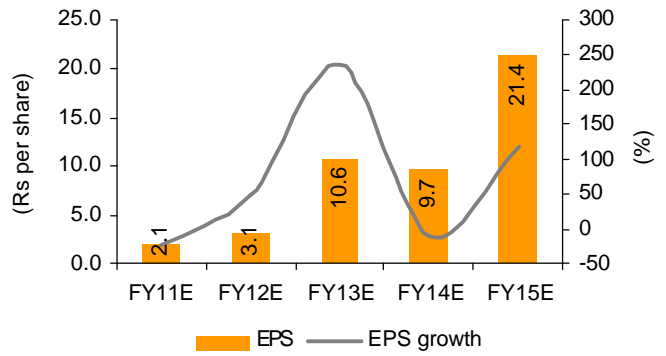
Source: Company, Emkay Research

APAT CAGR of 47.4% during FY11E-15E



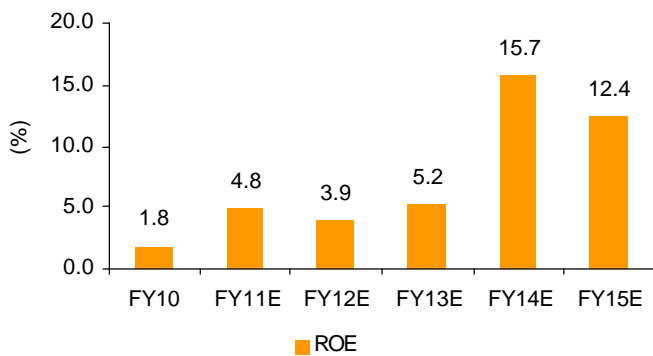
Source: Company, Emkay Research

Earnings per share CAGR of 37.5% during FY11E-15E



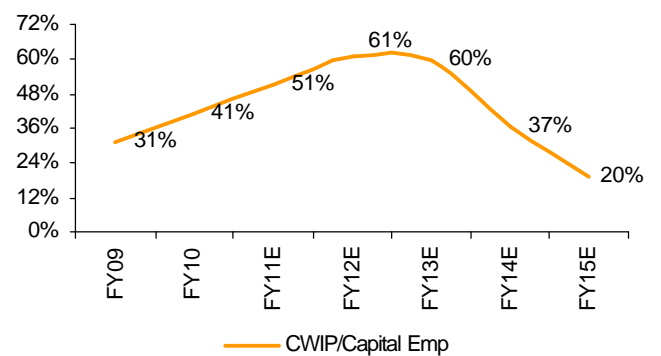
Source: Company, Emkay Research

Average ROE of 13.2% over FY11E-15E



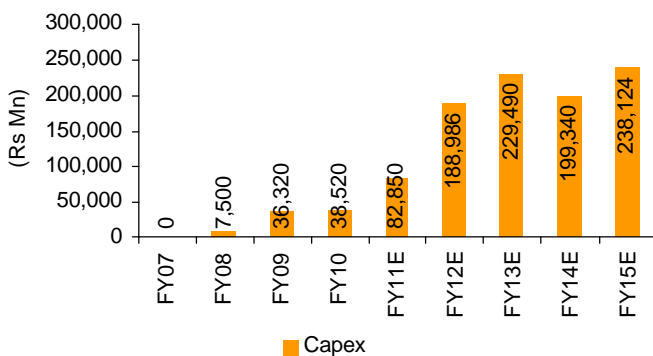
Source: Company, Emkay Research

CWIP/Total Capital Employed



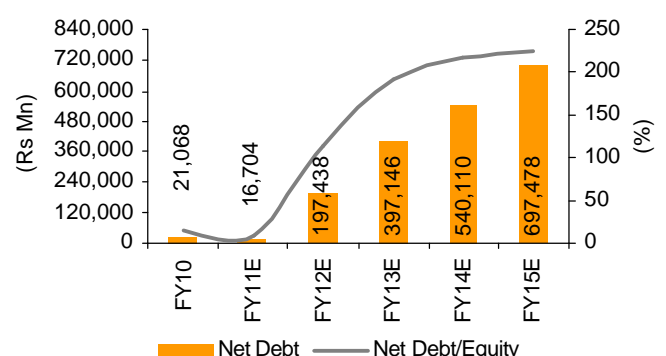
Source: Company, Emkay Research

Capex



Source: Company, Emkay Research

Net Debt Position



Source: Company, Emkay Research

EVM Calculation

Project	Rosa I	Rosa II	Rosa II	Butibori	Sasan	Tilaiya	K'ptm	Chitrgi	Samalkot	Kochi	Goa	Samalkot	Tato	Siyom	Usobla	Kalai	Arnolin	Amini	Mihun	Total	
Stage	Opera-tional	Construc-tion	Construc-tion	Construc-tion	Construc-tion	Construc-tion	Construc-tion	Construc-tion	Construc-tion	Opera-tional	Opera-tional	Construc-tion	Construc-tion	Develop-ment	Plan-ning	Plan-ning	Plan-ning	Plan-ning	Plan-ning	Plan-ning	Total
Capacity (MW)	600	300	300	600	3,960	3,960	4,000	5,940	2,400	220	165	48	700	1,000	400	1,200	420	500	400	27,113	
Fuel	Coal	Coal	Coal	Coal	Coal	Coal	Coal Imported	Coal	Gas	Gas	Gas	Gas	Hydro	Hydro	Hydro	Hydro	Hydro	Hydro	Hydro	Hydro	
PRE CONSTRUCTION PHASE (Weight)	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
DPR Prepared	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5	5	X	X	X	X	X	X	X
Techno Economic Clearance (CEA)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	X	X	X	X	X	X	X	X	X
Investment Approval CCEA	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	X	X	X	X	X	X	X	X	X
Land Acquisition	✓	✓	✓	✓	✓	✓	✓	67%	✓	NA	NA	✓	X	X	X	X	X	X	X	X	X
Environmental Clearance	✓	✓	✓	✓	✓	✓	✓	50%	✓	NA	NA	✓	50%	80%	X	X	X	X	X	X	X
Other Regulatory Clearances	✓	✓	✓	✓	✓	✓	✓	50%	✓	NA	NA	✓	X	X	X	X	X	X	X	X	X
Water Source Tie Up	✓	✓	✓	✓	✓	✓	✓	✓	✓	NA	NA	✓	X	X	X	X	X	X	X	X	X
Evacuation Arrangements	✓	✓	✓	✓	✓	✓	✓	X	✓	NA	NA	50%	X	X	X	X	X	X	X	X	X
Financial Closure	✓	✓	✓	✓	✓	✓	✓	91%	✓	NA	NA	50%	X	X	X	X	X	X	X	X	X
Equipment Ordering	✓	✓	✓	✓	✓	✓	✓	✓	✓	NA	NA	✓	X	X	X	X	X	X	X	X	X
Adjustment Factor (a)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.6	0.8	1.0	1.0	1.0	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.7
CONSTRUCTION PHASE (Weight)	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50
Site Levelling (5%)	✓	✓	✓	✓	✓	✓	✓	X	✓	NA	NA	✓	X	X	X	X	X	X	X	X	X
BTG Foundation (10%)	✓	✓	✓	✓	✓	✓	✓	X	✓	NA	NA	✓	X	X	X	X	X	X	X	X	X
Boiler Erection (Not for Hydro) (20%)	✓	✓	✓	50%	75%	X	X	X	X	NA	NA	✓	X	X	X	X	X	X	X	X	X
Boiler Light up & Drum Lifting (5%)	X	X	X	X	X	X	X	X	X	NA	NA	✓	X	X	X	X	X	X	X	X	X
Hydraulic Test (10%)	X	X	X	X	X	X	X	X	X	NA	NA	✓	X	X	X	X	X	X	X	X	X
Condenser Erection (5%)	X	X	X	X	X	X	X	X	X	NA	NA	✓	X	X	X	X	X	X	X	X	X
TG Erection (15%)	X	X	X	X	X	X	X	X	X	NA	NA	✓	X	X	X	X	X	X	X	X	X
Synchronization (20%)	X	X	X	X	X	X	X	X	X	NA	NA	✓	X	X	X	X	X	X	X	X	X
Commercialization (10%)	X	X	X	X	X	X	X	X	X	NA	NA	✓	X	X	X	X	X	X	X	X	X
Adjustment Factor (b)	1.0	0.4	0.4	0.3	0.3	0.0	0.3	0.0	0.1	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Net Adjustment Factor (a*b) (c)	1.0	0.7	0.7	0.7	0.7	0.3	0.7	0.3	0.4	1.0	1.0	1.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.4
Cost of Equity (CoE)	13%	15%	15%	16%	10%	11%	12%	15%	18%	12%	13%	13%	14%	14%	14%	14%	14%	14%	14%	14%	13%
Equity IRR (IRR)	20%	31%	27%	51%	13%	26%	12%	78%	82%	26%	21%	21%	23%	22%	23%	22%	22%	22%	22%	22%	31%
Potential Value Multiple (PVM) = (CoE/IRR)	1.5	2.1	1.9	3.1	1.3	2.5	1.0	5.1	4.5	2.1	1.6	1.7	1.7	1.5	1.6	1.6	1.7	1.6	1.7	1.6	2.3
PVM Adj. Capacity (d) = (PVM*(c)*capacity)	915	427	378	1,226	3,336	3,349	2,591	9,720	4,663	469	260	79	87	154	0	0	0	0	0	0	26,716
EV (Rs mn)																					413,850
Adj Capex (adj. for milestone) (Rs mn)																					422,293
Adj. EV (EV + Adjusted Capex) (Rs mn)																					836,142
EVM (adj. EV/ (d)) (Rs mn/MW)																					31

Source: Company, Emkay Research

Financial Tables

Income Statement (Rs. Mn)

(Year Ending Mar 31)	FY10	FY11E	FY12E	FY13E
Net Sales	207	14,931	34,707	115,423
Growth (%)		7,112.8	132.5	232.6
Expenditure	1,280	9,273	18,980	54,318
Fuel Cost	221	8,392	17,276	48,593
O&M Cost	1,059	881	1,704	5,725
SG&A Expenses	0	0	0	0
Other Expenses	0	0	0	0
EBITDA	-1,073	5,658	15,727	61,105
Growth (%)			178.0	288.5
EBITDA margin (%)	-518.4	37.9	45.3	52.9
Depreciation	57	1,771	3,059	10,086
EBIT	-1,130	3,886	12,669	51,019
EBIT margin (%)	-545.9	26.0	36.5	44.2
Other Income	8,227	7,172	2,898	707
Interest expenses	70	2,305	4,068	14,097
PBT	7,027	8,753	11,498	37,629
Tax	187	2,755	2,705	7,625
Effective tax rate (%)	2.7	31.5	23.5	20.3
Adjusted PAT	6,840	5,998	8,793	30,004
Growth (%)	179.8	-12.3	46.6	241.2
Net Margin (%)	3304.3	40.2	25.3	26.0
E/O items	0	0	0	0
Reported PAT	6,840	5,998	8,793	30,004
(Profit)/loss from JV's/Ass/MI	0	0	0	0
PAT after MI	6,840	5,998	8,793	30,004
Growth (%)	179.8	-12.3	46.6	241.2

Balance Sheet (Rs. Mn)

(Year Ending Mar 31)	FY10	FY11E	FY12E	FY13E
Equity share capital	23,968	27,968	27,968	28,220*
Reserves & surplus	120,660	136,646	145,439	179,385
Net worth	144,628	164,614	173,407	207,605
Secured Loans	22,406	79,652	217,278	397,506
Unsecured Loans	0	0	0	0
Loan Funds	22,406	79,652	217,278	397,506
Net deferred tax liability	0	0	0	0
Total Liabilities	167,034	244,267	390,685	605,110
Gross Block	23,571	54,521	129,521	236,854
Less: Depreciation	-164	-1,935	-4,994	-15,080
Net block	23,407	52,586	124,527	221,774
Capital work in progress	68,028	124,928	238,914	361,071
Investment	0	0	0	0
Current Assets	82,528	74,356	35,575	33,166
Inventories	486	1,494	2,587	6,441
Sundry debtors	288	2,650	5,885	19,102
Cash & bank balance	80,490	62,948	19,840	359
Loans & advances	1,232	7,232	7,232	7,232
Other current assets	32	32	32	32
Current lia & Prov	6,929	7,600	8,329	10,899
Current liabilities	6,501	7,600	8,329	10,899
Provisions	428	0	0	0
Net current assets	75,599	66,755	27,246	22,267
Misc. exp	0	0	0	0
Total Assets	167,034	244,267	390,685	605,110

Cash Flow (Rs. Mn)

(Year Ending Mar 31)	FY10	FY11E	FY12E	FY13E
PBT (Ex-Other income)	-1,200	1,581	8,601	36,922
Depreciation	57	1,771	3,059	10,086
Interest Provided	70	2,305	4,068	14,097
Other Non-Cash items	0	0	0	0
Chg in working cap	2,787	-8,270	-3,599	-14,502
Tax paid	-13	-3,183	-2,705	-7,625
Operating Cashflow	1,701	-5,795	9,423	38,978
Capital expenditure	-41,833	-87,850	-188,986	-229,490
Free Cash Flow	-40,132	-93,645	-179,563	-190,512
Other income	8,227	17,172	2,898	707
Investments	0	0	0	0
Investing Cashflow	-33,606	-70,678	-186,088	-228,783
Equity Capital Raised	-1	4,000	0	3,953
Loans Taken / (Repaid)	9,081	57,246	137,625	180,228
Interest Paid	-70	-2,305	-4,068	-14,097
Dividend paid (incl tax)	0	0	0	0
Income from investments				
Others	0	0	0	240
Financing Cashflow	9,010	58,941	133,557	170,324
Net chg in cash	-22,895	-17,532	-43,108	-19,481
Opening cash position	103,388	80,490	62,948	19,840
Closing cash position	80,493	62,958	19,840	359

Key Ratios

(Year Ending Mar 31)	FY10	FY11E	FY12E	FY13E
Profitability (%)				
EBITDA Margin	-518.4	37.9	45.3	52.9
Net Margin	3304.3	40.2	25.3	26.0
ROCE	-0.7	1.9	4.0	10.2
ROE	4.8	3.9	5.2	15.7
RoIC	-1.6	2.0	3.5	8.3
Per Share Data (Rs)				
EPS	2.9	2.1	3.1	10.6
CEPS	2.9	2.8	4.2	14.2
BVPS	60.3	58.9	62.0	73.6
DPS	0.0	0.0	0.0	0.0
Valuations (x)				
PER	49.8	66.2	45.2	13.4
P/CEPS	49.3	51.1	33.5	10.0
P/BV	2.4	2.4	2.3	1.9
EV / Sales	1,363.6	27.7	17.1	6.9
EV / EBITDA	-263.1	73.2	37.8	13.1
Dividend Yield (%)	0.0	0.0	0.0	0.0
Gearing Ratio (x)				
Net Debt/ Equity	0.1	0.1	1.1	1.9
Net Debt/EBITDA	-19.6	3.0	12.6	6.5
Working Cap Cycle (days)	-120	40	23	56

Source: Company, Emkay Research

* We have taken equity dilution

25 January, 2011

Reco
Buy

CMP Target Price
Rs54 Rs71

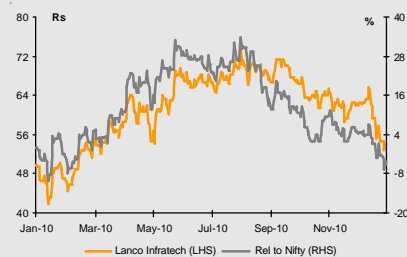
EPS change FY11E/12E (%) NA
Target price change (%) NA
Nifty 5,697
Sensex 19,008

Price Performance

(%)	1M	3M	6M	12M
Absolute	(13)	(20)	(19)	11
Rel. to Nifty	(9)	(14)	(23)	(0)

Source: Bloomberg

Relative price chart



Source: Bloomberg

Stock details

Sector	Power
Bloomberg	LANCI@IN
Equity Capital (Rs mn)	2408
Face Value (Rs)	1
No of shares o/s (mn)	2408
52 Week H/L (Rs)	75/41
Market Cap (Rs bn/USD mn)	130/2,847
Daily Avg Vol (No of shares)	5072510
Daily Avg Turnover (US\$ mn)	7.0

Shareholding Pattern (%)

	Dec-10	Sep-10	Jun-10
Promoters	68.0	68.0	68.0
FIINRI	20.4	20.7	20.2
Institutions	3.6	4.2	4.5
Private Corp	1.8	0.7	0.9
Public	6.3	6.5	6.5

Source: Capitaline

- **Lanco to commission one of the largest capacities (3,079 MW) in the private IPP space during FY10-FY12E, with the execution of most of its projects well on track**
- **Has highest domestic coal linkages (20mn MT) - Tied up 80% of its coal requirements + balanced off take with 5,000MW (54% of planned) tied up with fuel cost as a pass through**
- **Driven by its in-house EPC business, the company has one of the lowest capital cost per MW of Rs46mn/MW as compared to the universe average of Rs51mn/MW**
- **Valuations cheapest - nearest to Rs2.7/unit (long term merchant rate of Rs2.9/unit) and EVM of Rs27Mn (cheapest in our universe); Initiate coverage with 'Buy', PT of Rs71/share**

Commissioning one of the largest capacities by a private IPP during FY10-FY12E

Lanco will be commissioning 3,079 MW during FY10-FY12E, which is one of the largest capacities to be commissioned during the period by a private utility. With the EPC work done by the company itself, the execution of most of its projects are well on track.

Good fuel security and balanced off take mix; low capital cost per MW

Lanco has very good fuel security (80% tied up) with highest domestic coal linkages (20mn MT) under its belt, and balanced off-take with almost 5,000MW (54% of the total planned capacity) already tied up in case I and cost plus basis. With fuel cost pass through in most of the contracts, company is largely protected from any unusual fuel price increases. Moreover, driven by its in-house EPC business, the company has one of the lowest capital cost per MW of Rs46mn, which is a 9% discount to our universe average capital cost of Rs51 mn/MW.

Valuations cheapest in our universe; Initiate with 'Buy' rating

In our relative valuations matrix based on EVM, Lanco is one of the cheapest stocks in our universe with an EVM of Rs27mn/MW (18% discount). At CMP of Rs54/Share, the company is trading at 2.2x FY12E Book value with expected FY11E-FY15E average ROE of 17%. We like the business model of the company with highest fuel security, balanced off-take and low capital cost and assign a DCF based PT of Rs71/share. Considering that (1) EPC business is a large sized business with an order book of Rs250bn, contributing significant value (Rs16/Share) to the PT and (2) current valuations provide highest margin of safety implying long term merchant power prices of Rs2.9/unit, nearest to Rs2.7/unit, we initiate coverage with a 'Buy' rating. Key risk to our call - Any reduction in linkage coal quantities by Coal India, and Amarkantak-I Supreme court case verdict against Lanco.

Valuation table

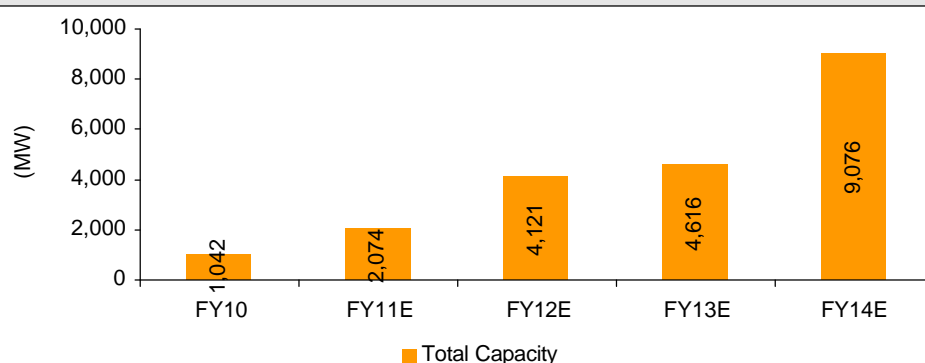
Y/E, Mar	Net Sales	EBIDTA (Core)	EBIDTA (%)	APAT	AEPS (Rs)	EPS % chg	RoE (%)	P/E (x)	EV / EBITDA	P/BV (x)
FY10	80,320	14,515	18.1	4,764	2.0	42.1	16.6	27.0	13.4	3.2
FY11E	99,443	25,202	25.3	8,623	3.6	81.0	22.3	14.9	9.3	2.5
FY12E	146,651	45,931	31.3	6,693	2.8	-22.4	15.8	19.2	7.1	2.1
FY13E	170,961	52,199	30.5	9,298	3.9	38.9	17.4	13.9	6.8	1.7

Source: Emkay Research

Theme Charts

Lanco will be commissioning the largest capacities during FY10-FY12E

To commission 3,079 MW during FY10-FY12E



Source: Company, Emkay Research

Has the highest domestic coal linkages in our coverage universe

Very good fuel security (80% tied up) with highest domestic coal linkages (20mn MT) under its belt

We have not considered coal from Griffin coal mines in our numbers

Mn MT	FY10	FY11E	FY12E	FY13E	FY14E	FY15E	FY16E	FY17E
Fuel Requirement								
Imported Coal	0.0	1.3	3.5	3.5	3.5	3.5	3.5	3.5
Coal	1.2	2.9	8.5	8.5	17.6	25.3	25.3	25.3
Gas	2.1	3.2	3.5	5.7	6.4	6.4	6.4	6.4
Total Coal Requirement	1.2	4.3	12.0	12.0	21.2	28.8	28.8	28.9
Total Gas Requirement	2.1	3.2	3.5	5.7	6.4	6.4	6.4	6.4
Fuel Availability								
Imported Coal	0.0	1.3	3.5	3.5	3.5	3.5	3.5	3.5
Coal	1.15	2.94	8.51	8.52	14.54	19.49	19.52	19.54
Gas			3.32	3.18	3.15	3.15	3.16	3.17
Total Coal Availability	1.2	4.3	12.0	12.0	18.1	23.0	23.0	23.1
Total Gas Availability			3.32	3.18	3.15	3.15	3.16	3.17
Net Shortfall (Coal)	0.0	0.0	0.0	0.0	3.1	5.8	5.8	5.8
Net Shortfall (Gas)	2.15	3.16	0.18	2.50	3.21	3.21	3.21	3.21
% Shortfall (Coal)	0%	0%	0%	0%	15%	20%	20%	20%
% Shortfall (Gas)	100%	100%	5%	44%	50%	50%	50%	50%

Source: Company, Emkay Research

Most of its tied up capacity is under fuel cost pass through agreement

Volatilities in fuel prices to have minimum impact

Project	Tied up Capacity (MW)	Off Take type	Tariffs (Rs/unit)	Commissioning Date of first unit	Fuel Cost Pass through
Kondapalli I	368	Case 1	3.0	Apr-00	Yes
Aban	120	Case 1	2.2	Aug-05	Yes
Amarkantak II	300	Regulated*	Cost plus	Sep-10	Yes
Amarkantak III	1,320	Regulated	Cost plus	Jul-13	Yes
Udupi I&II	1,200	Regulated	Cost plus	Jan-11	Yes
Anpara	1,200	Case 1	2.1	Mar-11	Yes
Babandh	1,320	Regulated	Cost plus	Jul-13	Yes
Vidarbha	1,320	Case 1	2.8	Jul-13	Yes
Total tied up capacity	7,148				

Source: Company, Emkay Research

*Cap of Rs2.34/unit

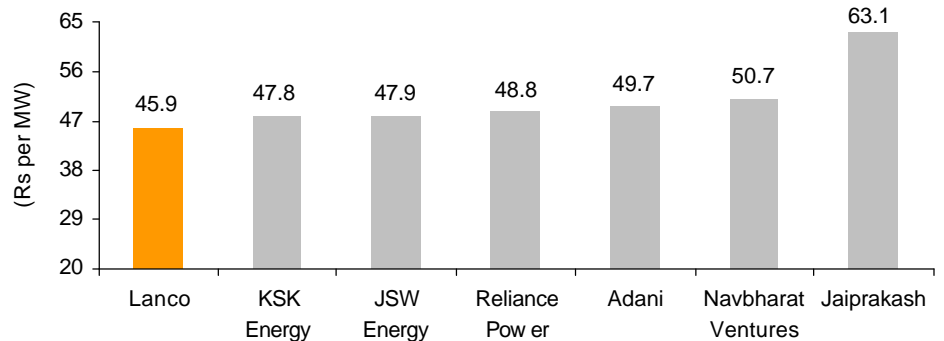
Project execution at an advanced stage

	DPR Prepared	Techno Economic Clearance (TEC)	Investment Approval COEA	Land Acquisition	Environmental Clearance	Other Regulatory Clearances	Water Source TieUp	Evacuation Arrangements	Financial Closure	Equipment Ordering
Kondapalli I	NA	NA	NA	✓	✓	✓	✓	✓	✓	✓
Kondapalli II	NA	NA	NA	✓	✓	✓	✓	✓	✓	✓
Aban	NA	NA	NA	✓	✓	✓	✓	✓	✓	✓
Amarkantak I	NA	NA	NA	✓	✓	✓	✓	✓	✓	✓
Amarkantak II	NA	NA	NA	✓	✓	✓	✓	✓	✓	✓
Amarkantak III	NA	NA	NA	✓	✓	✓	✓	x	x	✓
Udupi I&II	NA	NA	✓	✓	✓	✓	✓	✓	✓	✓
Anpara	NA	NA	NA	✓	✓	✓	✓	✓	✓	✓
Babandh	NA	NA	NA	✓	✓	✓	✓	✓	✓	✓
Vidarbha	NA	NA	NA	50%	50%	✓	✓	✓	✓	✓
Kondapalli III	NA	NA	NA	✓	✓	✓	✓	✓	✓	✓
Vamshi	✓	✓	✓	✓	✓	✓	NA	✓	✓	✓
Vamshi Ind	✓	✓	✓	✓	✓	✓	NA	✓	✓	✓
Lanco Green	x	x	x	x	x	x	NA	x	x	x
Ultranchal	x	x	x	x	x	x	NA	x	x	x
Teesta	✓	✓	✓	✓	✓	✓	NA	✓	✓	✓

Source: Company, Emkay Research

Has the lowest capital cost per MW

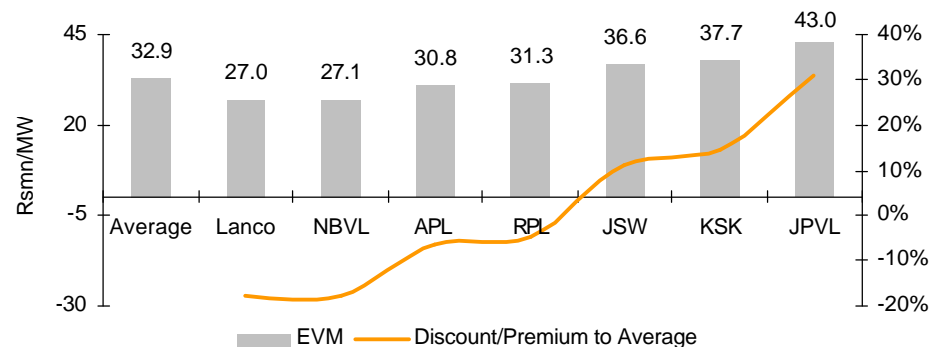
Driven by in-house EPC, Lanco's capital cost per MW stands at Rs46mn/MW versus sector average of Rs51mn/MW....



Source: Company, Emkay Research

On EVM, trades at a discount to our universe average

EVM of Rs27mn, 14% discount to our universe average of Rs33mn



Source: Company, Emkay Research

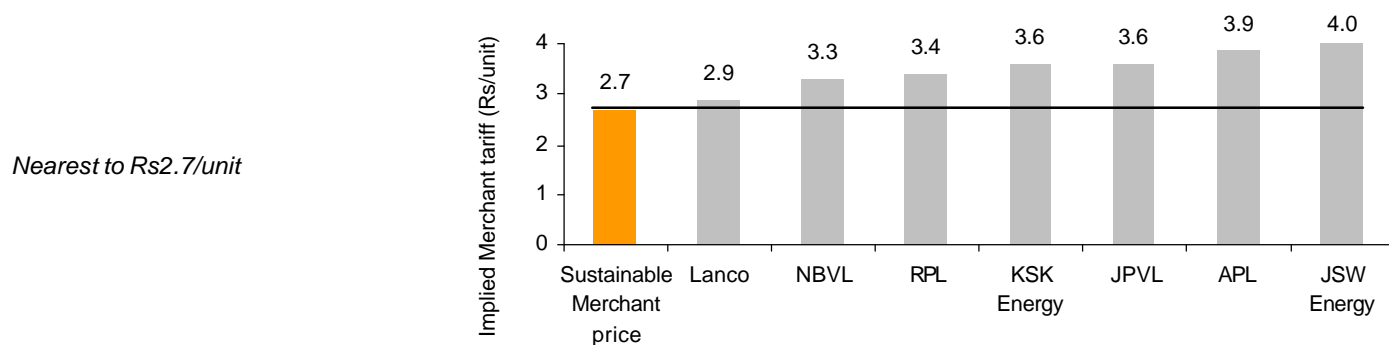
Sum of parts valuation

	Total Capacity (MW)	Economic Interest	Cost Of Equity	NPV Rsmn	JSW's share milestone Adj. (Rsmn)	Rs per Share
Kondapalli I	734	59.0%	13.9%	14268	8418	4
Amarkantak I	300	100.0%	17.5%	14811	14811	6
Amarkantak II	300	100.0%	14.0%	4008	4008	2
Amarkantak III	1320	100.0%	18.3%	13320	4033	2
Udupi I&II	1200	100.0%	14.1%	16506	16506	7
Anpara	1200	100.0%	12.5%	9436	9436	4
Babandh	1320	100.0%	16.6%	24836	24836	10
Vidarbha	1320	100.0%	15.0%	18575	18575	7
Kondapalli III	742	59.0%	18.6%	12168	3769	2
Teesta	500	99.0%	11.0%	5554	2749	1
NPV Per Share						46
Add: Cash Per Share						10
Add: Value of EPC Business Rs/share						16
Fair value per share						71

Fair value of Rs71/share based on DCF

Source: Company, Emkay Research

Has one of the lowest implied long term merchant rates

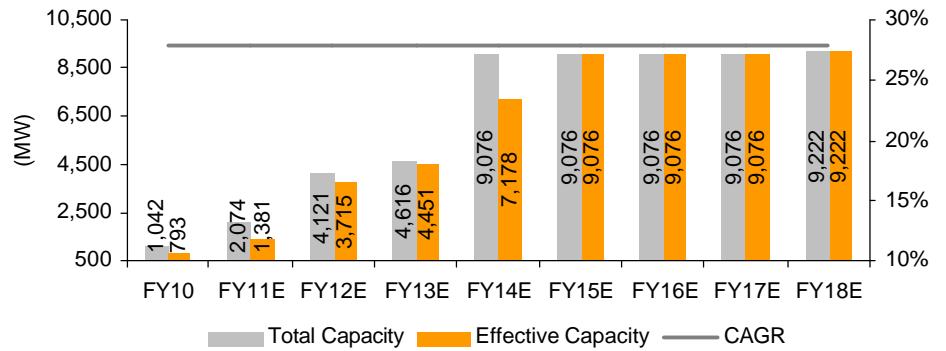


Source: Company, Emkay Research

Company Background

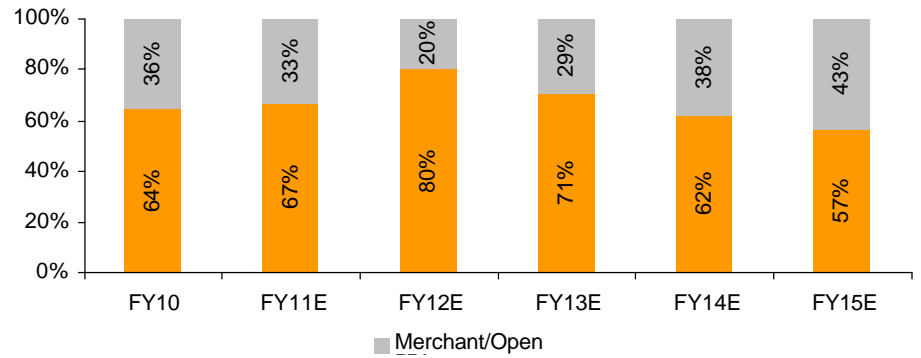
To commission 9,222 MW by FY18E

Lanco plans to ramp its installed capacity to 9,222 MW by FY18E



Source: Company, Emkay Research

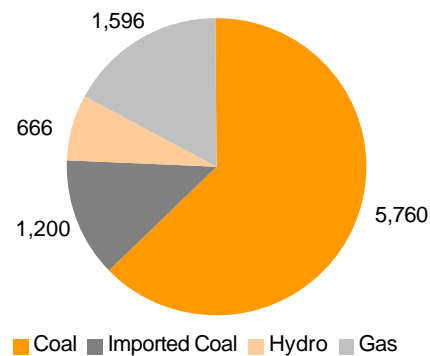
Off take wise breakup



Source: Company, Emkay Research

Fuel wise mix of the total planned capacity (MW)

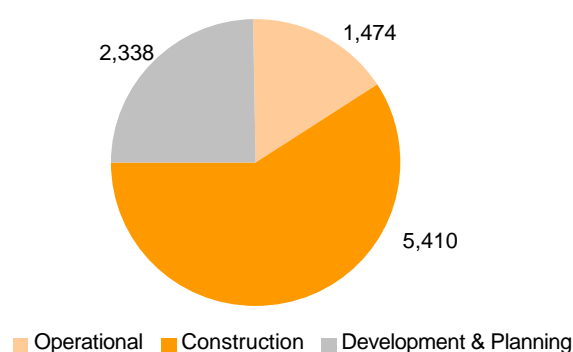
6,960 MW of the total planned capacity is coal based



Source: Company, Emkay Research

Majority of the planned capacity is under construction (MW)

Out of 9,222 MW total planned capacity, 1,474 MW is operational & 5,410 MW is under construction



Source: Company, Emkay Research

Note: We have not considered Udipi first unit in operational capacity

Power projects constitute 88% of the total order book

Order Book Composition	FY09	FY10
Power Projects	83%	88%
Building Projects	9%	7%
Road Projects	7%	1%
Irrigation	1%	2%
TLT	0%	2%
Others	1%	0%

Source: Company, Emkay Research

Per unit Calculations

Rs/Unit	FY11E	FY12E	FY13E	FY14E	FY15E
Average PPA Tariff	2.44	2.10	2.02	2.14	2.16
Average Tariff	3.24	2.59	2.60	2.69	2.78
Average Fuel Cost	1.18	1.01	1.09	1.06	1.08
O&M Cost	0.17	0.16	0.17	0.17	0.18
Depreciation	0.63	0.75	0.66	0.80	0.78
Interest	0.44	0.46	0.43	0.50	0.50
PBT Per Unit	0.82	0.22	0.25	0.16	0.24
Tax per unit	0.16	0.04	0.05	0.03	0.05
PAT Per unit	0.65	0.17	0.20	0.13	0.19

Source: Company, Emkay Research

Fund requirements

Equity Dilution (Rs mn)	FY11E	FY12E	FY13E
OCF	10,002	17,548	24,540
Capex	56,296	66,330	83,410
Equity Requirement	17,158	8,371	17,535
Debt Repayment	1,934	3,950	9,805
FCFe	(7,663)	9,970	(1,047)
Cash in Hand at the beginning	18,264	23,248	5,857
Equity Dilution	0.0%	0.0%	0.0%

Source: Company, Emkay Research

*Considering CMP

Note: We have not considered cash out flow of Griffin acquisition in our numbers due to lack of clarity on exact payment schedule and ambiguity over future capex

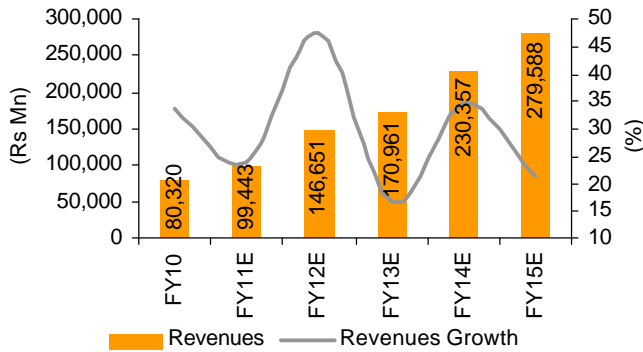
Assumptions

	Kondapalli		Aban		Amarkantak		Udupi I&I		Anpara		Babandh		Vidarbha		Kondapalli III		Vamshi		Vamshi Ind		Lanco		Ultranchal		Teesta		
	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	
Capacity (MW)	368	366	120	300	300	1320	1200	1200	1320	1320	1320	1320	742	10	10	70	70	10	10	70	70	70	76	500			
COD of 1st Unit	Apr-00	Sep-09	Aug-05	Jun-09	Sep-10	Jul-13	Jan-11	Mar-11	Jul-13	Jul-13	Jul-13	Jul-13	Dec-11	Jan-09	Mar-10	Mar-17	Mar-17	Mar-10	Mar-17	Mar-17	Mar-17	Mar-17	Mar-17	Mar-13			
Capital Cost (Rsmn)	11	12	4	15	15	69	51	47	68	66	66	25	1	1	1	5	5	1	1	5	5	5	30				
Equity (%)	31	0	30	20	20	20	20	20	20	20	20	30	20	20	20	20	20	20	20	20	20	20	20	20			
Debt (%)	69	100	70	80	80	80	80	80	80	80	80	70	80	80	80	80	80	80	80	80	80	80	80	80			
SHR (Kcal/Kwh)	1,900	1,800	1,900	2,400	2,350	2,200	2,250	2,250	2,200	2,200	2,200	2,200	1,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
PAF (%)	90	90	93	93	93	93	93	93	93	93	93	93	93	99	99	99	99	99	99	99	99	99	99	99			
PLF (%)																											
Tied Up Capacity	88	85	82	90	90	90	90	90	90	90	90	90	90	50	50	50	50	50	50	50	50	50	50	50			
Merchant Capacity	80	80	80	80	80	80	80	80	80	80	80	80	80	45	45	45	45	45	45	45	45	45	45	45			
Aux Consumption (%)	2.5	2.5	2.5	8.5	8.5	6.5	7.5	7.0	7.0	7.0	7.0	7.0	2.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0			
O&M (Rsmn/MW or % of Cap cost)	1.2	1.2	1.2	1.2	1.2	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%			
Fuel Requirement (Mn MT)	1.5	1.5	0.5	1.4	1.5	5.7	3.6	5.7	5.6	5.8	5.8	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
Fuel Tied Up (%)	100	100	100	100	100	0	100	100	100	100	100	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
GCV (Kcal/Kg)	9,800	8,500	9,800	3,780	3,780	3,780	6,000	3,780	3,780	3,780	3,780	8,500	8,500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
Landed Fuel Cost (Rs/MT)	253	239	253	997	997	1,615	2,484	1,012	1,156	1,372	1,372	239	239	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
Fuel Escalation (%)																											
Coal	4	4	4	4	4	4	3	0	4	4	4	4	4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
OffTake																											
Tied Up (MW)	368	0	120	0	300	400	1181	1100	330	720	720	0	0	10	10	70	70	10	10	70	70	0	500				
Merchant or Open (MW)	0	366	0	300	0	920	19	100	990	600	600	742	0	0	0	0	0	0	0	0	0	0	76	0			
Levelized Tariff (Rs/Unit)	NA	NA	2.23	NA	2.34	NA	NA	2.10	NA	2.80	2.80	NA	NA	2.87	2.87	2.87	2.87	2.87	2.87	2.87	2.87	NA	NA	2.32			

Source: Company, Enkay Research

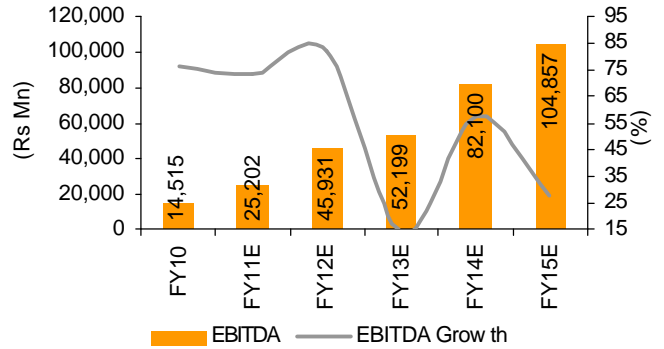
Financials

Revenue CAGR of 29.5% during FY11E-15E



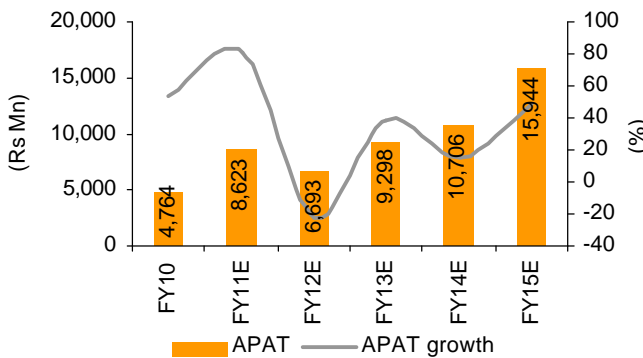
Source: Company, Emkay Research

EBITDA CAGR of 42.8% during FY11E-15E



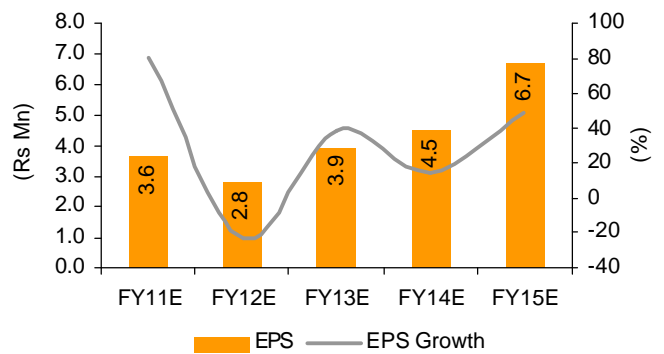
Source: Company, Emkay Research

APAT CAGR of 16.6% during FY11E-15E



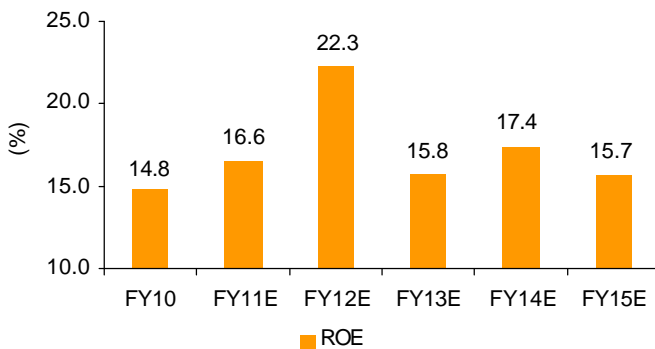
Source: Company, Emkay Research

Earnings per share CAGR of 10.6% during FY11E-15E



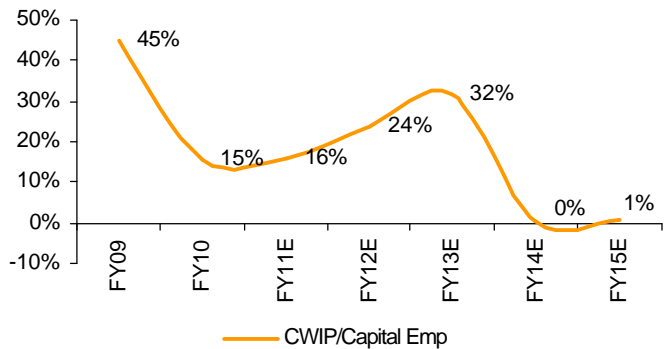
Source: Company, Emkay Research

Average ROE of 13.3% over FY11E-15E



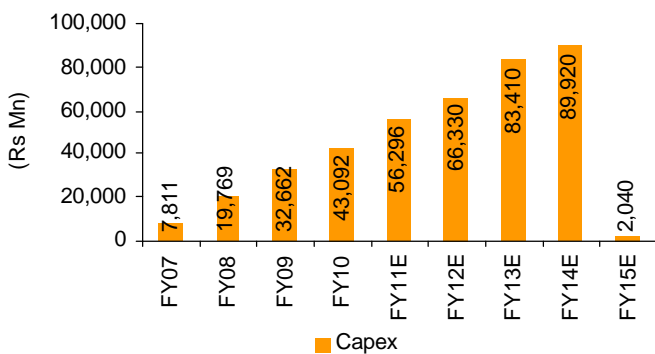
Source: Company, Emkay Research

CWIP/Total Capital Employed



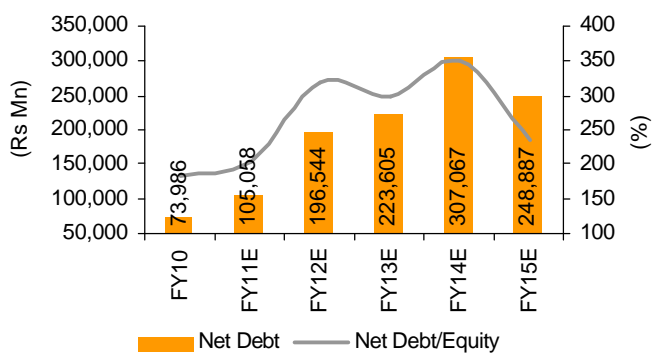
Source: Company, Emkay Research

Capex



Source: Company, Emkay Research

Net Debt Position



Source: Company, Emkay Research

EVM Calculation

Project	Kondapalli		Kondapalli		Aban		Amarkantak		Amarkantak		Udupi		Anpara		Babandh		Vidarbha		Kondapalli		Vamshi		Lanco		Teesta		Total	
	I	II	III	Operational	Operational	Operational	Operational	Operational	Development	Construction	Construction	Construction	Construction	Construction	Construction	Construction	Construction	Construction	Construction	Construction	Construction	Construction	Construction	Construction	Construction	Construction		Construction
Capacity (MW)	368	366	366	120	300	300	300	1,320	1,320	1,200	1,200	1,200	1,320	1,320	1,320	742	742	10	10	10	10	70	70	76	500	9,222		
Fuel	Gas	Gas	Gas	Gas	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Gas	Gas	Hydro	Hydro	Hydro	Hydro	Hydro	Hydro	Hydro	Hydro	Hydro		
PRE CONSTRUCTION PHASE (Weight)	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	
DPR Prepared	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Techno Economic Clearance (CEA)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Investment Approval CCEA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Land Acquisition	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Environmental Clearance	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Other Regulatory Clearances	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Water Source Tie Up	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Evacuation Arrangements	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Financial Closure	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Equipment Ordering	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Adjustment Factor (a)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.9	
CONSTRUCTION PHASE (Weight)	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50
Site Levelling (5%)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
BTG Foundation (10%)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Boiler Erection (Not for Hydro) (20%)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Boiler Light up & Drum Lifting (5%)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Hydraulic Test (10%)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Condenser Erection (5%)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
TG Erection (15%)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Synchronization (20%)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Commercialization (10%)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Adjustment Factor (b)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.4	
Net Adjustment Factor (a*b) (c)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.6	
Cost of Equity (CoE)	13%	15%	12%	12%	18%	14%	14%	18%	18%	14%	14%	14%	17%	15%	12%	19%	19%	11%	11%	11%	11%	11%	11%	15%	15%	15%	15%	
Equity IRR (IRR)	44%	0%	25%	0%	66%	20%	20%	30%	30%	22%	22%	15%	49%	37%	15%	46%	46%	23%	25%	25%	25%	22%	28%	20%	20%	29%		
Potential Value Multiple (PVM)=(CoE/IRR)	3.4	0.0	2.0	2.0	3.8	1.4	1.4	1.7	1.7	1.5	1.5	1.2	2.9	2.5	1.2	2.5	2.5	2.1	2.3	2.3	2.0	2.0	1.8	1.8	1.8	2.0		
PVM Adj. Capacity (d) = (PVM*(c)*capacity)	1,480	0	122	122	1,128	387	665	665	665	1,660	1,660	1,154	2,042	1,434	569	569	21	21	23	23	0	0	0	453	11,137			
EV (Rs mn)																												
Adj Capex (adj. for milestone) (Rs mn)																											195,021	
Adj. EV (EV + Adjusted Capex) (Rs mn)																											105,326	
EVM (adj. EV/ (d)) (Rs mn/MW)																											300,347	

Source: Company, Enrkey Research

Financial Tables

Income Statement (Rs. Mn)

(Year Ending Mar 31)	FY10	FY11E	FY12E	FY13E
Net Sales	80,320	99,443	146,651	170,961
Growth (%)	33.7	23.8	47.5	16.6
Expenditure	65,805	74,241	100,721	118,763
Fuel Cost	44,657	49,977	70,468	83,805
O&M Cost	21,148	24,264	30,253	34,958
SG&A Expenses	0	0	0	0
Other Expenses	0	0	0	0
EBITDA	14,515	25,202	45,931	52,199
Growth (%)	76.2	73.6	82.2	13.6
EBITDA margin (%)	18.1	25.3	31.3	30.5
Depreciation	3,479	6,635	20,596	21,790
EBIT	11,036	18,568	25,334	30,409
EBIT margin (%)	13.7	18.7	17.3	17.8
Other Income	1,839	1,453	1,019	1,487
Interest expenses	3,554	5,817	13,752	15,562
PBT	9,321	14,204	12,601	16,333
Tax	3,642	3,914	3,645	4,475
Effective tax rate (%)	39.1	27.6	28.9	27.4
Adjusted PAT	5,679	10,290	8,956	11,859
Growth (%)	54.2	81.0	-22.4	38.9
Net Margin (%)	7.1	10.3	6.1	6.9
E/O items	0	0	0	0
Reported PAT	5,679	10,290	8,956	11,859
(Profit)/loss from JV's/Ass/MI	-915	-1,667	-2,263	-2,561
PAT after MI	4,764	8,623	6,693	9,298
Growth (%)	54.2	81.0	-22.4	38.9

Balance Sheet (Rs. Mn)

(Year Ending Mar 31)	FY10	FY11E	FY12E	FY13E
Equity share capital	2,385	2,385	2,385	2,385
Reserves & surplus	38,171	49,181	59,075	72,337
Net worth	40,556	51,567	61,460	74,723
Secured Loans	83,614	128,306	202,401	260,224
Unsecured Loans	0	0	0	0
Loan Funds	83,614	128,306	202,401	260,224
Net deferred tax liability	1,003	0	0	0
Total Liabilities	125,173	179,873	263,861	334,946
Gross Block	61,644	117,837	198,220	214,887
Less: Depreciation	-10,867	-17,502	-37,270	-58,151
Net block	50,777	100,335	160,950	156,736
Capital work in progress	19,237	28,950	63,767	106,710
Investment	11,593	0	0	0
Current Assets	78,675	85,841	75,615	108,604
Inventories	16,267	16,477	18,304	19,253
Sundry debtors	22,270	24,241	30,408	32,595
Cash & bank balance	18,264	23,248	5,857	36,618
Loans & advances	21,800	21,800	20,972	20,063
Other current assets	74	74	74	74
Current lia & Prov	35,110	35,250	36,468	37,100
Current liabilities	35,110	35,250	36,468	37,100
Provisions	0	0	0	0
Net current assets	43,565	50,591	39,148	71,504
Misc. exp	0	0	0	0
Total Assets	125,173	179,873	263,861	334,946

Cash Flow (Rs. Mn)

(Year Ending Mar 31)	FY10	FY11E	FY12E	FY13E
PBT (Ex-Other income)	7,482	12,751	11,582	14,847
Depreciation	3,479	6,635	20,596	21,790
Interest Provided	3,554	5,817	13,752	15,562
Other Non-Cash items	440	-1,009	-1	0
Chg in working cap	-15,028	-2,042	-5,948	-1,594
Tax paid	-3,642	-3,914	-3,645	-4,475
Operating Cashflow	-3,715	18,238	36,337	46,129
Capital expenditure	-19,355	-65,906	-116,027	-60,519
Free Cash Flow	-23,071	-47,668	-79,691	-14,390
Other income	1,839	1,453	1,019	1,487
Investments	-3,508	11,593	0	0
Investing Cashflow	-21,024	-52,860	-115,009	-59,033
Equity Capital Raised	8,097	-44	0	0
Loans Taken / (Repaid)	27,644	44,692	74,095	57,823
Interest Paid	-3,554	-5,817	-13,752	-15,562
Dividend paid (incl tax)	0	0	0	0
Income from investments				
Others	-840	775	938	1,404
Financing Cashflow	31,347	39,606	61,281	43,665
Net chg in cash	6,608	4,984	-17,391	30,761
Opening cash position	11,656	18,264	23,248	5,857
Closing cash position	18,263	23,248	5,856	36,618

Key Ratios

(Year Ending Mar 31)	FY10	FY11E	FY12E	FY13E
Profitability (%)				
EBITDA Margin	18.1	25.3	31.3	30.5
Net Margin	7.1	10.3	6.1	6.9
ROCE	10.5	12.2	11.4	10.2
ROE	16.6	22.3	15.8	17.4
RoIC	8.4	10.7	8.7	7.9
Per Share Data (Rs)				
EPS	2.0	3.6	2.8	3.9
CEPS	3.5	6.4	11.4	13.0
BVPS	17.0	21.6	25.8	31.3
DPS	0.0	0.0	0.0	0.0
Valuations (x)				
PER	27.0	14.9	19.2	13.9
P/CEPS	15.6	8.4	4.7	4.1
P/BV	3.2	2.5	2.1	1.7
EV / Sales	2.4	2.4	2.2	2.1
EV / EBITDA	13.4	9.3	7.1	6.8
Dividend Yield (%)	0.0	0.0	0.0	0.0
Gearing Ratio (x)				
Net Debt/ Equity	1.8	2.0	3.2	3.0
Net Debt/EBIDTA	5.1	4.2	4.3	4.3
Working Cap Cycle (days)	93	68	71	55

Source: Company, Emkay Research

Note: We have assumed no dividend payout

Attractive MOUs/contracts, but materilization risk

25 January, 2011

Reco
Hold

CMP Target Price
Rs107 Rs110

EPS change FY11E/12E (%) NA
Target price change (%) NA
Nifty 5,697
Sensex 19,008

Price Performance

(%)	1M	3M	6M	12M
Absolute	(22)	(37)	(34)	(45)
Rel. to Nifty	(18)	(33)	(37)	(51)

Source: Bloomberg

Relative price chart



Source: Bloomberg

Stock details

Sector	Power
Bloomberg	KSK@IN
Equity Capital (Rs mn)	3726
Face Value (Rs)	10
No of shares o/s (mn)	373
52 Week H/L (Rs)	207/104
Market Cap (Rs bn/USD mn)	40/876
Daily Avg Vol (No of shares)	192296
Daily Avg Turnover (US\$ mn)	0.6

Shareholding Pattern (%)

	Dec-10	Sep-10	Jun-10
Promoters	52.7	52.7	52.7
FIINRI	35.7	35.6	35.8
Institutions	6.1	6.7	7.6
Private Corp	4.3	4.0	3.4
Public	1.2	1.0	0.5

Source: Capitaline

- **The lower off-take by Viraj (220MW) and Lafarge (26MW) for Wardha Warora and VS Lignite plant is a blessing in disguise creating an opportunity for KSK to trade in early merchant power**
- **Fuel MOUs for almost 80% capacity at cost plus and merchant power locked in for three years at attractive rates with Reliance Infra (Rs4.85/Unit - FY11E-FY14E)**
- **But materialization of MOUs is a key concern; History suggests risk - (1) GMDC's Morga block declared under no-go zone, (2) MSEDCL asking KSK to back down generation or supply at lower tariff than contracted Rs5.13/unit, (3) Coal India's cost plus supplies getting delayed**
- **Implying long term merchant price of Rs3.6/unit and EVM of Rs38mn/MW; Initiate with 'Hold'**

Lower off take by Viraj - a blessing in disguise

Lower off-take by Viraj (50MW instead of 220MW) and Lafarge (26MW deferred for two years) for Wardha Warora and VS Lignite is a blessing in disguise. Both of these projects have commissioned /are commissioning in FY11E or early FY12E, enabling it to enjoy the early merchant power opportunity - tied up with Reliance Infra at Rs4.85/Unit (FY11E-14E).

Fuel MOUs for 80% capacity and off take secured on attractive terms

In case the contracts/MOUs with GMDC, GIDC, PIPDC, MPSCMC go through smoothly, KSK's fuel security would be the best among peers with almost 80% availability (39mn MT) at very competitive costs (most cases cost plus). In terms of off-take, it has tied up - (1) 560MW in group captives with attractive IRRs (equity investment 51-74% but economic interest 100%), (2) 270MW with Reliance Infra at Rs4.85/unit (FY11E-FY14E) and (3) 2,270MW in case I and cost plus projects.

But materialization of MOUs is a key concern; history suggests risk

We highlight three instances which suggest risk in materialization of attractive MOUs/Contracts - (1) GMDC's Morga block declared under no-go zone, (2) MSEDCL asking KSK to back down generation or supply at lower tariff than contracted Rs5.13/unit, (3) Coal India's cost plus supplies getting delayed.

Implied Tariff of Rs3.6/unit; Initiate with 'Hold' rating

At CMP of Rs107/Share, stock is trading at 1.1x FY12E Book value with expected FY11E-15E ROE average of 17%. We initiate coverage with 'Hold' rating and PT of Rs110/Share. Key risks to our call - (1) execution delays/any other issue in Wardha Warora, (2) lower supply/cancellation of fuel supply MOUs/Contracts/linkages and (3) failure to make alternative arrangements in place of GMDC's Morga block.

Valuation table

Y/E, Mar	Net Sales	EBIDTA (Core)	EBIDTA (%)	APAT	AEPS (Rs)	EPS % chg	RoE (%)	P/E (x)	EV / EBITDA	P/BV (x)
FY10	4,534	2,568	56.6	1,751	4.7	19.7	7.6	22.8	31.7	1.4
FY11E	8,213	4,461	54.3	2,048	5.5	17.0	7.3	19.5	16.8	1.3
FY12E	20,046	11,142	55.6	4,870	13.1	137.5	14.7	8.2	11.1	1.1
FY13E	28,205	15,074	53.4	5,830	13.4	3.0	13.6	8.0	13.8	0.9

Source: Emkay Research

Theme Charts

Lower offtake- blessing in disguise

Wardha Warora - 540 MW	Previous allocation	Current Allocation	Tariffs
Viraj	270	50 MW till FY14, then 141 MW	Fixed Cost + Fuel Cost
Others	129	129	Fixed Cost + Fuel Cost
Merchant	141	361	

Source: Company, Emkay Research

Lower off-take by Viraj (50MW instead of 220MW) and Lafarge (26MW deferred for two years) for Wardha Warora and VS Lignite is a blessing in disguise.

However, MSEDCL asking KSK to back down generation or supply at lower tariff than contracted Rs5.13/unit highlights that materialization of MOUs/contracts remains a risk

VS Lignite - 135 MW	Previous allocation	Current Allocation	Tariffs
Lafarge	26	26 MW after Dec'2012	Fixed Cost + Fuel Cost
Others	109	109	Fixed Cost + Fuel Cost
Merchant	0	26 MW till Dec'2012	

Source: Company, Emkay Research

KSK has 80% fuel security- best among our coverage universe

Mn MT	FY10	FY11E	FY12E	FY13E	FY14E	FY15E	FY16E	FY17E
Fuel Requirement								
Coal	0.6	2.0	4.8	7.1	15.8	38.6	48.7	48.7
Gas	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Total Coal Requirement	0.6	2.0	4.8	7.1	15.8	38.6	48.7	48.7
Total Gas Requirement	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Fuel Availability								
Coal	0.4	1.0	3.7	6.9	15.6	38.4	39.3	39.3
Gas	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Total Coal Availability	0.4	1.0	3.7	6.9	15.6	38.4	39.3	39.3
Total Gas Availability	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Net Shortfall (Coal)	0.2	1.0	1.1	0.2	0.2	0.2	9.4	9.4
Net Shortfall (Gas)	0	0	0	0	0	0	0	0
% Shortfall (Coal)	31%	51%	23%	3%	1%	1%	19%	19%
% Shortfall (Gas)	0%	0%	0%	0%	0%	0%	0%	0%

Source: Company, Emkay Research

If the contracts/MOUs with GMDC, GIDC, PIPDC, MPSMC go through smoothly, KSK's fuel security would be the best among peers with almost 80% availability

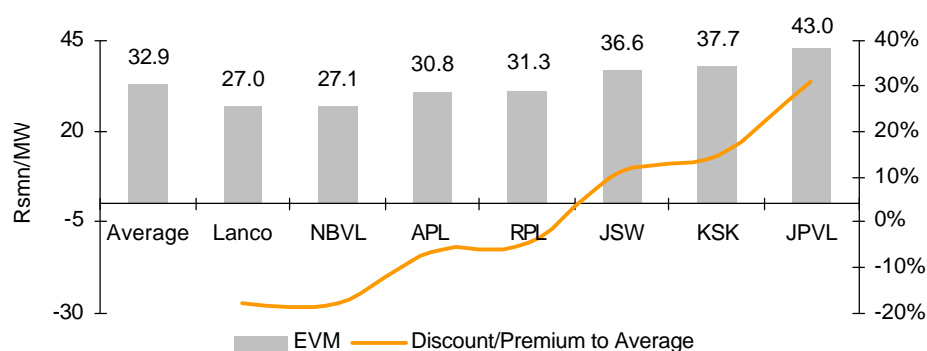
Innovative capital structure to maximize project ROEs

Projects	Total Capacity (MW)	Equity Stake	Economic Interest	Total Equity Requirement (Rsmn)	KSK's Equity Contribution (Rsmn)	Equity IRR
Arasmeta	43	51%	100%	510	260	33%
Sai Regency	58	51%	100%	550	281	26%
Sitapuram	43	51%	100%	480	245	61%
VS Lignite	135	100%	100%	1,725	1,725	18%
Wrddh Warora	540	100%	100%	4,820	4,820	21%
Arasmeta Exp	43	51%	100%	440	224	34%
Mahanadi	3,600	92%	92%	40,475	37,350	16%
Narmada	1,800	74%	100%	20,238	14,976	38%
JR Power	1,800	51%	100%	20,238	10,321	32%
Vidarbha	1,800	100%	100%	20,238	20,238	30%
Dibbin HEP	130	51%	100%	2,375	1,211	22%
Kameng HEP	600	51%	100%	11,250	5,738	20%
Kameng Basin	345	51%	100%	6,250	3,188	21%

KSK has implemented an innovative funding structure. KSK has retained majority stake with equity stakes in most of the projects in the range of 51%-74%. However, the economic interest of KSK in all the projects stands at 100%

Source: Company, Emkay Research

Currently trades at a 15% premium to our universe on EVM basis



But current valuation implies an EVM of Rs38mn/mw

Source: Company, Emkay Research

Sum of parts valuation

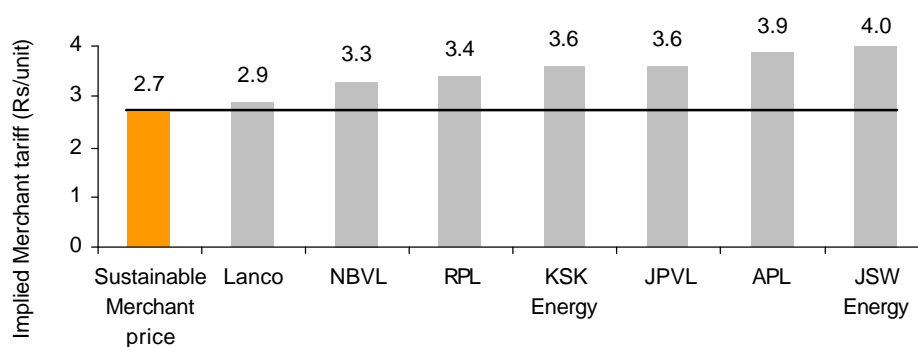
Fair value of Rs110/share based on DCF

	Total Capacity (MW)	Economic Interest	Cost Of Equity	NPV Rsmn	KSK's share milestone Adj. (Rsmn)	Rs per Share
Arasmeta	43	100.0%	11.5%	1400	1400	4
Sai Regency	58	100.0%	10.5%	1478	1478	4
Sitapuram	43	100.0%	11.1%	1873	1873	5
VS Lignite	135	100.0%	11.4%	2820	2820	8
Wrddh Warora	540	100.0%	15.7%	9059	9059	24
Arasmeta Exp	43	100.0%	10.0%	1434	1434	4
Mahanadi	3600	92.3%	15.0%	16761	4190	11
NPV Per Share						60
Add: Cash Per Share						31
Add: Value of Projects Business Rs/share						19
Fair Value per share						110

Source: Company, Emkay Research

An implied long term merchant rate of Rs3.6/unit

Current valuation imply merchant power prices of Rs3.6/unit (33% higher than Rs2.7/unit)

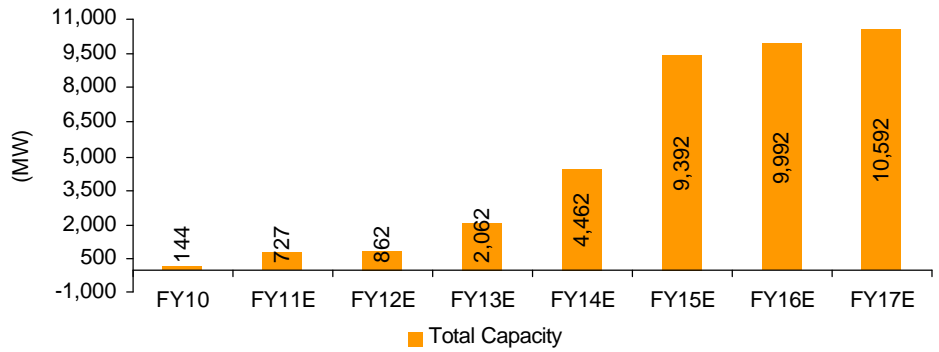


Source: Company, Emkay Research

Company Background

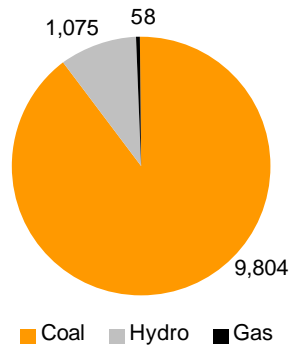
Plan to scale up to 10,592 MW by FY17E

Major addition in FY13E - FY15E



Source: Company, Emkay Research

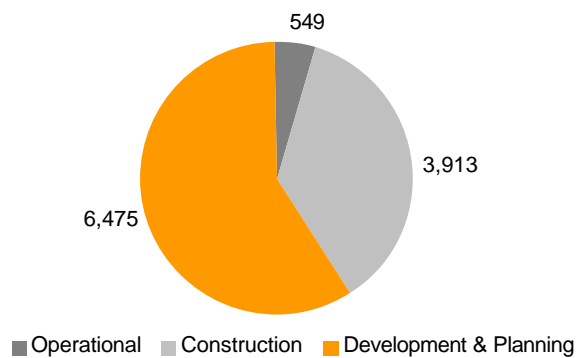
Fuelwise mix of the planned capacity (MW)



Source: Company, Emkay Research

Status of projects (MW)

3,913MW under construction



Source: Company, Emkay Research

Per unit Calculations

Rs/Unit	FY11E	FY12E	FY13E	FY14E	FY15E
Average PPA Tariff	2.96	2.96	2.66	2.31	2.23
Average Tariff	3.57	3.84	3.38	2.94	3.10
Average Fuel Cost	1.39	1.48	1.35	1.17	1.23
O&M Cost	0.21	0.19	0.18	0.18	0.19
Depreciation	0.44	0.39	0.36	0.35	0.35
Interest	0.74	0.70	0.61	0.58	0.58
PBT Per Unit	0.80	1.09	0.88	0.66	0.74
Tax per unit	0.16	0.22	0.18	0.13	0.15
PAT Per unit	0.64	0.87	0.70	0.53	0.59

Source: Company, Emkay Research

Fund requirements

Equity Dilution (Rs mn)	FY11E	FY12E	FY13E
OCF	1,747	5,378	8,042
Capex	26,160	54,655	96,695
Equity Requirement	12,661	17,910	14,879
Debt Repayment	330	908	2,515
FCFE	(9,958)	(12,608)	(8,004)
Cash in Hand at beginning	11,975	11,626	0
Equity Dilution	0.0%	0.1%*	16.2%*

Source: Company, Emkay Research

* at Rs150

Equity dilution likely in FY12E

Assumptions

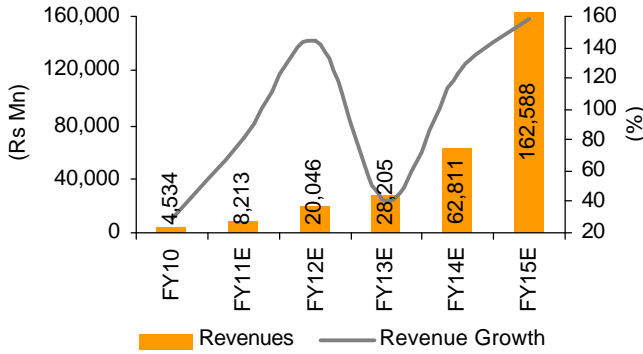
	Arasmeta	Sai Regency	Sitapuram	VS Lignite	Wrdh Warora	Arasmeta Exp	Mahanadi	Narmada	JR Power	Vidarbha	Dibbin HEP	Kameng HEP	Kameng Basin
Capacity (MW)	43	58	43	135	540	43	3600	1800	1800	1800	130	600	345
COD of 1st Unit	Nov-06	Sep-07	Mar-08	May-10	Jul-10	Feb-11	Sep-12	Dec-13	Mar-14	Sep-14	Jan-15	Aug-16	Mar-17
Capital Cost (Rsbn)	2	2	2	7	24	2	162	81	81	81	10	45	25
Equity (%)	30	25	30	25	20	20	25	25	25	25	25	25	25
Debt (%)	70	75	70	75	80	80	75	75	75	75	75	75	75
SHR (Kcal/Kwh)	3,120	2,185	2,925	2,680	2,335	3,120	2,267	2,267	2,267	2,267	0	0	0
PAF (%)	92	92	92	92	92	92	92	92	92	92	92	92	92
PLF (%)													
Tied Up Capacity	90	90	90	85	90	90	90	85	85	85	50	50	50
Merchant Capacity	80	80	80	80	80	80	80	80	80	80	45	45	45
Aux Consumption (%)	9.0	9.8	6.4	11.0	10.5	10.5	7.5	7.5	7.5	7.5	1.0	1.0	1.0
O&M (Rsm/MW or % of Cap cost)	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.0	1.0	1.0	1.5%	1.5%	1.5%
Fuel Requirement (Mn MT)	0.4	0.3	0.3	1.0	3.3	0.4	17.2	9.0	9.0	9.0	NA	NA	NA
Fuel Tied Up (%)*	64	84	87	100	73	100	52	100	100	100	NA	NA	NA
GCV (Kcal/Kg)	2,834	8,796	3,229	2,800	2,880	2,834	3,654	3,229	3,229	3,229	NA	NA	NA
Landed Fuel Cost (Rs/MT)	1,204	239	1,704	800	1,664	804	1,306	1,504	1,504	1,504	NA	NA	NA
Fuel Escalation (%)													
Coal	4	4	4	4	4	4	4	4	4	4	4	4	4
OffTake													
Tied Up (MW)	34	58	37	122	179	43	2,270	0	0	0	0	0	0
Merchant or Open (MW)	9	0	6	13	361	0	1,330	1,800	1,800	1,800	130	600	345
Levelized Tariff (Rs/Unit)	Group Captive	Group Captive	Group Captive	Group Captive	4.85/unit (Rel Infra - FY11E-14E)	NA	2.34/unit for 1,010 MW & CERC rate for 1,260 MW	NA	NA	NA	NA	NA	NA

Source: Company, Emkay Research

*Assuming MOUs/contracts materialize

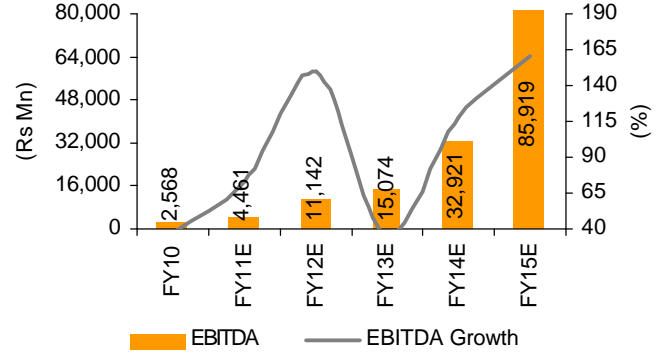
Financials

Revenue CAGR of 110.9% during FY11E-15E



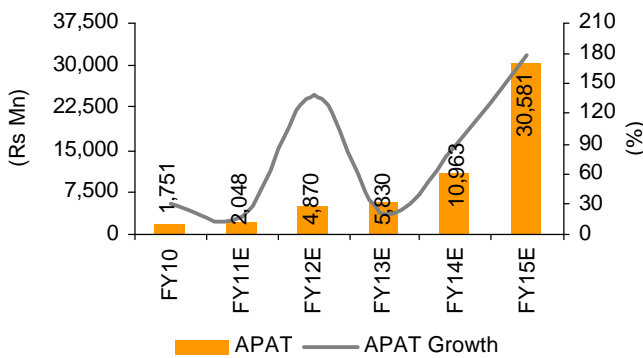
Source: Company, Emkay Research

EBITDA CAGR of 109.5% during FY11E-15E



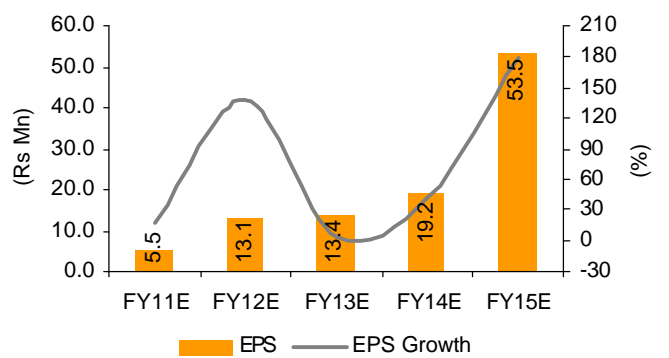
Source: Company, Emkay Research

APAT CAGR of 96.6% during FY11E-15E



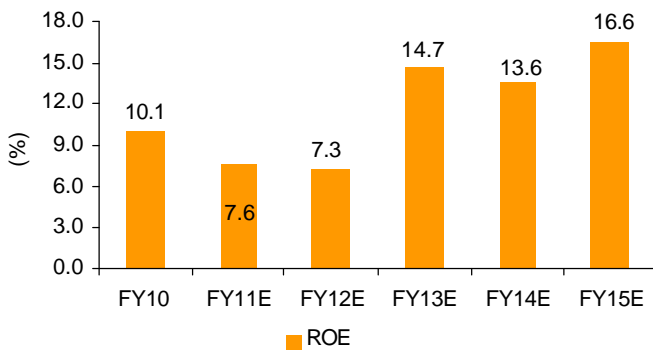
Source: Company, Emkay Research

Earnings per share CAGR of 76.6% during FY11E-15E



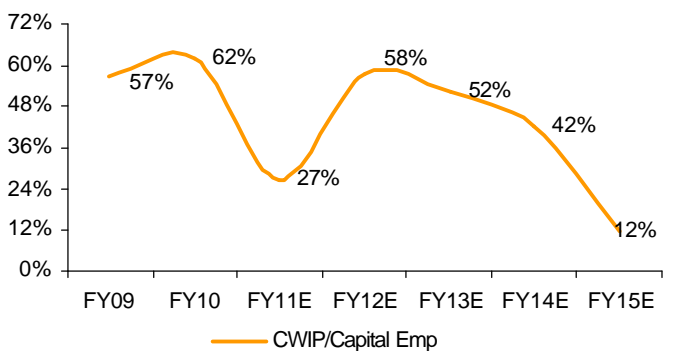
Source: Company, Emkay Research

Average ROE of 19.4% over FY11E-15E



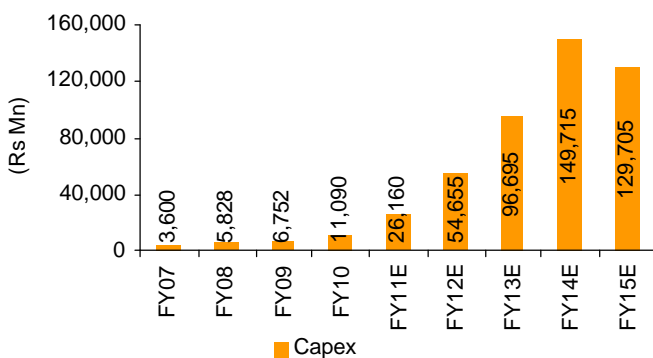
Source: Company, Emkay Research

CWIP/Total Capital Employed



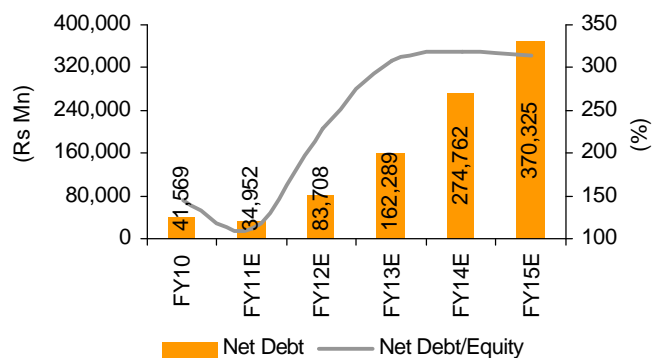
Source: Company, Emkay Research

Capex



Source: Company, Emkay Research

Net Debt Position



Source: Company, Emkay Research

EVM Calculation

Project	Arammeta		Sai Sitapuram		VS Lignite		Wrdrh Warora		Arammeta Exp		Mahanadi		Narmada		JR Power		Vidarbha		Dibbin HEP		Kameng HEP		Kameng Basin		Total	
	Operational	Regency	Operational	Operational	Operational	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal		Coal
Capacity	43	58	43	43	135	540	43	3,600	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	10,937	
Fuel	Coal	Gas	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Hydro	Hydro
PRE CONSTRUCTION PHASE (Weight)	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
DPR Prepared	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	X	X
Techno Economic Clearance (CEA)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	X	X
Investment Approval CCEA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	X	X
Land Acquisition	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	X	X
Environmental Clearance	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	X	X
Other Regulatory Clearances	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	X	X
Water Source Tie Up	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	X	X
Evacuation Arrangements	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	X	X
Financial Closure	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	X	X
Equipment Ordering	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	X	X
Adjustment Factor (a)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.4	
CONSTRUCTION PHASE (Weight)	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Site Levelling (5%)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	X	X
BTG Foundation (10%)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	X	X
Boiler Erection (Not for Hydro) (20%)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	X	X
Boiler Light up & Drum Lifting (5%)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	X	X
Hydraulic Test (10%)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	X	X
Condenser Erection (5%)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	X	X
TG Erection (15%)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	X	X
Synchronization (20%)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	X	X
Commercialization (10%)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	X	X
Adjustment Factor (b)	1.0	1.0	1.0	1.0	1.0	0.9	0.9	0.7	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
Net Adjustment Factor (a*b) (c)	1.0	1.0	1.0	1.0	1.0	0.9	0.9	0.8	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.3	
Cost of Equity (CoE)	12%	11%	11%	11%	11%	16%	16%	10%	15%	19%	19%	19%	19%	19%	19%	19%	19%	19%	19%	16%	16%	16%	16%	16%	15%	
Equity IRR (IRR)	33%	26%	61%	18%	18%	21%	34%	34%	16%	38%	32%	32%	32%	32%	32%	32%	32%	32%	22%	22%	20%	20%	20%	21%	19%	
Potential Value Multiple (PVM) = (CoE/IRR)	2.8	2.4	5.5	1.6	1.6	1.3	3.4	1.1	1.1	2.0	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.6	1.3	1.3	1.2	1.2	1.2	1.3	1.3	
PVM Adj. Capacity (d) = (PVM*(c)*capacity)	122	142	237	216	216	656	121	2,033	0	0	0	0	0	0	0	0	0	0	22	22	0	0	0	0	3,528	
EV (Rs mn)																										67,755
Adj Capex (adj. for milestone) (Rs mn)																										65,320
Adj. EV (EV + Adjusted Capex) (Rs mn)																										133,074
EVM (adj. EV/ (d)) (Rs mn/MW)																										38

Source: Company, Enkay Research

Financial Tables

Income Statement (Rs. Mn)

(Year Ending Mar 31)	FY10	FY11E	FY12E	FY13E
Net Sales	4,534	8,213	20,046	28,205
Growth (%)	29.4	81.1	144.1	40.7
Expenditure	1,966	3,751	8,903	13,130
Fuel Cost	1,209	3,198	7,721	11,243
O&M Cost	757	554	1,183	1,888
SG&A Expenses	0	0	0	0
Other Expenses	0	0	0	0
EBITDA	2,568	4,461	11,142	15,074
Growth (%)	36.8	73.7	149.8	35.3
EBITDA margin (%)	56.6	54.3	55.6	53.4
Depreciation	260	1,001	2,017	2,993
EBIT	2,309	3,460	9,126	12,081
EBIT margin (%)	50.9	42.1	45.5	42.8
Other Income	1,126	1,093	688	324
Interest expenses	1,246	1,626	3,438	4,759
PBT	2,189	2,927	6,375	7,646
Tax	276	738	1,371	1,575
Effective tax rate (%)	12.6	25.2	21.5	20.6
Adjusted PAT	1,913	2,188	5,003	6,072
Growth (%)	28.8	17.0	137.8	19.7
Net Margin (%)	42.2	26.6	25.0	21.5
E/O items	0	0	0	0
Reported PAT	1,913	2,188	5,003	6,072
(Profit)/loss from JV's/Ass/MI	-162	-140	-133	-241
PAT after MI	1,751	2,048	4,870	5,830
Growth (%)	28.8	17.0	137.8	19.7

Balance Sheet (Rs. Mn)

(Year Ending Mar 31)	FY10	FY11E	FY12E	FY13E
Equity share capital	3,726	3,726	3,731*	4,336*
Reserves & surplus	24,841	27,865	32,931	48,256
Net worth	28,567	31,591	36,662	52,592
Secured Loans	53,513	46,578	83,708	163,114
Unsecured Loans	0	0	0	0
Loan Funds	53,513	46,578	83,708	163,114
Net deferred tax liability	0	0	0	0
Total Liabilities	82,080	78,169	120,370	215,706
Gross Block	18,585	45,760	51,785	105,752
Less: Depreciation	-816	-1,818	-3,834	-6,828
Net block	17,769	43,943	47,951	98,924
Capital work in progress	51,214	20,755	69,385	112,113
Investment	0	0	0	0
Current Assets	17,577	18,108	8,041	9,962
Inventories	491	726	1,281	1,713
Sundry debtors	449	1,095	2,098	2,763
Cash & bank balance	11,975	11,626	0	825
Loans & advances	4,133	4,133	4,133	4,133
Other current assets	529	529	529	529
Current lia & Prov	4,480	4,637	5,007	5,295
Current liabilities	4,480	4,637	5,007	5,295
Provisions	0	0	0	0
Net current assets	13,097	13,471	3,034	4,668
Misc. exp	0	0	0	0
Total Assets	82,080	78,169	120,370	215,706

Cash Flow (Rs. Mn)

(Year Ending Mar 31)	FY10	FY11E	FY12E	FY13E
PBT (Ex-Other income)	1,062	1,834	5,687	7,323
Depreciation	260	1,001	2,017	2,993
Interest Provided	1,246	1,626	3,438	4,759
Other Non-Cash items	-1	44	0	0
Chg in working cap	-1,609	-724	-1,188	-809
Tax paid	-276	-738	-1,371	-1,575
Operating Cashflow	682	3,043	8,583	12,691
Capital expenditure	-36,669	3,284	-54,655	-96,695
Free Cash Flow	-35,987	6,327	-46,072	-84,004
Other income	1,126	1,093	688	324
Investments	0	0	0	0
Investing Cashflow	-35,542	4,377	-53,967	-96,371
Equity Capital Raised	5,072	0	67	9,078
Loans Taken / (Repaid)	31,067	-6,935	37,130	79,406
Interest Paid	-1,246	-1,626	-3,438	-4,759
Dividend paid (incl tax)	0	0	0	0
Income from investments				
Others	112	791	0	781
Financing Cashflow	35,005	-7,770	33,759	84,506
Net chg in cash	144	-350	-11,626	825
Opening cash position	11,831	11,975	11,626	0
Closing cash position	11,975	11,625	0	825

Key Ratios

(Year Ending Mar 31)	FY10	FY11E	FY12E	FY13E
Profitability (%)				
EBITDA Margin	56.6	54.3	55.6	53.4
Net Margin	42.2	26.6	25.0	21.5
ROCE	3.7	4.3	9.2	7.2
ROE	7.6	7.3	14.7	13.6
RoIC	3.9	3.8	7.7	5.7
Per Share Data (Rs)				
EPS	4.7	5.5	13.1	13.4
CEPS	5.4	8.2	18.5	20.3
BVPS	76.7	84.8	98.3	121.3
DPS	0.0	0.0	0.0	0.0
Valuations (x)				
PER	22.8	19.5	8.2	8.0
P/CEPS	19.8	13.1	5.8	5.3
P/BV	1.4	1.3	1.1	0.9
EV / Sales	18.0	9.1	6.2	7.4
EV / EBITDA	31.7	16.8	11.1	13.8
Dividend Yield (%)	0.0	0.0	0.0	0.0
Gearing Ratio (x)				
Net Debt/ Equity	1.5	1.1	2.3	3.1
Net Debt/EBIDTA	16.2	7.8	7.5	10.8
Working Cap Cycle (days)	50	34	39	22

Source: Company, Emkay Research

*Assuming equity dilution

25 January, 2011

Reco
Accumulate

CMP Target Price
Rs318 Rs369

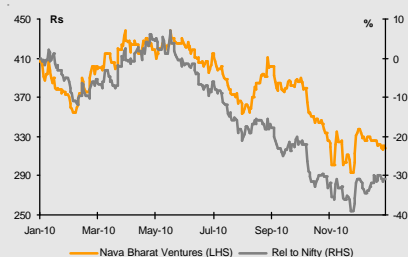
EPS change FY11E/12E (%) NA
Target price change (%) NA
Nifty 5,697
Sensex 19,008

Price Performance

(%)	1M	3M	6M	12M
Absolute	(4)	(18)	(23)	(24)
Rel. to Nifty	1	(12)	(27)	(32)

Source: Bloomberg

Relative price chart



Source: Bloomberg

Stock details

Sector	Power
Bloomberg	NBVL@IN
Equity Capital (Rs mn)	153
Face Value (Rs)	2
No of shares o/s (mn)	76
52 Week H/L (Rs)	447/289
Market Cap (Rs bn/USD mn)	24/526
Daily Avg Vol (No of shares)	64605
Daily Avg Turnover (US\$ mn)	0.5

Shareholding Pattern (%)

	Dec-10	Sep-10	Jun-10
Promoters	45.5	45.5	45.5
FIINRI	23.1	19.7	18.5
Institutions	3.8	5.1	6.0
Private Corp	2.3	2.9	3.2
Public	25.3	26.8	26.8

Source: Capitaline

- **NBVL has kept most of its generation capacity open but its ferro alloys business acts as a natural hedge against volatile merchant prices**
- **Has fuel availability for most of its plants (assuming supply from Indonesian mine) through coal linkages, washery rejects and imported coal (through acquisition of stakes in mines)**
- **Virtually debt free company - Being an early beneficiary of the merchant power boom, NBVL has generated huge cash flows in the past two three years. This has led to it prepaying most of its loans & is virtually debt free**
- **Valuations reasonable - Implies (1) lowest EVM of Rs27mn/MW & (2) long term merchant power prices of Rs3.3/unit; Initiate coverage with 'Accumulate' rating**

Significant capacities open but hedged against volatile merchant rates

In terms of off-take, NBVL has kept most of its generation capacity open, except a 300MW plant planned as cost plus in Zambia. But, being one of the largest (0.2mn MT capacity) ferro alloy manufacturers in the country, it has an option to shift to ferro alloys using captive power, in case merchant prices are unfavorable. To this extent, it is safeguarded from the volatilities of merchant power prices.

Has fuel availability for most of its plants

Apart from 228MW of operational capacity, 664MW of additional capacity is under construction and development, slated for commissioning in FY11E-15E, with 64MW expected to commission in Q4FY11E. Assuming supply from Indonesian mine, NBVL has tied up most its fuel requirements for 892MW.

Significant beneficiary of the current merchant power boom in the country

NBVL, with an already operational capacity of 228MW since past two years, has been a significant beneficiary of the merchant power boom in the country. The company has generated huge cash flows in the past 2-3 years. Led by power segment (average power realizations of Rs3.50/Unit to Rs5.12/Unit), the net profits of the company have grown at a CAGR of 74% during FY06-FY10. This has led to it prepaying most of its loans and is virtually debt free.

Valuations reasonable, Initiate with 'Accumulate' rating

In our relative valuations matrix based on EVM, NBVL with Rs27mn/MW is one of the cheapest. Also, we have not considered significant value of its ferro alloys, sugar and coal business while calculating implied merchant price of Rs3.30/unit, seemingly inexpensive. At CMP of Rs318/Share, NBVL is trading at 1.1x FY12E Book value with expected FY11E-15E average ROE of 17%. We like the business model of the company with best fuel security and open off-take with an option to shift to ferro alloys. We initiate coverage with an 'Accumulate' rating and DCF based PT of Rs369/share. Key risk to our call - any reduction in linkage coal quantities, higher than expected liabilities in Zambia, delays/cancellation of Indonesian coal mine acquisition.

Valuation table

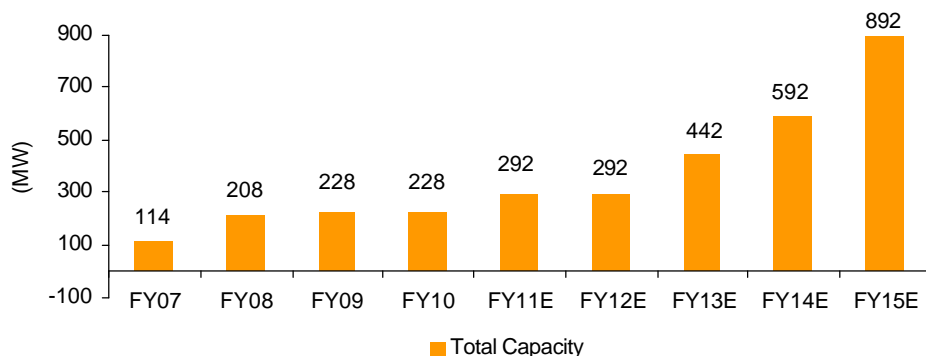
Y/E, Mar	Net Sales	EBIDTA (Core)	EBIDTA (%)	APAT	AEPS (Rs)	EPS % chg	RoE (%)	P/E (x)	EV / EBITDA	P/BV (x)
FY10	11,794	5,582	47.3	4,968	65.1	-8.4	36.0	4.9	3.9	1.5
FY11E	11,322	4,093	36.1	3,783	41.9	-35.7	20.4	7.6	6.0	1.4
FY12E	13,784	4,947	35.9	4,704	52.1	24.4	19.8	6.1	6.1	1.1
FY13E	16,162	5,298	32.8	4,275	47.3	-9.1	14.8	6.7	6.5	0.9

Source: Emkay Research

Theme Charts

NBVL has been the biggest beneficiary of the merchant power boom in the country

Nava Bharat Ventures (NBVL), with an already operational capacity of 228MW since past two years, has been a significant beneficiary of the merchant power boom in the country. Currently, it is executing 664MW of additional power capacity, which is slated to commission in FY11E-FY15E period



Source: Company, Emkay Research

Fuel available for most of the plants

Mn MT	FY10	FY11E	FY12E	FY13E	FY14E	FY15E	FY16E	FY17E
Fuel Requirement								
Imported Coal	0.1	0.1	0.1	0.1	0.6	0.6	0.6	0.6
Coal	1.4	1.4	1.7	2.1	2.5	3.5	3.8	3.8
Requirement	1.5	1.5	1.8	2.2	3.0	4.1	4.4	1.5
Fuel Availability								
Imported Coal	0.1	0.1	0.1	0.1	0.6	0.6	0.6	0.6
Coal	1.4	1.4	1.7	2.1	2.5	3.3	3.3	3.3
Availability	1.5	1.5	1.8	2.2	3.0	3.9	3.9	3.9
Shortfall	0.0	0.0	0.0	0.0	0.0	-0.2	-0.5	-0.5
% Shortfall	0%	0%	0%	0%	0%	-5%	-11%	-11%

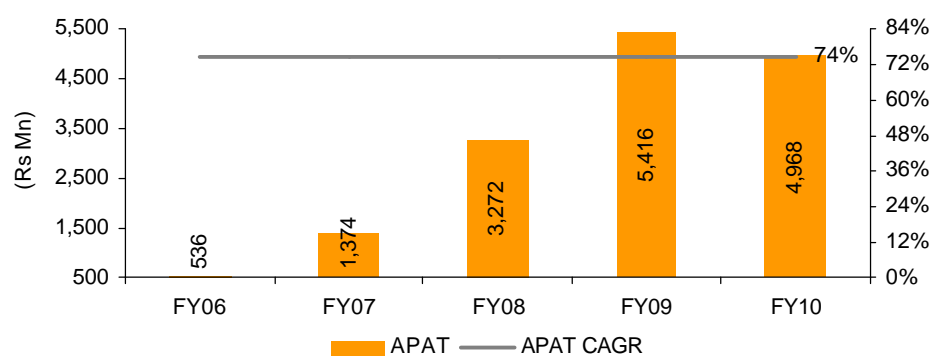
Source: Company, Emkay Research

Note: Assumed supply from Indonesian mines

Tied up almost all its fuel requirements for 892MW through coal linkages, washery rejects and imported coal through acquisition of stakes in mines.

During FY06-FY10, PAT has registered a CAGR of 74% led by higher merchant prices...

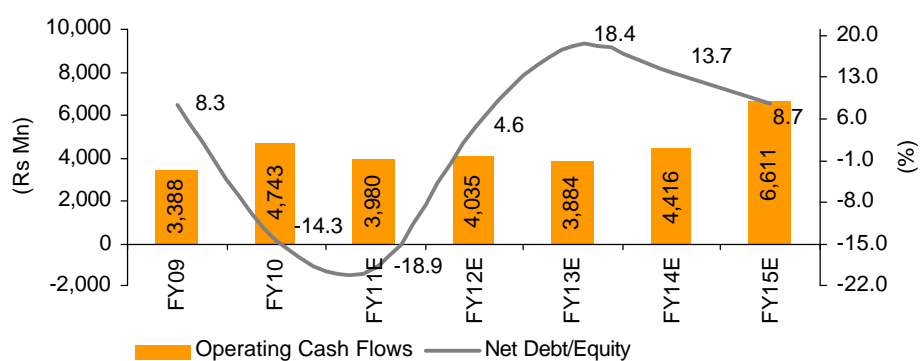
Led by power segment (average power realizations of Rs3.50/Unit to Rs5.12/Unit), the net profits of the company have grown at a CAGR of 74% during FY06-FY10



Source: Company, Emkay Research

Has generated huge cash flows in the past two-three years leading to prepayment most of its loans - virtually debt free.

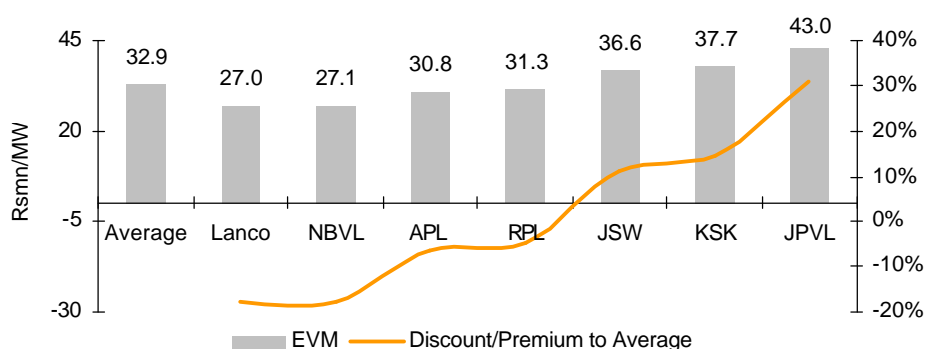
...leading to generation of huge cash flows resulting in the company being debt free



Source: Company, Emkay Research

EVM of Rs27mn, 18% discount to our coverage universe

Currently trading at a discount of 18% on EVM basis to our universe



Source: Company, Emkay Research

Sum of parts valuation

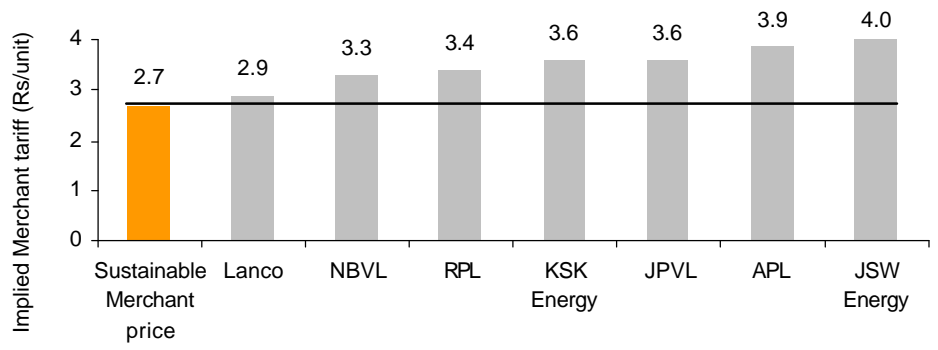
	Total Capacity (MW)	Economic Interest	Cost Of Equity	NPV Rsmn	NPV's share milestone Adj. RsMn	Rs per Share
AP I	114	100.0%	14.1%	5161	5161	57
Orissa	94	100.0%	13.5%	3607	3607	40
AP II	20	100.0%	14.1%	591	591	7
Orissa II	64	100.0%	14.5%	3141	3141	35
AP III	150	100.0%	16.6%	4243	4243	47
AP IV	150	100.0%	15.1%	823	823	9
Zambia	300	65.0%	11.0%	8482	5113	61
NPV Per Share						236
Add: Value of Coal Mines (Rs/share)						18
Add: Value of Sugar business (Rs/share)						6
Add: Cash Per Share						109
Fair Value per share						369

Fair value of Rs 369/share based on DCF

Source: Company, Emkay Research

Implied long term merchant rate of Rs3.3/unit

Current valuation implies long term merchant tariff of Rs 3.3 per unit, 22% higher than Rs2.7/unit

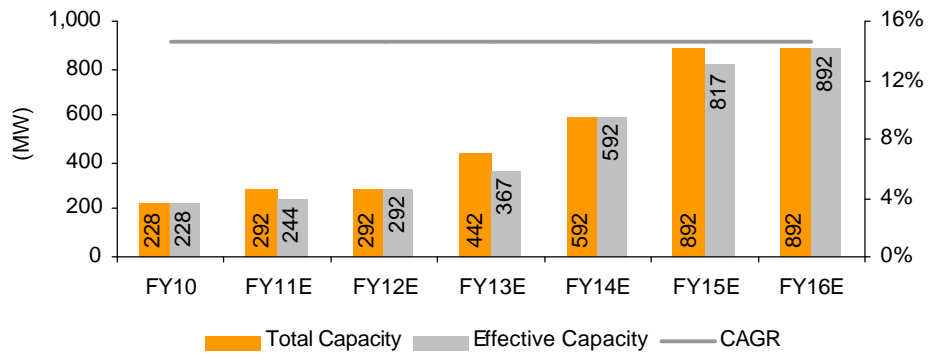


Source: Company, Emkay Research

Company Background

NBVL to scale up its capacity to 892MW by FY15E

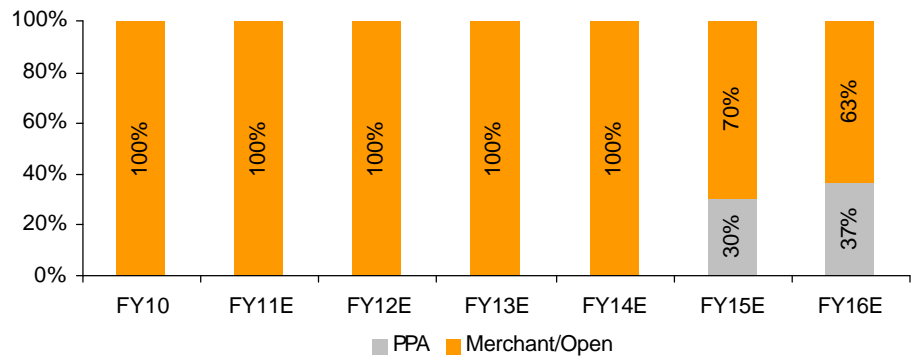
Total planned capacity to come on stream by FY15E



Source: Company, Emkay Research

Most of the total planned capacity to be sold in merchant market

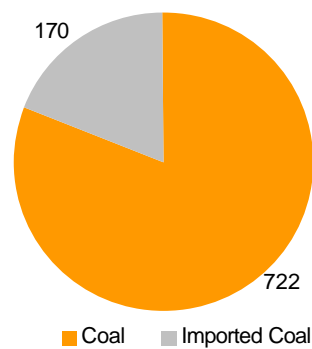
100% of the capacity during FY11E-FY14E to be sold in spot market



Source: Company, Emkay Research

Fuelwise mix of the total planned installed capacity (MW)

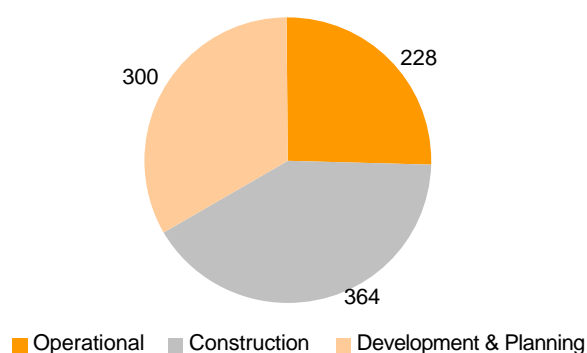
Company only has coal-based capacities



Source: Company, Emkay Research

Current status of the planned capacities (MW)

364 MW capacity under construction



Source: Company, Emkay Research

Assumptions

	AP I	Orissa	AP II	Orissa II	AP III	AP IV	Zambia
Capacity (MW)	114	94	20	64	150	150	300
COD of 1st Unit	Mar-06	Dec-07	Feb-09	Mar-11	Sep-12	Mar-13	Jun-14
Capital Cost (Rsbn)	3	3	1	2	7	7	22
Equity (%)	30	51	100	30	30	30	30
Debt (%)	70	49	0	70	70	70	70
SHR (Kcal/Kwh)	3,000	3,000	3,600	3,000	2,400	2,400	2,350
PAF (%)	93	93	93	93	93	93	93
PLF (%)							
Tied Up Capacity	90	90	90	90	90	90	90
Merchant Capacity	80	80	80	80	80	80	80
Aux Consumption (%)	10.0	10.0	10.5	10.0	8.5	8.5	8.5
O&M (Rsmn/MW)	1.1	1.1	1.1	1.1	1.0	1.0	1.1
Fuel Requirement (Mn MT)	0.8	0.6	0.1	0.4	0.8	0.5	1.4
Fuel Tied Up (%)*	100	100	100	100	100	0	100
GCV (Kcal/Kg)	3,320	3,500	5,200	3,320	3,320	5,200	4,150
Landed Fuel Cost (Rs/MT)	1,620	1,620	2,898	1,032	1,032	3,358	1,725
Fuel Escalation (%)							
Coal	4	4	4	4	4	4	4
Power Off Take							
Tied Up (MW)	0	0	0	0	0	0	300
Merchant or Open (MW)	114	94	20	64	150	150	0
Levellized Tariff (Rs/Unit)	NA	NA	NA	NA	NA	NA	Cost Plus

Source: Company, Emkay Research

*Assuming supply from Indonesian mines

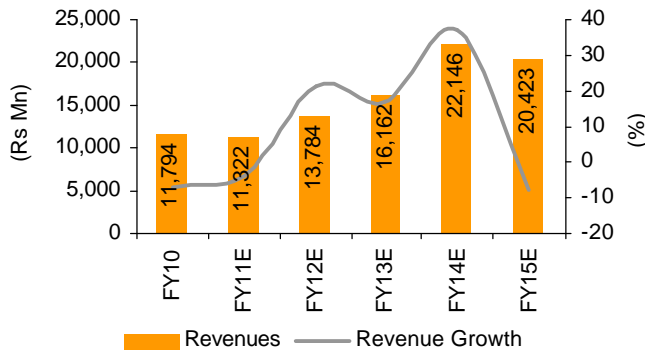
Per unit Calculations

Rs/Unit	FY11E	FY12E	FY13E	FY14E	FY15E
Average PPA Tariff					4.23
Average Tariff	4.50	4.50	4.00	3.60	3.79
Average Fuel Cost	1.62	1.58	1.49	1.53	1.49
O&M Cost	0.17	0.18	0.19	0.19	0.20
Depreciation	0.25	0.26	0.28	0.32	0.39
Interest	0.21	0.23	0.29	0.36	0.47
PBT Per Unit	2.24	2.24	1.75	1.19	1.25
Tax per unit	0.06	0.18	0.35	0.24	0.25
PAT Per unit	2.19	2.06	1.40	0.95	1.00

Source: Company, Emkay Research

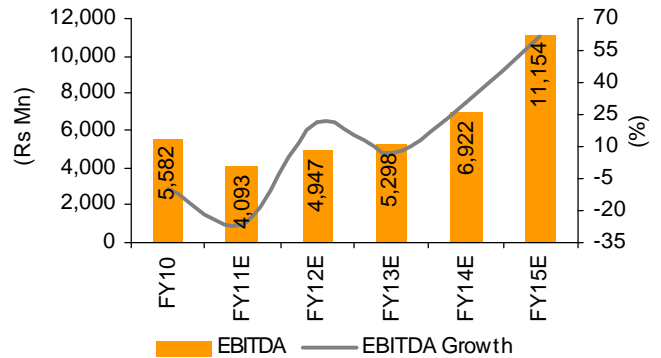
Financials

Revenue CAGR of 31.1% during FY11E-15E



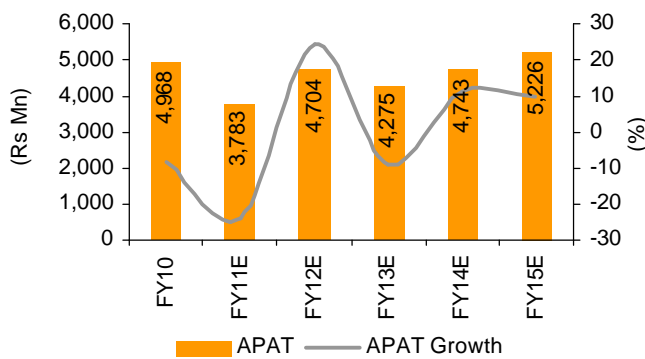
Source: Company, Emkay Research

EBITDA CAGR of 28.5% during FY11E-15E



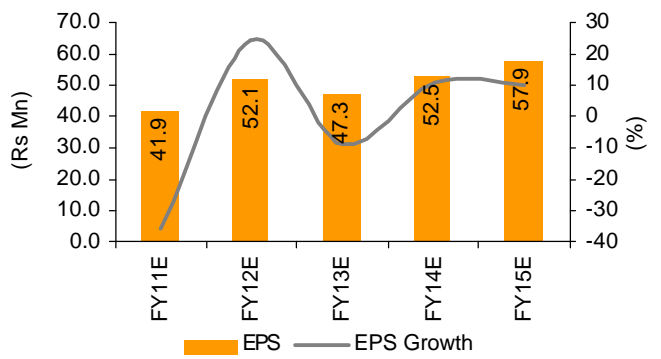
Source: Company, Emkay Research

APAT CAGR of 8.4% during FY11E-15E



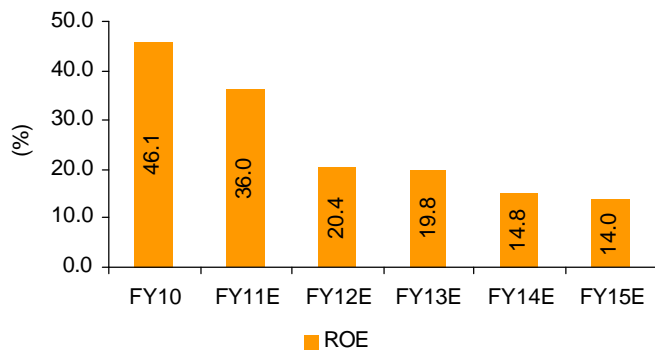
Source: Company, Emkay Research

Earnings per share CAGR of 8.4% during FY11E-15E



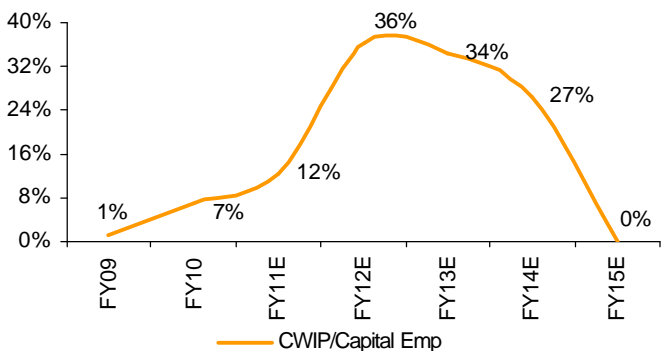
Source: Company, Emkay Research

Average ROE of 15.7% over FY11E-15E



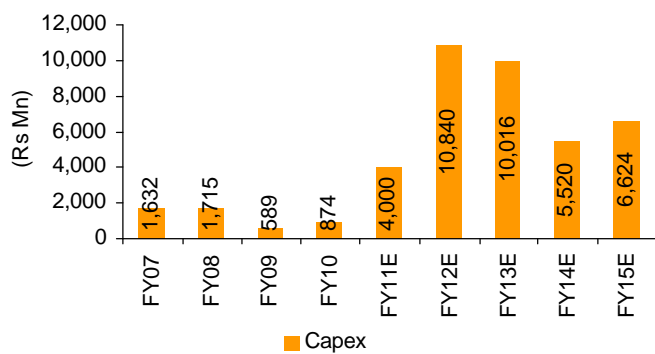
Source: Company, Emkay Research

CWIP/Total Capital Employed



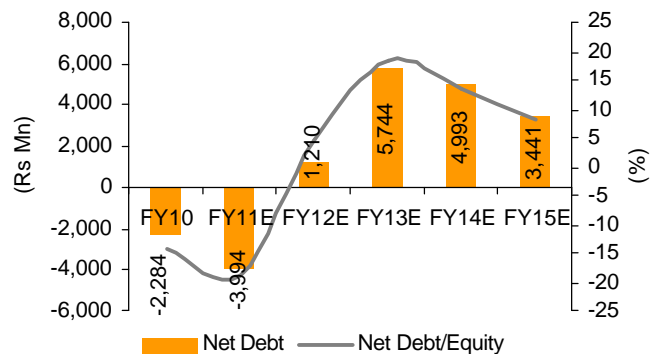
Source: Company, Emkay Research

Capex



Source: Company, Emkay Research

Net Debt Position



Source: Company, Emkay Research

Fund requirements

Equity Dilution (Rs mn)	FY11E	FY12E	FY13E
OCF	3,980	4,035	3,884
Capex	4,000	10,840	10,016
Equity Requirement	1,326	3,126	3,005
Debt Repayment	107	241	241
FCFe	2,388	837	659
Cash in Hand at the beginning	6,223	8,063	10,714
Equity Dilution	0.0%	0.0%	0.0%

Source: Company, Emkay Research

EVM Calculation

Project	AP I	Orissa	AP II	Orissa II	AP III	AP IV	Zambia	Total
Stage	Operational	Operational	Operational	Construction	Construction	Construction	Construction	
Capacity (MW)	114	94	20	64	150	150	300	892
Fuel	Coal	Coal	Imported Coal	Coal	Coal	Imported Coal	Coal	
PRE CONSTRUCTION PHASE (Weight)	100%	100%	100%	100%	100%	100%	100%	100%
DPR Prepared	NA	NA	NA	NA	NA	NA	NA	
Techno Economic Clearance (CEA)	NA	NA	NA	NA	NA	NA	NA	
Investment Approval CCEA	NA	NA	NA	NA	NA	NA	NA	
Land Acquisition	NA	NA	NA	✓	✓	✓	x	
Environmental Clearance	NA	NA	NA	✓	✓	x	x	
Other Regulatory Clearances	NA	NA	NA	✓	50%	50%	x	
Water Source Tie Up	NA	NA	NA	✓	✓	✓	x	
Evacuation Arrangements	NA	NA	NA	✓	✓	✓	x	
Financial Closure	NA	NA	NA	✓	✓	✓	x	
Equipment Ordering	NA	NA	NA	✓	✓	x	x	
Adjustment Factor (a)	1.0	1.0	1.0	1.0	0.9	0.7	0.0	0.6
CONSTRUCTION PHASE (Weight)	100%	100%	100%	100%	100%	100%	100%	100%
Site Levelling (5%)	NA	NA	NA	✓	✓	✓	x	
BTG Foundation (10%)	NA	NA	NA	✓	x	x	x	
Boiler Erection (Not for Hydro) (20%)	NA	NA	NA	✓	x	x	x	
Boiler Light up & Drum Lifting (5%)	NA	NA	NA	✓	x	x	x	
Hydraulic Test (10%)	NA	NA	NA	✓	x	x	x	
Condenser Erection (5%)	NA	NA	NA	✓	x	x	x	
TG Erection (15%)	NA	NA	NA	x	x	x	x	
Synchronization (20%)	NA	NA	NA	x	x	x	x	
Commercialization (10%)	NA	NA	NA	x	x	x	x	
Adjustment Factor (b)	1.0	1.0	1.0	0.6	0.1	0.1	0.0	0.3
Net Adjustment Factor (a*b) (c)	1.0	1.0	1.0	0.8	0.5	0.4	0.0	0.5
Cost of Equity (CoE)	14%	14%	14%	15%	17%	15%	11%	15%
Equity IRR (IRR)	45%	26%	4%	52%	48%	17%	30%	36%
Potential Value Multiple (PVM) = (CoE/IRR)	3.2	1.9	0.3	3.6	2.9	1.1	2.8	2.5
PVM Adj. Capacity (d) = (PVM*(c)*capacity)	365	182	6	177	215	62	0	1,007
EV (Rs mn)								22,564
Adj Capex (adj. for milestone) (Rs mn)								4,690
Adj. EV (EV + Adjusted Capex) (Rs mn)								27,254
EVM (adj. EV/ (d)) (Rs mn/MW)								27

Source: Company, Emkay Research

Financial Tables

Income Statement (Rs. Mn)

(Year Ending Mar 31)	FY10	FY11E	FY12E	FY13E
Net Sales	11,794	11,322	13,784	16,162
Growth (%)	-7.0	-4.0	21.7	17.3
Expenditure	6,212	7,229	8,837	10,864
Fuel Cost	2,961	6,892	8,417	10,334
O&M Cost	3,251	338	420	530
SG&A Expenses	0	0	0	0
Other Expenses	0	0	0	0
EBITDA	5,582	4,093	4,947	5,298
Growth (%)	22.4	23.4	19.6	7.1
EBITDA margin (%)	47.3	36.1	35.9	32.8
Depreciation	444	391	482	662
EBIT	5,139	3,702	4,465	4,637
EBIT margin (%)	43.6	32.7	32.4	28.7
Other Income	246	639	1,379	1,550
Interest expenses	306	250	347	572
PBT	5,079	4,090	5,496	5,615
Tax	111	308	792	1,340
Effective tax rate (%)	2.2	7.5	14.4	23.9
Adjusted PAT	4,968	3,783	4,704	4,275
Growth (%)	-8.3	-23.9	24.4	-9.1
Net Margin (%)	42.1	33.4	34.1	26.5
E/O items	20	0	0	0
Reported PAT	4,989	3,783	4,704	4,275
(Profit)/loss from JV's/Ass/MI	0	0	0	0
PAT after MI	4,989	3,783	4,704	4,275
Growth (%)	-8.3	-23.9	24.4	-9.1

Balance Sheet (Rs. Mn)

(Year Ending Mar 31)	FY10	FY11E	FY12E	FY13E
Equity share capital	153	181	181	181
Reserves & surplus	15,809	20,975	26,259	30,998
Net worth	15,962	21,156	26,440	31,178
Secured Loans	3,938	4,069	11,924	18,715
Unsecured Loans	0	0	0	0
Loan Funds	3,938	4,069	11,924	18,715
Net deferred tax liability	202	0	0	0
Total Liabilities	20,103	25,225	38,364	49,893
Gross Block	9,017	11,317	11,317	18,117
Less: Depreciation	-2,465	-2,967	-3,560	-4,333
Net block	6,551	8,349	7,756	13,784
Capital work in progress	1,416	3,116	13,956	17,172
Investment	963	963	963	963
Current Assets	13,747	15,346	18,273	20,603
Inventories	2,806	2,787	2,839	2,905
Sundry debtors	1,452	1,230	1,454	1,460
Cash & bank balance	6,222	8,063	10,714	12,970
Loans & advances	3,266	3,266	3,266	3,266
Other current assets	0	0	0	0
Current lia & Prov	2,576	2,564	2,599	2,643
Current liabilities	2,576	2,564	2,599	2,643
Provisions	0	0	0	0
Net current assets	11,171	12,782	15,674	17,960
Misc. exp	2	14	14	-14
Total Assets	20,103	25,224	38,364	49,893

Cash Flow (Rs. Mn)

(Year Ending Mar 31)	FY10	FY11E	FY12E	FY13E
PBT (Ex-Other income)	4,853	3,452	4,118	4,064
Depreciation	444	391	482	662
Interest Provided	306	250	347	572
Other Non-Cash items	56	-190	0	0
Chg in working cap	428	229	-241	-29
Tax paid	-111	-308	-792	-1,340
Operating Cashflow	5,975	3,824	3,913	3,930
Capital expenditure	-1,260	-3,889	-10,729	-9,905
Free Cash Flow	4,715	-65	-6,816	-5,975
Other income	246	639	1,379	1,550
Investments	-603	0	0	0
Investing Cashflow	-1,617	-3,250	-9,350	-8,355
Equity Capital Raised	-3	1,387	0	0
Loans Taken / (Repaid)	-365	130	7,855	6,791
Interest Paid	-306	-250	-347	-572
Dividend paid (incl tax)	-803	0	0	0
Income from investments				
Others	0	0	580	464
Financing Cashflow	-1,477	1,267	8,088	6,682
Net chg in cash	2,880	1,841	2,651	2,257
Opening cash position	3,343	6,222	8,063	10,714
Closing cash position	6,223	8,063	10,714	12,970

Key Ratios

(Year Ending Mar 31)	FY10	FY11E	FY12E	FY13E
Profitability (%)				
EBITDA Margin	47.3	36.1	35.9	32.8
Net Margin	42.1	33.4	34.1	26.5
ROCE	28.3	16.3	14.0	10.5
ROE	36.0	20.4	19.8	14.8
RoIC	39.5	23.5	17.8	11.3
Per Share Data (Rs)				
EPS	65.1	41.9	52.1	47.3
CEPS	70.9	46.2	57.4	54.7
BVPS	209.1	234.1	292.6	345.0
DPS	9.0	5.8	7.2	6.5
Valuations (x)				
PER	4.9	7.6	6.1	6.7
P/CEPS	4.5	6.9	5.5	5.8
P/BV	1.5	1.4	1.1	0.9
EV / Sales	1.9	2.2	2.2	2.1
EV / EBITDA	3.9	6.0	6.1	6.5
Dividend Yield (%)	2.8	1.8	2.3	2.1
Gearing Ratio (x)				
Net Debt/ Equity	-0.1	-0.2	0.0	0.2
Net Debt/EBIDTA	-0.4	-1.0	0.2	1.1
Working Cap Cycle (days)	160	125	112	82

Source: Company, Emkay Research

Emkay Rating Distribution

BUY	Expected total return (%) (stock price appreciation and dividend yield) of over 25% within the next 12-18 months.
ACCUMULATE	Expected total return (%) (stock price appreciation and dividend yield) of over 10% within the next 12-18 months.
HOLD	Expected total return (%) (stock price appreciation and dividend yield) of upto 10% within the next 12-18 months.
REDUCE	Expected total return (%) (stock price depreciation) of upto (-)10% within the next 12-18 months.
SELL	The stock is believed to under perform the broad market indices or its related universe within the next 12-18 months.

DISCLAIMER: This document is not for public distribution and has been furnished to you solely for your information and may not be reproduced or redistributed to any other person. The manner of circulation and distribution of this document may be restricted by law or regulation in certain countries, including the United States. Persons into whose possession this document may come are required to inform themselves of, and to observe, such restrictions. This material is for the personal information of the authorized recipient, and we are not soliciting any action based upon it. This report is not to be construed as an offer to sell or the solicitation of an offer to buy any security in any jurisdiction where such an offer or solicitation would be illegal. No person associated with Emkay Global Financial Services Ltd. is obligated to call or initiate contact with you for the purposes of elaborating or following up on the information contained in this document. The material is based upon information that we consider reliable, but we do not represent that it is accurate or complete, and it should not be relied upon. Neither Emkay Global Financial Services Ltd., nor any person connected with it, accepts any liability arising from the use of this document. The recipient of this material should rely on their own investigations and take their own professional advice. Opinions expressed are our current opinions as of the date appearing on this material only. While we endeavor to update on a reasonable basis the information discussed in this material, there may be regulatory, compliance, or other reasons that prevent us from doing so. Prospective investors and others are cautioned that any forward-looking statements are not predictions and may be subject to change without notice. We and our affiliates, officers, directors, and employees world wide, including persons involved in the preparation or issuance of this material may; (a) from time to time, have long or short positions in, and buy or sell the securities thereof, of company (ies) mentioned herein or (b) be engaged in any other transaction involving such securities and earn brokerage or other compensation or act as a market maker in the financial instruments of the company (ies) discussed herein or may perform or seek to perform investment banking services for such company(ies) or act as advisor or lender / borrower to such company(ies) or have other potential conflict of interest with respect to any recommendation and related information and opinions. The same persons may have acted upon the information contained here. No part of this material may be duplicated in any form and/or redistributed without Emkay Global Financial Services Ltd.'s prior written consent. No part of this document may be distributed in Canada or used by private customers in the United Kingdom. In so far as this report includes current or historical information, it is believed to be reliable, although its accuracy and completeness cannot be guaranteed.

EMKAY GLOBAL FINANCIAL SERVICES LIMITED

Corporate Add: Paragon Centre, C-06, Ground Floor, P. B. Marg, Opp. Century Mills, Worli, Mumbai 400013 India.

Tel.: +91 22 6612 1212 | Web: www.emkayglobal.com