Global Equity Research - India

Initiating Coverage

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STOCK BROKING LIMITED

Sector: Power Generation

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NTPC (Rs205)

Outperformer

Undisputed leader for the years to come

Target Price: Rs245

NTPC Ltd. is the largest power generator in India with ~20% of India's capacity and ~30% of generation. We estimate total capacity of NTPC to be 42,844 MW by FY12 and 60,394 MW by FY17, capacity addition of 12,700 MW by FY12 would be the highest amongst Indian players. Impressive cash generation from operation, along with strong cash and investment on balance sheet would be a big positive to back up growth in the current power deficit environment. Further, proven execution capability and expertise would continue to remain as competitive strength of NTPC. Therefore, we initiate coverage on NTPC with a 12 month target price of Rs 245, an upside potential of 19% and rate it as an Outperformer.

Continues to be undisputed leader adding highest capacity among peers: NTPC holds ~20% of India's capacity and generates ~30% of India's energy and its leadership position is likely to be retained in foreseeable future. As per the current expansion plan, we expect NTPC to enhance it's total installed capacity from current 30,144 MW to 42,844 MW by FY12 and 60,394 MW by FY17. Consequently, it would add the highest capacity (~12,700 MW in next 3 years) amongst domestic players and hold 5x capacity of the next listed generator by FY12. We are positive on its superior track record of capacity addition and running those at a commendable efficiency level, backed by execution capability and rich expertise which is difficult for peers to replicate soon.

Multipronged strategy to counter fuel constraint: NTPC has recently adopted a multi pronged strategy as some plants are facing fuel supply constraints especially with low inventory leading to lower than normative Plant Load Factor (PLF). It's strategy includes 1) Fuel (coal) supply agreement with Coal India Ltd. for new plants having penalty clause of 90% trigger level 2) developing captive mines 3) global acquisition of coal mining assets 4) gas supply issue - soon to be addressed. Captive mine to start supply marginally from FY12 and expected mine acquisition abroad could give comfort in the long run. Nevertheless, conditional supply agreement with CIL will serve short term requirement.

Robust financials in the power deficit scenario, a big positive: We expect sales to record a CAGR of 12% (FY09 to FY14E), backed by 9% volume growth in line with additional capacity. EBITDA margin is likely to increase to above 26% level from FY11. We like consistent and impressive track record of cash generation from operation (Rs 100 bn/ year). Moreover, strong cash (~172 bn) and investment (~Rs 117 bn) in balance sheet are big positives for the company as successful capacity addition is a critical growth factor for power generation companies given the prevailing deficit scenario of Indian power sector. NTPC also exhibits highest ROE among domestic peers.

Valuation: We have valued NTPC on BV and capacity (MW), than earnings as profitability is regulated in this industry. Currently NTPC is trading at 3x FY09 BV and 2.7x FY10 BV. Going by the historical P/BV (forward) band, we arrive at a target price of Rs246/share, based on 3x FY11BV. Also, the scrip is available at EV/MW multiple of 65x FY10 capacity and if the same is carried forward to FY11, we arrive at target price of Rs 244/share, (65x FY11MW). Moreover, we believe replacement cost should be around Rs 50-55mn per MW in FY11, giving a support for the stock. Therefore taking average, we arrive at a 12 month price target of Rs 245/share for NTPC and initiate our coverage with **Outperformer** rating.

NTPC	
Reuters/Bloomberg Code	NTPC.BO / NATP@IN
Market Cap. (Rsmn)	1,690,320
Market cap. (US$mn)	35,995
Shares Outstanding (mn)	8,245.5
52-week High/Low (Rs)	233 / 130
Major Share Holders (%)	Sep-09
Promoter/Majority	89.5
FIIs	2.5
MF/FIs	4.7
Others	1.2
Public	2.1

Rsmn	FY2008	FY2009	FY2010E	FY2011E	FY2012E
Net Sales	386,823	443,138	501,762	540,712	611,128
EBITDA	117,352	107,218	127,661	140,586	164,559
Net Profit	74,699	80,925	85,347	92,618	105,794
EPS Adjusted (Rs)	9.1	9.8	10.4	11.2	12.8
EPS Growth (%)	8.3	8.3	5.5	8.5	14.2
EBITDA margin (%)	30.3	24.2	25.4	26.0	26.9
PER (x)	22.6	20.9	19.8	18.3	16.0
P/BV (x)	3.2	2.9	2.7	2.5	2.3
Price/sales (x)	4.4	3.8	3.4	3.1	2.8
EV/EBITDA (x)	15.7	17.8	16.1	15.2	13.5
Dividend Yield (%)	1.7	1.8	1.9	2.1	2.4
RoCE (%)	11.8	8.9	9.2	8.8	9.2
RoE (%)	14.7	14.6	14.2	14.3	15.0

Source: Company and Karvy Estimates

Investment positives

1. Leadership position in capacity, generation and efficiency to remain in foreseeable future, backed by proven execution capability & expertise

Likely to add the highest capacity among Indian peers in foreseeable future

NTPC is going through a major expansion drive and since the beginning of 11th five year plan (FY07-12), it had set a target of adding ~22,500 MW by FY12 to take its total installed capacity to 50,000 MW. Further, it aims to add another 25,000 MW during the 12th five year plan (FY12-17), making total targeted capacity 75,000 MW by FY17. However, considering the current status of projects under construction and capacity addition target achieved of till date (3,240 MW), we estimate total installed capacity of NTPC to be 42,844 MW by FY12 and 60,394 MW by FY17. (refer exhibit-2 for capacity addition estimates details). This would be lower than its own target by ~ 7,200 MW in FY12 and by ~14,600 MW in FY17. Despite this, it would exhibit the best execution capability by adding highest capacity among Indian players in next 3 years.

To add highest capacity among peers

Highest capacity to be added by NTPC only.........

In exhibit- 1, we have factored in targeted capacity addition as planned by the management for all the competitors of NTPC. On the other hand, for NTPC we have factored in a target miss of ~7,200 MW by FY12E. Nevertheless, NTPC is and will remain as the highest generator by the end of the 11th five year plan period with an installed capacity of 42,844 MW and the nearest competitor - Tata Power - at 8,266 MW, being one-fifth the size of NTPC. We estimate NTPC to add above 12,000 MW in next 3 years, highest amongst the Indian peers.

Exhibit 1: Absolute capacity addition comparison

Company	Installed Capacity (MW) FY09	Capacity Addition (MW) (FY09-12E)	Installed Capacity (MW) FY12E
Tata Power	2,785	5,481	8,266
Neyvelli Lignite	2,490	950	3,440
Reliance Power	300	3,200	3,500
Torrent Power	500	1,148	1,648
CESC	975	0	975
GIPCL	560	750	1,310
Adani Power	0	6,600	6,600
Indiabulls Power	0	1,335	1,335
NTPC	**30,144**	**12,700**	**42,844**

Source: Company & Karvy Research

Exhibit 2: Plant-wise capacity addition of NTPC

Plant / Staion (MW)	States	Fuel	Composition	FY10	FY11	FY12	FY13	FY14	Remarks
Standalone				**3,300**	**2,460**	**3,690**	**1,500**	**4,140**	
Rihand - III	Uttar Pradesh	Coal	2x500	-	-	-	500	500	Main plant order placed in Jan & Feb 09
Vindyachal - IV	Uttar Pradesh	Coal	2x500	-	-	-	500	500	Coal linkage expedited
Sipat - I	Chhattisgarh	Coal	3x660	1,320	660	-	-	-	Water supply constraint
Kahalgaon - II	Bihar	Coal	3x500	500	-	-	-	-	Lack of adequate infrastructure like road and rail links
Barh - I	Bihar	Coal	3x660	-	-	-	-	1,980	Tussle with the Russian supplier over price ceiling
Barh - II	Bihar	Coal	2x660	-	-	1,320	-	-	Main plant order placed in Mar & Oct 08
North Karanpura	Jharkhand	Coal	3x600	-	-	-	-	660	NA
Simhadri - II	Andhra Pradesh	Coal	2x500	-	500	500	-	-	
Bongaigaon	Assam	Coal	3x250	-	-	750	-	-	
Farakka - III (M)	West Bengal	Coal	1x500	-	500	-	-	-	
Mauda	Maharashtra	Coal	2x500	-	-	-	500	500	Main plant order placed in Nov 08
Korba - III (M)	Chhattisgarh	Coal	1x500	500	-	-	-	-	
Dadri	Uttar Pradesh	Coal	2x490	980	-	-	-	-	
Kawas	Gujarat	Gas	2x650	-	-	-	-	-	Non-finalization of gas supply agreement with RIL
Jhanor Gandhar	Gujarat	Gas	2x650	-	-	-	-	-	Non-finalization of gas supply agreement with RIL
Koldam	Himachal Pradesh	Hydro	800	-	800	-	-	-	Delay in the dam and spillway works at project site
Loharinag Pala (M)	Uttaranchal	Hydro	600	-	-	600	-	-	
Tapovan Vishnugad (M)	Uttaranchal	Hydro	520	-	-	520	-	-	
JV				**-**	**2,000**	**500**	**-**	**-**	
NTPC - Tamil Nadu Energy Co. Ltd.									
Ennore / Vallur	Tamil Nadu	Coal	2x500	-	500	500	-	-	
Aravali Power Co. Pvt. Ltd.									
Aravali	Haryana	Coal	3x500	-	1,500	-	-	-	
Subsidairy				**-**	**-**	**750**	**250**	**-**	
Bhartiya Rail Bijlee Co. Ltd.									
Nabinagar	Bihar	Coal	4x250	-	-	750	250	-	Acquisition of land pending
Consolidated Addition				**3,300**	**4,460**	**4,940**	**1,750**	**4,140**	
Cumulative Capacity			**30,144**	**33,444**	**37,904**	**42,844**	**44,594**	**48,734**	

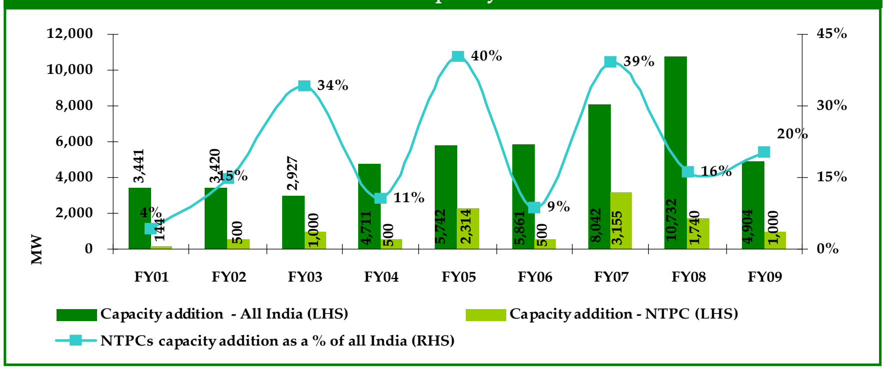
Source: Company & Karvy Research *Note: M = Merchant Power Capacity*

Superior execution track record, difficult to replicate soon

Expertise and execution capability - difficult to replicate by others..

NTPC started its journey from 500 MW in 1975 and presently it has an installed capacity of 30,644 MW. It has added almost 10,000 MW in the decade ending 2000 and likely to add above 14,000 MW by 2010. Over the past decade (FY01-09) the company has contributed 22% to India's power capacity addition, bringing immense expertise and capability to execute and add capacities further. We believe these expertise and capabilities developed over decades are difficult to replicate by any other player, especially in a short time period. Engineering capabilities to implement, commissioning of projects and running at superior efficiency brings in significant competitive advantages for the company, which makes us believe that it would continue to contribute significantly in the capacity addition journey of India in foreseeable future.

Exhibit 3: Contributed 22% to all India capacity addition

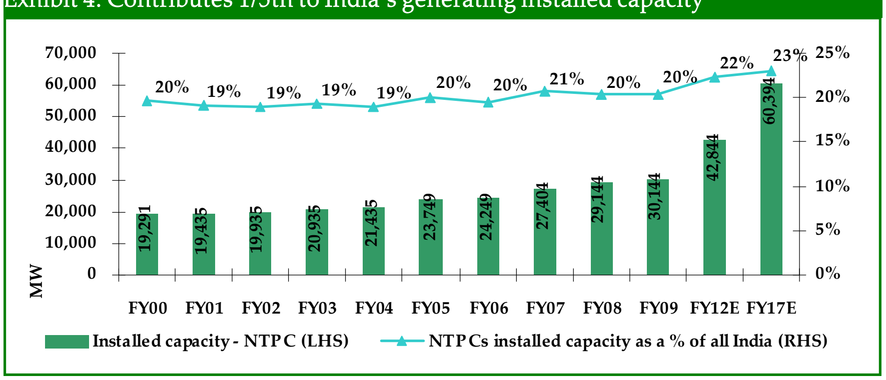


Source: CEA, Company & Karvy Research

Operating at a commendable capacity and expected to remain as leader in near future

NTPC is not only India's largest but also fifth largest power generating company in Asia and one of the top ten generating companies in the world. Since last decade it is having almost 20% of total domestic capacity and this is likely to touch 22% by FY12 and FY17 as per our estimates. NTPC has been consistent in adding capacity since its inception in 1975. The behemoth has added above 9,000 MW to make its capacity above 19,000 MW during FY1990-2000. During this decade ending FY2010, we expect it to add above 14,000 MW. We expect total installed capacity of NTPC to be around 43,000 MW by FY12, which would be 22% of Indian capacity as per our estimates. We believe NTPC should continue to remain as leader with 22-23% of total capacity by FY12 and FY17, despite significant capacity build up by several new private players in the industry during this period.

Exhibit 4: Contributes 1/5th to India's generating installed capacity



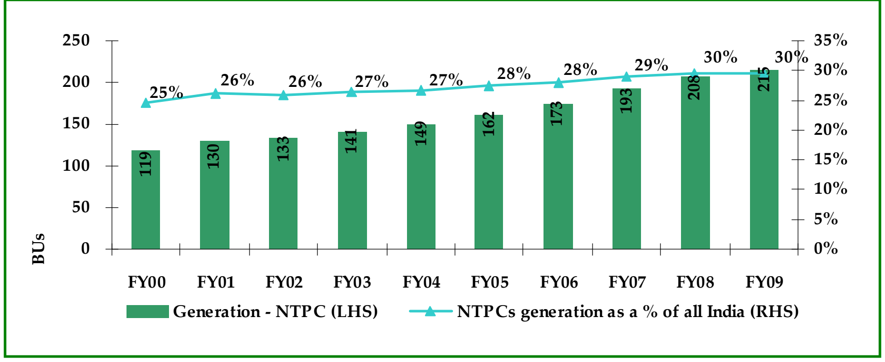
Source: CEA, Company & Karvy Research

Contributing ~30% of total Indian power generation, with 20% of total capacity

NTPC is also one of the efficient companies having higher than industry average plant load factor. This is evident as it contributes 30% of Indian power generation while capacity wise it contributes ~20%. NTPC's generation contribution has improved over a period of time from 25% in the beginning of the decade and grown steadily to 30% currently.

Leadership status in capacity and generation to remain in forseeable future

Exhibit 5: Contributes ~ 1/3rd to all India generation



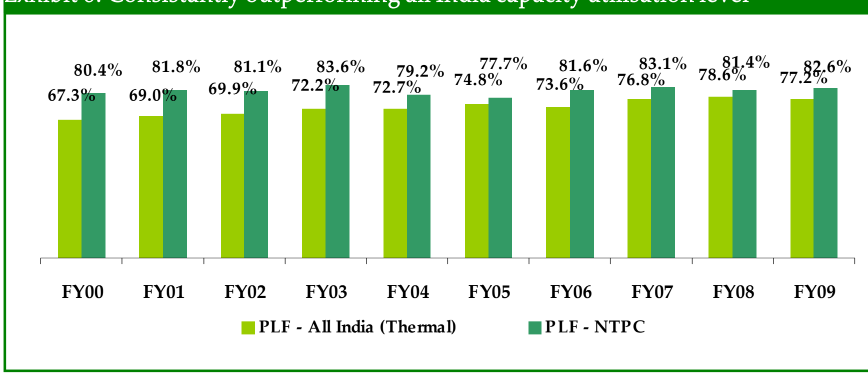
Source: CEA, Company & Karvy Research

Tough efficiency benchmark for peers, despite huge size & wide geographical plant locations

Maintaining such efficiency with huge capacity a different ball game

NTPC enjoys a very high PLF when compared to the industry (as in exhibit 6) and we believe maintaining such efficiency consistently, despite a huge capacity and wide geographical presence of plants across India is derived from expertise and experience. NTPC is having above 30,000 MW installed capacity at 26 various power stations across India and planning to add 10 more stations by end of FY12. Hence, we believe running with such large number of stations with remarkable efficiency is a tough benchmark to replicate for peers, especially new entrants or players with expertise of running smaller size of plants.

Exhibit 6: Consistantly outperforming all India capacity utilisation level



Source: CEA, Company & Karvy Research

Note: (a) The PLF mentioned for NTPC is including JV & Subsidiaries generating units (coal & gas fired plants).
(b) The PLF mentioned for FY00-03 is of coal-fired plants, while the PLF of gas-fired plant is 70.3%, 72.2%, 71.1% and 70.0% for FY00, FY01, FY02 and FY03 respectively.

The PLF of NTPC is pulled down especially (refer exhibit -7) on account of low capacity utilisation of Ratnagiri Gas & Power Pvt. Ltd. (JV with GAIL, Maharashtra State Electricity Board and Indian financial institutions) and other gas-fired plants. The PLF of NTPC's coal-fired plants (consolidated) is 87.6% and that of gas-fired plants (consolidated) is 68.3%. Only Torrent and CESC are having better PLF than NTPC at gross level. However, Torrent and CESC are operating at very small capacities (500 MW & 975 MW respectively) with only 3-4 locations, against NTPC's wide presence in 26 locations. There are several plants of NTPC which are running at very high PLF (above 90% - refer exhibit-8) also, but it gets tougher when size increases significantly. Hence, we are of the opinion it would be difficult for smaller players to maintain high efficiency with diverse locations and large size of NTPC.

Exhibit 7: Domestic peer group PLF

Company	Installed Capacity (MW) FY09	PLF (%) FY09
Tata Power	2,785	69.2%
Neyvelli Lignite	2,490	79.0%
Reliance Power	300	NA
Torrent Power	500	91.6%
CESC	975	97.0%
GIPCL	560	80.1%
Adani Power	0	NA
Indiabulls Power	0	NA
NTPC	**30,144**	**82.6**

Source:Company,Kary Research

Note to exhibit-7: PLF for Tata Power is the combined utilisation level for 2,179 MW thermal capacity (coal-fired plant only) with a PLF of 78.2%, 448 MW hydro capacity with a PLF of 29.5% and 159 MW wind capacity.

Exhibit 8: Plantwise PLF for the past 3 years

Plant / Satation	Located in States	Installed Capacity FY09 (MW)	PLF FY07 (%)	FY08 (%)	FY09 (%)
Singrauli	Madhya Pradesh	2,000	83.8	91.7	90.7
Rihand	Uttar Pradesh	2,000	91.9	95.4	97.2
Unchahar	Uttar Pradesh	1,050	95.5	97.7	93.7
Tanda	Uttar Pradesh	440	91.1	91.7	89.4
Badarpur	Delhi	705	84.1	84.7	88.5
Dadri	Uttar Pradesh	840	95.7	98.0	99.4
Korba	Chhattisgarh	2,100	89.7	96.1	96.2
Vindhyachal	Madhya Pradesh	3,260	92.6	92.6	93.2
Sipat	Chhattisgarh	1,000	0.0	0.0	84.7
Farakka	West Bengal	1,600	81.3	83.5	76.8
Kahalgaon	Bihar	1,840	89.4	71.4	67.6
Talcher - Kaniha	Orissa	3,000	90.0	94.0	85.8
Talcher - Thermal	Orissa	460	86.2	84.5	90.7
Ramagundam	Andhra Pradesh	2,600	88.9	90.2	94.5
Simhadri	Andhra Pradesh	1,000	92.1	88.6	97.4

Source: Company

Note to Exhibit-8: Kahalgaon Stage II - Unit 1 & 2 attained commercialization date in FY09 (Aug 1, 2008 and Dec 31, 2008); therefore the PLF had dipped to as low as 67.6% in FY09.

Project delay concern is already factored in

We believe that the market is apprehensive regarding possible spill over of several projects to 12th five year plan period, as several on going projects are tail ended towards end of FY11 and FY12. We studied this aspect and found that, this is because several projects were initiated during 2006-07, so automatically their completion time falls into end of 11th five year plan during FY11 and FY12. The main plant orders for projects like Aravali (1,500 MW), Dadri (980 MW), Korba (500 MW), Mauda (1,000 MW), Farraka (500 MW) and Bongaingaon (750 MW) were given in 2006-07. On the other hand, we also believe that some projects are getting delayed and leading to cost over run on account of a variety of reasons. Prominent projects that are running behind schedule are Koldam, HP (delay in the dam and spillway works at the project site), Sipat, Chattisgarh (water supply constraint), Kawas & Gandhar, Gujarat (continuing gas price dispute from KG Basin) and Kahalgaon, Bihar (lack of adequate infrastructure like road and rail links). We believe such challenges are inherent for any power generation company operating at such huge capacity addition program. Market is discounting growth of NTPC on likely delay in some projects, which is also factored by us, but we believe other players would also not have a smooth ride in capacity addition, due to some common challenges prevalent in India.

Despite slipage in own target, NTPC to add highest capacity

Nevertheless, the highest addition by NTPC only

We are of the opinion that other players (Exhibit 1) who are chalking out aggressive expansion plan may also face even more severe execution challenges leading to time over run, once they progress ahead. We believe it is assumed in the market that competitors of NTPC would have a smooth ride in their capacity addition target, unlike NTPC; where we disagree. Even if we give benefit of doubt to its competitors, and assume that they will successfully add their targeted generation capacity by FY12, we found that in absolute terms NTPC would add highest capacity by FY12 and FY14 and continue to lead Indian power generation market.

2. Fuel worries have negligible impact in long run

Considering announcement of several new power capacities in India, we are of the opinion that coal supply scenario in India is likely to be tighter in coming years. In our report dated September 18, 2009, titled "Coal will be the key to India's power ambitions…." we have estimated that even if the country meets the planned power capacities being added on time, a shortage of coal supply will limit the actual power generation to 64% of the planned incremental capacity of coal-based power in the 11th plan.

NTPC has adopted a multi-pronged strategy as some plants are facing fuel supply constraints especially with low inventory leading to lower than normative PLF. To counter this issue the company has taken a few steps; which includes:

1) Conditional fuel (coal) supply agreement with CIL
2) Developing captive mine
3) Scouting for coal mines abroad
4) Gas supply issue - soon to be addressed

1) Conditional fuel (coal) supply agreement with CIL

Fuel linkage with 90% triggered level

On 29th of May 2009, NTPC and CIL inked a much-awaited fuel supply agreement (FSA) where the trigger level of 90% was agreed upon. Trigger level is basically the minimum assured level of coal supply and off-take, failing which either of the parties will attract penalty. Based on our discussion with the management we learnt that the new power projects of NTPC will get an assured supply of coal to operate the plants at a PLF of 90%. Earlier, CIL had guaranteed 60% of the supply of fuel to the power utilities against their demand of 90%. As per the FSA, CIL along with subsidiaries should supply ~130 million metric tonnes (MMT) of coal to NTPC for its 15 power plants. Moreover a separate MoU was also signed between NTPC and Eastern Coalfields Limited (ECL), a subsidiary of CIL, for annual coal supply of 2 MMT to NTPC's severe coal shortage stations at Farakka and Kahalgaon. We believe this clause appears to be favourable for NTPC, given an apparent coal supply constraint (see the apparent coal shortage note below) scenario for the whole industry. The penalty clause attached to the agreement makes us believe that it would be more binding and leave thin scope of default on both the parties.

Apparent Coal shortage: *During FY10, CIL has indicated availability of coal of 313 MMT, against expected demand of above 400 MMT. Adding further, ~30 MMT from Singareni Collieries Company Limited and 20 MMT from captive mines, total indigenous coal supply could be ~363 MMT, resulting shortage of 41 MMT for the FY10.*

2) Captive mine, a viable step towards fuel security in the long run

Given the deepening coal supply constraint which is expected to worsen in future, NTPC has commenced developing captive mines. NTPC is developing 8 coal blocks allocated to it, of which 2 blocks are in 50:50 joint venture (JV) with CIL. With total reserves of 5,907 Million MT, the mines are expected to produce 68 metric tonnes per annum (MTPA).

Captive mine to meet 5% & 11% coal requirement by FY12 and FY14

The management expects to start production of coal from Pakhri Barwadih mines by end of 2009 and plans to achieve coal production of about 14 MTPA by FY12 and 47 MTPA by FY17. However, according to a report by Ministry of Power, ('Broad status of captive coal mines allotted to power utilities' dated Jan-Mar 2009), NTPC would be able to produce 8.2 MTPA by FY12, against projection of 14 MTPA by NTPC itself. The MoP also stated that in three coal blocks allotted to NTPC in Jharkhand at Pakhri Barwadih, Kerandari and Chatti Bariatu are yet to establish significant infrastructure especially rail linkage. A rail linkage is being laid to evacuate coal from the mines to plants, which is called "Koderma - Hazaribagh- Banadag" line. The power ministry report also includes that, only 6 km out of required 89 km rail linkage is laid so far. Considering these factors we have factored in our model captive coal production of 8 MTPA, 15 MTPA and 22 MTPA for FY12, FY13 and FY14 respectively. This would help the company meet 5%, 9% and 11% of its coal requirement for FY12, FY13 and FY14 respectively.

Exhibit 9: Details of Caol block allotted by Ministry of Coal to NTPC

Block allocated	Coal fields	State	Beneficiary project	Date of allotment	Anticipated date of commencement of coal production	Anticipated date of attaining full capacity	Status of exploration	Geological reserve (MMT)	Full capacity rate of production (MTPA)	Rate of production (As per approved mining plan) (MTPA) FY11	FY12	FY13	FY14	FY15	FY16	FY17
Pakri-Barwadih	North Karanpura	Jharkhand	Basket of NR & ER NTPC Projects	11-Oct-04	Jan-10	FY21-22	E	1,600	15.0	2.3	5.2	8.5	9.5	10.0	10.5	11.5
Kerandari	North Karanpura	Jharkhand	Barh St.-II (2X800 MW) Tanda Exp-II	25-Jan-06	FY11-12	FY14-15	E	229	6.0	0.0	0.0	2.0	4.0	6.0	6.0	6.0
Chatti Bariatu	North Karanpura	Jharkhand	Barh St.-II (2X800 MW) Tanda Exp-II	25-Jan-06	FY10-11	FY14-15	E	243	7.0	0.0	1.0	3.0	5.0	7.0	7.0	7.0
Chatti Bariatu (South)	North Karanpura	Jharkhand	NA	25-Jul-07	NA	NA	E	354	NA	NA	NA	NA	NA	NA	NA	NA
Dulanga	IB Valley	Orissa	Darlipalli (3,200 MW)	25-Jan-06	FY11-12	FY16-17	RE	260	5.0	0.0	0.5	1.0	2.2	3.0	4.0	5.0
Talaipali	Mand Raigarh	Jharkhand	Lara (4,000 MW)	25-Jan-06	FY11-12	FY23-24	RE	965	15.0	0.0	0.0	2.0	3.0	4.5	6.0	8.0
NTPC - Total								**3,651**	**48.0**	**2.3**	**6.7**	**16.5**	**23.7**	**30.5**	**33.5**	**37.5**
Brahmini	Rajmahal	Jharkhand	Kahalgaon & Farakka Expansion	25-Jan-06	NA	NA	E	1,900	20.0	0.0	1.5	1.5	1.5	1.5	1.5	10.0
Chichro Patsimal	Rajmahal	Jharkhand	Kahalgaon & Farakka Expansion	25-Jan-06	NA	NA	RE	356								
NTPC + CIL JV - Total								**2,256**	**20.0**	**0.0**	**1.5**	**1.5**	**1.5**	**1.5**	**1.5**	**10.0**
Grand Total								**5,907**	**68.0**	**2.3**	**8.2**	**18.0**	**25.2**	**32.0**	**35.0**	**47.5**

Source: Ministry of Power, Ministry of Coal & Karvy Research

Note: E: Explored, RE: Regionally Explored, MT: Million tonnes & MTPA: Metric tonnes per annum

3) Scouting for mines abroad

Given the constraint in coal availability scenario in India and to improve fuel security on its own, NTPC is scouting for coal mining assets abroad. In line with this strategy, a new company, International Coal Ventures (ICV), was formed in collaboration with Steel Authority of India Ltd. (SAIL), Coal India ltd. (CIL), Rashtriya Ispat Nigam Ltd. (RINL), NMDC and NTPC. SAIL, CIL, RINL, NMDC and NTPC contributes equity in the ratio of 2:2:1:1:1 respectively to form to ICV. The entity, ICV is incorporated for carrying on business of overseas acquisition and/or operation of coal mines/blocks/companies for securing coking and thermal coal supplies.

NTPC is also pursuing separately coal block acquisition in Indonesia and Mozambique apart from scouting mines in Australia and Canada through ICV. However, there is no significant development in terms of acquiring any overseas coal block by the special entity, ICV. On the other hand, according to media reports, NTPC is close to acquiring coal mines in Indonesia and Mozambique and it is in the process of doing due-diligence for it. However, due to lack of clarity on the deal, we have not yet factored this positive development in our model. Nevertheless, it would be a positive development for the company in coming days.

Imports to fill the gap of coal until any coal mining asset is acquired abroad: To make good the shortage of coal in the domestic market NTPC had in FY09 imported 5.4 million tonnes of coal as against 2.8 MT in FY08. The company has already placed orders to import 12.5 MT in FY2010 out of which it has already received 3.7 MT in H1FY10. We believe that NTPC would continue importing such quantity in future to fill the gap between demand and supply; until it successfully acquires coal mines abroad thus meeting its requirement levels.

4) Gas supply issue - soon to be addressed

NTPC has seven gas-based power stations - Anta, Auraiya, Kayamkulam, Kawas, Gandhar, Dadri and Faridabad - with a collective power generation capacity of ~ 4,000 MW and the fuel for these stations is sourced from the spot market. The company requires 15-16 Million Metric Standard Cubic Meter Per Day (MMSCMD) of gas for its gas-based power plants out of which it would source 2 MMSCMD from state-run Gas Authority of India Ltd (GAIL). NTPC received 10.74 MMSCMD of gas during the FY09 as against 11.76 MMSCMD received in FY08. Thus the gas-run power stations of the company operated at a PLF of 67.01% in FY09 as against 68.14% in FY08. However, in H1FY10 NTPC exceeded market expectation by reporting a PLF of 78.4% as against 62.7% reported in H1FY09 and a PLF of 67.0% in FY09 and 68.1% in FY08, on account of easing in gas supply recently. So improved gas availability scenario in India could give a comfort for its gas based plants. The company has taken the following steps to ensure gas availability:

Gas supply agreement with GAIL: NTPC is in the advanced stage of finalization of agreement with GAIL, for supply of 2.5 MMSCMD of R-LNG (re-gasified liquefied natural gas), for a period of 10 years. Under this agreement, the supply of gas is to commence from December'09.

During the first half of FY10, on an average, over 27.83 MMSCMD of gas/ RLNG has been received in view of improved supplies as against 22.01 MMSCMD in corresponding half of previous year. NTPC is also renewing the Administered Price Mechanism (APM) agreement with GAIL till 2021, and the Panna-Mukta-Tapti (PMT) gas agreement till 2019 for sustained long-term gas supplies of 12.9 MMSCMD of gas.

Agreement with oil marketing companies (OMC) for fall back fuel: NTPC has entered into medium term agreement for naphtha supplies for many of its plants with some OMC - BPCL & IOC. To further enhance fuel security of gas based stations, increasing the capacity of liquid fuel storage tank is also under consideration at some of its stations.

NELP-V work on full swing and also bidding for new blocks: NTPC had bagged its maiden oil exploration block in 2005 under New Exploration and Licensing Policy (NELP) -V. The 20 exploration blocks under the 5th round of NELP was allotted for exploration activities in Arunachal Pradesh, to NTPC (30%) in consortium with Canoro Resources Ltd. (30%), Geopetrol International Inc. of France (30%). The exploration and production activities in the NELP-V are in full swing. Over and above this, NTPC has been bidding for oil and gas blocks, during various rounds of NELP. Possible equity stake in foreign oil and gas blocks/LNG terminals etc. are also some of the measures taken by the company to enhance gas supply security.

Gas from KG Basin, availability not the issue but pricing: Currently NTPC is fighting a case against RIL in Supreme Court of India to get gas at US$ 2.34 per million metric British thermal unit (mmBtu), a price substantially lower than the US$ 4.2 per mmBtu approved by the government. Hence, supply or availability is not a constraint for gas based plants, however, on account of this lingering issue of gas price, gas based power stations of NTPC at Kawas and Gandhar with combined capacity of 2,600 MW is getting delayed to come on stream. Therefore, due to non clarity of the issue, we have not factored these two plants on our model presently and watch closely to update in future.

Concern remains in short term…….

Though some of the power stations of NTPC have faced coal supply issues, we believe the scenario is likely to improve in long run. Recently coal availability emerged as a serious constraint in some stations of NTPC with coal stocks of less than 7 days, as against standard requirement of 15 days. Those stations of NTPC were Farakka, Kahalgaon, Sipat, Talcher and Korba. Nevertheless, while some stations had faced shortage of supply, some others were facing other challenges with infrastructure, which were in developing stage. Based on media reports, we learned that recently two coal-based power plants of NTPC in Farakka (West Bengal) and Kahalgaon (Bihar) were shut for 45 days, lead by coal supply and transportation bottlenecks. We believe the above mentioned issue will remain as a concern for some time. However, NTPC is taking (above discussed) adequate steps to counter the issue which should help in fading away the concern in long run. NTPC has recently formed 50:50 joint ventures with Coal India Ltd with an intention to develop Brahmini and Chichro Patsimal coal blocks to get ensured supply of coal for its Farakka and Kahalgaon power plants.

.......but impact is negligible

While, we continue to remain cautious on the coal shortage issue in the near term, the net impact of this on NTPC is quite insignificant during this period. It is reported by power ministry that on account of crippling coal supply, NTPC has lost potential generation of 126 million units (MUs) between April and June of FY10. This implies a total potential loss of ~ 1500 MUs for the entire year, which is 0.7% of total units generated by NTPC in FY09. Hence, net impact on generation should not be more than 1-2% on NTPC in short term.

3. Merchant power capacity addition to sweeten blended tariff

Out of the total capacity addition of 22,430 MW planned for the 11th five year plan ending in March 2012, NTPC plans to add 2,120 MW (exhibit 2) of merchant power capacity, representing ~5% of total installed capacity estimated by us; for which the company could fetch average tariff at ~Rs 4-5/ unit against ~Rs 2/ unit under Power Purchase Agreements (PPAs) signed with State Electricity Boards (SEBs). This capacity addition would improve blended realisation of NTPC which consequently could reflect in improved ROE.

4. Established trend of 100% realization of dues

66% of the energy bills realisation within a week

Not until the suggestion of the Ahluwalia Committee was implemented in 2003, NTPC was in a strained financial situation, due to poor realisation of dues from state electricity boards (SEBs). The committee had suggested maintaining opening letter of credit (LoC) to the extent of 105% of average monthly billing established by all customers. For six years in succession (FY04 onwards) and to the end of H1FY10, NTPC has in received 100% realization of current dues. Not only this, the company realises 66% of the energy bills within a week of presentation of the bill for the month. To maintain this track record the company has setup an incentive scheme to encourage customers to pay on time.

Further, in accordance with the suggestions of the committee; the central government and the Reserve Bank of India (RBI) signed a tripartite agreement (TPA) with SEBs for one-time settlement, after waiver of 60% of interest/surcharge on the past dues, to power generating Public Sector Undertakings (PSUs). The 8.5% tax free SLR bonds were structured to achieve a moratorium of 5 years and repayment period of 15 years.

5. Further divestment, could be a trigger

As per media reports, government may sell up to 5% of its 89.5% equity stake in NTPC before March 2010. The step would be part of the United Progressive Alliance (UPA) government's disinvestment programme for select public sector undertakings to reduce the fiscal deficit of India. However, the company is yet to receive any formal approval in this regard.

6. Adding nuclear fuel in portfolio, a long term positive

NTPC got into the nuclear generation business, through a joint venture with Nuclear Power Corporation of India Ltd. (NPCIL) for setting up a Nuclear Power Projects. NPCIL and NTPC stake in the ratio of 51:49. Both the parties are likely to invest jointly ~Rs 150 bn in the next eight years to set up nuclear power plants in the country. The plan, initially, is to set up a 2,000-MW nuclear power project, which could come up by 2017.

Financials

Quarterly Financials - Standalone

Rs mn	Q2FY09	Q1FY10	Q2FY10	YoY %	QoQ %
Net Sales	96,614	120,027	107,828	12	(10)
Other Operaing Income	4,297	5,253	4,698	9	(11)
Net Revenue	**100,911**	**125,280**	**112,526**	**12**	**(10)**
Cost of Fuel	59,559	77,427	66,068	11	(15)
Employee Cost	6,047	5,904	5,040	(17)	(15)
Other Expenditure	5,533	4,939	4,582	(17)	(7)
Total Expenditure	71,138	88,270	75,691	6	(14)
EBITDA	**29,773**	**37,010**	**36,836**	**24**	**(0.5)**
EBITDA Margin (%)	*29.5*	*29.5*	*32.7*		
Other Income	3,151	2,510	2,712	(14)	8
Interest & Finance Charges	5,264	4,447	5,407	3	22
Depreciation	5,267	6,128	6,438	22	5
PBT	22,394	28,945	27,703	24	(4)
Tax	1,289	7,009	6,183	380	(12)
Effective Tax Rate (%)	5.8	24.2	22.3		
PAT	**21,105**	**21,936**	**21,520**	**2**	**(2)**
PAT Margin (%)	*20.9*	*17.5*	*19.1*		
EPS	2.56	2.66	2.61	2	(2)

Source: Company & Karvy Research

During Q2FY10, NTPC reported a net sales growth of 12% YoY and de growth 10% QoQ to Rs 108 bn. The YoY sales growth was combination of volume, along with tariff rate growth; however sequential de-growth would be attributed to lower generation. While sales declined sequentially by 10%, total expenditure declined by 14% in Q2FY10, reflecting a significant margin expansion of 320 bps QoQ. This is mainly on account of savings in fuel cost, as fuel cost and employee cost. However, on YoY basis, fuel cost as a percentage of net sales remained almost in the same range of 61%+. Total expenditure grew by just 6% on a sales growth of 12% (YoY), owing to lower employee cost and other expenditures. Therefore, during Q2FY10, EBITDA margin has expanded by ~320 bps in both YoY and QoQ basis, to 32.7%. Consequently, EBITDA grew by 24% YoY and declined marginally ~0.5% (QoQ) in Q2FY10.

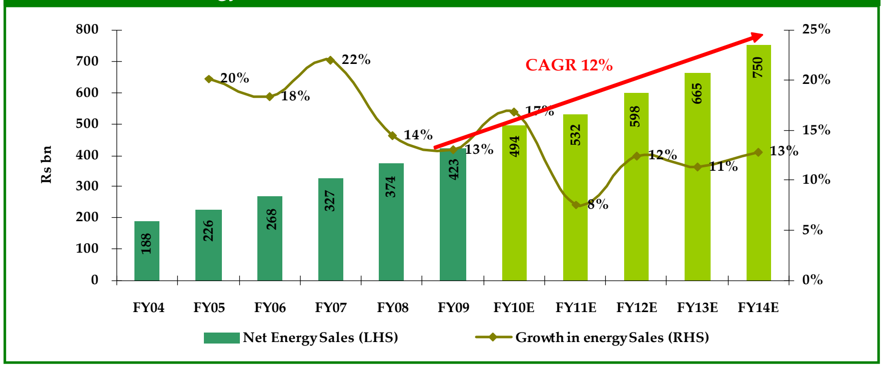
PBT grew by 24% YoY, following the trend of EBITDA. However, sequentially PBT de-grew by 4%, on a 0.5% decline at EBITDA level, on account of higher interest cost. PAT reported at Rs 21.52 bn in Q2FY10, reflecting a growth of 2% YoY and de growth of 2% QoQ. So, EPS for Q2FY10 stands at Rs 2.61.

Annual Financials Outlook

Revenue growth backed by capacity addition

We expect NTPC to record a net sales growth (CAGR) of 12% from FY09 to FY14E. We estimate net sales of Rs 525 bn in FY10E and Rs 567 bn in FY11E and to cross Rs 800 bn by FY14E. This growth would be primarily driven by volume growth (9%) backed by on going capacity expansion while remaining 3% growth would be contributed from tariff rate.

Exhibit 10: Net Energy Sales - NTPC Consolidated

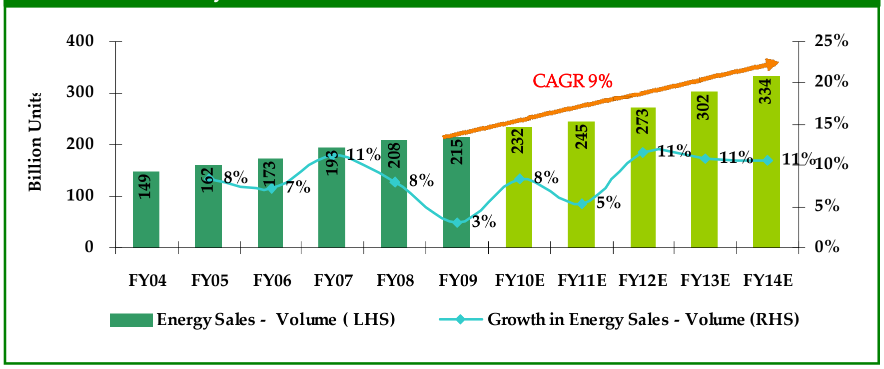


Source: Company & Karvy Research

Likely capacity addition at 10% CAGR (FY09-14), against 6% in FY05-09.

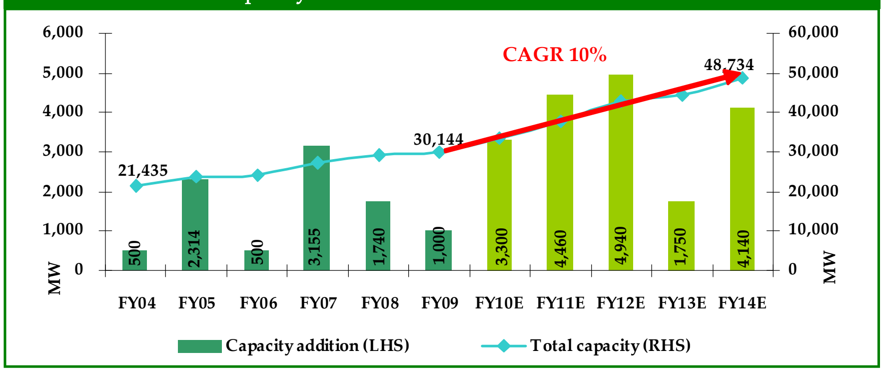
We estimate a volume growth (CAGR) of 9% from FY09 to FY14E. We believe volume growth would come from additional capacity coming up in future. The company aims to take installed capacity from 30,144 MW in FY09 to 50,000 MW by FY12 and 75,000 MW by FY17. However, we are of the opinion that it will miss its target and the feasible capacity as per us stands at ~ 42,800 MW by FY12 and ~ 60,400 MW in FY17. Despite missing target by 7,200 MW till FY12 we expect it to add 18,590 MW in next 5 years, ending FY14. This translates into capacity addition of 10% CAGR from FY09-14, against CAGR of 6% recorded during last five years, from FY05-09.

Exhibit 11: Electricity Generation - NTPC Consolidated



Source: Company & Karvy Research

Exhibit 12: Installed Capacity Addition



Source: Company & Karvy Research

EBITDA & EBITDA Margin

Historically, EBITDA margin of NTPC has been on the early thirties, but slipped below 30% in FY09 due to unprecedented rise in fuel prices and hike of employee cost reflecting PSU pay hike (in line with 6th pay commission). Average coal prices had moved up by 17% in FY09 (YoY) which has primarily driven raw material cost northward. Due to the pay hike, average cost per employee has surged by 61% in FY08 and 29% in FY09, consequently above 100% hike over that of FY07. We believe impact of the salary hike will take few years to come to previous level of employee cost. We estimate employee cost as a percentage of net sales to come down gradually from 5.5% in FY09 to 5.1% in FY12 and 4.5% in FY14. While, we have factored a nominal hike in employee cost (considering the next revision in 2016) till FY14, we estimate 35% growth in employee strength in next 5 years to support the on going expansions.

Exhibit 13: Expenditure break-up

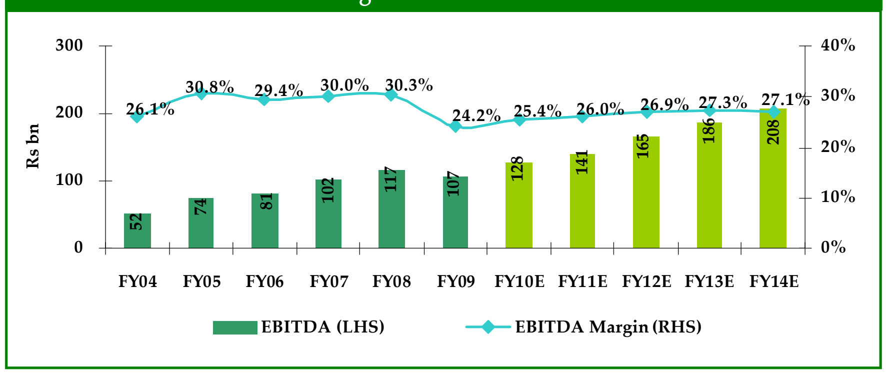
% of Net Revenue	FY04	FY05	FY06	FY07	FY08	FY09	FY10E	FY11E	FY12E	FY13E	FY14E
Cost of Fuel	61.6	56.9	59.5	58.5	57.4	61.7	60.2	58.9	57.6	57.3	57.8
Employee Cost	4.5	3.8	3.6	3.5	5.0	5.7	5.4	5.4	5.3	4.8	4.6
Other Expenses	7.9	8.6	7.5	7.9	7.2	8.4	8.9	9.7	10.2	10.6	10.6
EBITDA Margin %	26.1	30.8	29.4	30.0	30.3	24.2	25.4	26.0	26.9	27.3	27.1

Source: Company & Karvy Research

We estimate cost of fuel as a percentage of net sales would continue to be highest; nevertheless, we expect fall from FY11 as a result of captive coal production and scale of operation.

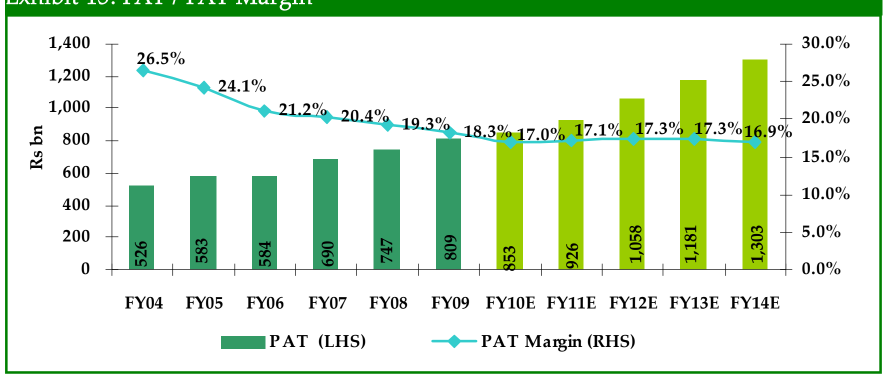
Effectively, we expect EBITDA margin to inch up to 26-27% FY11 onwards, despite consistent increase of other expenses. While other expenses (O&M) are expected to remain almost in the similar range, we expect consistent improvement in power trading volume through subsidiary, NTPC Vidyut Vyapar Nigam. This business runs at extremely thin margin of around 2% at EBITDA level. Considering the pertinent power shortage we expect energy trading volume to remain high for next couple of years. We expect EBITDA to record a CAGR (from FY09-14) of 14.2%.

Exhibit 14: EBITDA / EBITDA Margin



Source: Company & Karvy Research

Exhibit 15: PAT / PAT Margin

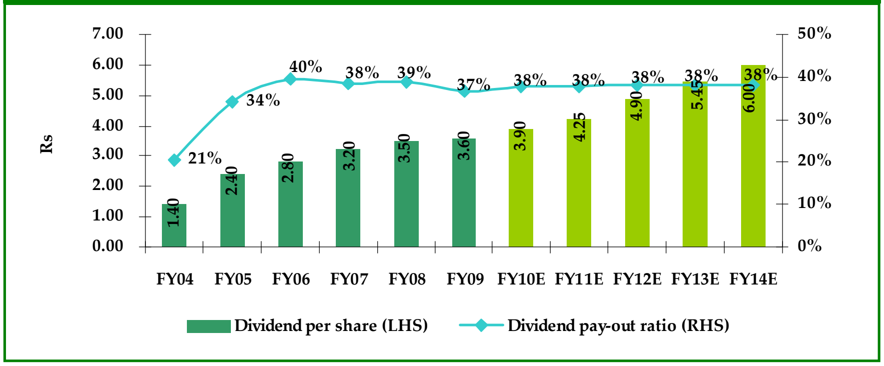


Source: Company & Karvy Research

On higher tax out go, PAT to grow at 10% despite 12% growth of PBT

We expect PBT to register a CAGR of 12.4% from FY09 to FY14. However, we expect net profit to grow at a 10% only during the same period, on account of higher (22%) tax out go from FY10 onwards against only 13% tax out go recorded in FY09. We expect net profit of NTPC to be around Rs 85.3 bn in FY10 and Rs 92.6 bn in FY11. Similarly, we estimate EPS to be ~ Rs 10.3 in FY10 and Rs 11.2 in FY11.

Exhibit 16: Consistent Dividend Record



Source: Company & Karvy Research

Consistent dividend payout record

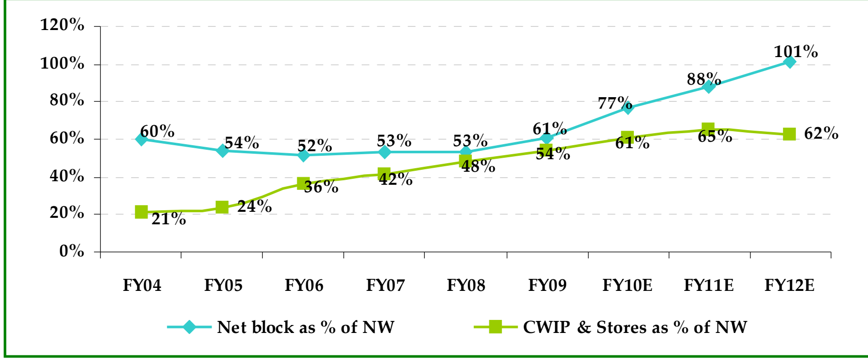
Considering historical trend, we believe NTPC would continue to share profits maintaining a decent dividend pay out in future. We expect the company to maintain its pay out ratio on the higher thirties in coming years. This translates into dividend per share (DPS) of around ~ Rs 3.9 in FY10 and Rs 4.3 in FY11. We estimate DPS to touch Rs 6.00 by FY14.

ROE to remain subdued on the cost of aggressive capex, unavoidable necessity

Aggressive capex to pressurise ROE for some time

Power generation companies which generate and sell power through long term power purchase agreement (PPA) are regulated on the return on equity (RoE) by regulators unlike merchant power companies. Tariff of energy units sold out by these power utilities (generators) are calculated backward adding fixed ROE on the cost of capacity charges (annual fixed cost) and energy charges (primary fuel cost). During 2009 January, the Central Electricity Regulatory Commission (CERC) issued new tariff regulations for next five years (2009-14) under which the base rate for RoE has been raised from 14.0% to 15.5% and put additional RoE of 0.5%, to those projects which are commissioned on time (Refer annaxure). However, we believe RoE will remain subdued for few years, despite which NTPC would continue to achieve high efficiency in coming days as a significant portion of asset is likely to remain unutilised being in capital work-in-progress and construction stores and advances. As it takes 3-4 years to set up power plants, capital blocked as unfinished assets (under capital work-in-progress and stores) are likely to drag returns for the whole company. We have observed the same in case of NTPC, that is why it could fall short of achievable (that is 15.5% for FY09-14) RoE for next few years.

Exhibit 17: Significant assets to remain in CWIP



Source: Company & Karvy Research

As it can be derived from the above exhibit 17 that since FY05 onwards, capital WIP and stores & advances have gone up significantly as several projects were initiated during FY06-07 and we expect the trend to continue for next few years ahead on account of continued capex. Capital WIP and Stores together reported to cross 200% of net capex of that year in FY07 from 171% in FY05. We expect the same to be above 200% in coming few years.

Higher capital blocked in WIP, obvious affect of aggressive capex plan

On one hand we point towards the issue of possibility of lower than achievable ROE due to higher blockage of assets in work in progress, on other hand we are of the opinion that this is natural and unavoidable considering gestation period of power plants. While this could be viewed as one face of aggressive capex, serious need of capacity addition in the country is another dire need. Moreover, benefit from capacity addition would be accrued in long run. Market has seen this as a negative point in NTPC in comparison to other private generation companies. However, we disagree on the point and believe that all peers who are adding significant capacity should also experience the same phenomena. And we think those are not experiencing it now, either they are not adding significant capacity (which is a long tern negative) or they are behind NTPC in terms of capacity adding program. We opine that the same would be experienced by other power generators in future as most of the expansion plans declared by private players after FY07.

Exhibit 18: Domestic peer group - ROE derivation

Company	RoE (%)			CWIP/Net Worth (%)		
	FY07	FY08	FY09	FY07	FY08	FY09
Tata Power	12.4	12.9	13.0	17.4	36.7	61.6
Neyvelli Lignite	7.0	12.7	8.9	23.8	42.0	45.8
Reliance Power	0.1	1.2	1.8	25.4	6.0	33.9
Torrent Power	2.4	6.4	11.9	32.6	79.4	91.6
CESC	6.9	7.3	7.4	6.0	11.6	22.5
GIPCL	18.4	9.3	7.4	221.0	74.1	19.7
Adani Power	(1.6)	(0.8)	(0.1)	216.2	170.3	280.8
NTPC	14.7	14.7	14.6	41.6	48.4	53.7

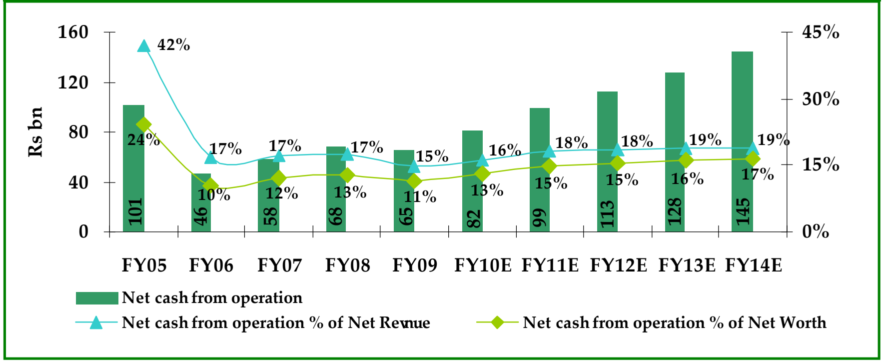
Source: Company & Karvy Research

Strong and consistent cash flow from operation

Consistent cash generation from operation at 20% of sales

The behemoth is currently generating positive cash from operation of ~ Rs 100 bn/ year, 20% of its net sales. We expect cash from operation to cross Rs 130 bn in next two years and ~ Rs 150 bn by FY12 which translates into ~Rs 18-20/ share, (refer cash flow). Currently net cash from operation is above Rs 60 bn, which is ~15% of net sales. We estimate the same to touch ~ Rs 100 bn in FY11 taking net cash generation from operation to Rs 12/share by FY11 from current Rs 8 /share.

Exhibit 19: Consistent and strong positive cash generation



Source: Company & Karvy Research

Investment Concerns

Inability to add capacity in time could adversely affect profitability

At the beginning of the 11th five year plan (FY07-12) NTPC had chalked out a plan to add 22,430 MW of capacity during this plan period; thereby taking the cumulative capacity to 50,000 MW. With about half the plan period over the company has successfully commercialized 3,240 MW (FY08: 1,740 MW, FY09: 1,000 MW & FY10 (upto date): 500 MW) i.e. 14.4% of the target. We believe that as per the trend NTPC would be able to commercialize an additional capacity of 15,440 MW by March 2012 (including 3,240 MW already installed) i.e. 68.8% of the target; thus taking the cumulative capacity to 42,844 MW. Any further delay in capacity addition could drag down sales and profitability and cash flow.

Failure to counter fuel shortage issues could drag capacity utilisation

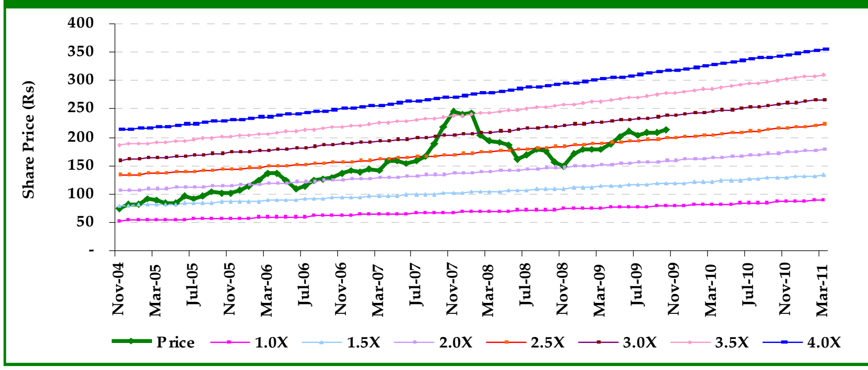
A few of NTPC's power plants have been consistently facing coal shortage issues, for which the company is adopting three prolonged strategy to counter it. NTPC has taken steps like signing long term fuel supply agreement with CIL, developing captive mines and acquisition of mines abroad. However, failure to execute any of these strategies would result in lower capacity utilisation (PLF) and lower profitability than our estimates.

Valuation

Based on BV

Power generation companies are usually valued on BV or capacity (MW) than earnings as profitability is regulated. Historically the stock was moving in a band of 1.5-2 x of forward BV till FY06 but then the P/BV band improved to 2-3x of BV, leaving apart the euphoric valuation during mid FY07 to mid FY08, where it was trading at above 3.5x its 1 year forward BV. Currently NTPC is trading at 3x FY09 BV and 2.7x FY10 BV. If we roll over to the similar multiples to next year, we arrive at a 12 month target price of Rs246/share, based on 3x FY11BV.

Exhibit 20: 1Yr forward P/BV Band

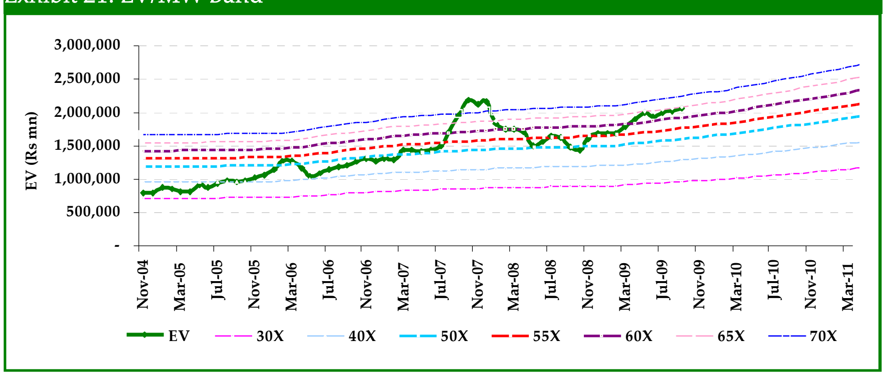


Source: NSE & Karvy Research

Based on MW

Historically, the stock was trading in an EV/MW band of 30x to 50x its forward capacity till FY06 but then the EV/MW band moved to next level from 50-65x, leaving apart the euphoric valuation period from mid FY07 to mid FY08, where it was trading at above 80x its forward MW. Currently NTPC is trading with an EV/MW multiple of 65x FY10. Retaining the same EV/MW multiple of 65x and rolling on our capacity (MW) base to FY11, we arrive at a price target of Rs 244/share.

Exhibit 21: EV/MW Band



Source: NSE & Karvy Research

Moreover we believe the replacement cost has been a strong support in history. We studied that during the last slowdown where valuations of companies contracted significantly, NTPC stock didn't fall below 45x in the EV/MW band. This is because currently average cost to set up a thermal power plant is Rs 45-50 mn per MW. Therefore, we believe the current replacement cost reacted as a strong support even during such severe slow down last year. We believe replacement cost of power plant should grow at least by inflation. Above that on account of huge capacity addition program chalked out by several companies in recent time, apparently there would be constraint on availability of quality people and timely equipments which could act instrumental to inch up project cost further. We estimate that due to above mentioned supply constraint, replacement cost could move up by 3-4% in FY10 and FY11, above inflation rate. Eventually, pushing replacement cost to ~ Rs 55 mn/ MW in FY11, from current average of ~Rs 45-50 mn/MW. Consequently, giving a support for the stock at ~ Rs 200/share based on replacement cost of Rs 55/MW on FY11 capacity.

Exhibit 22: Replacement Cost

Year	FY09	FY10E	FY11E	FY12E
Replacement cost/MW (Rs mn)	45	50	55	60
Inflation rate (YoY)		6.5%	7.0%	7.5%
Additional cost escalation due to shortage of manpower & equipment		4%	4%	2%

Source: Karvy Research

Peer Comparison

On the comparative landscape along with domestic peers, we found that at current price, NTPC is trading at discount to some of its peers. We believe the company deserves a premium to all domestic peers considering its size and efficiency. As discussed above, NTPC is and will remain the biggest generator by a large margin (its holding 10x its next players capacity and likely to hold 5x of next player's capacity even by FY12). Companies that are exhibiting higher PLF than NTPC are either too small or undiversified and we strongly believe that meeting efficiency (read PLF) level of NTPC with such mammoth size will be the biggest challenge for those competitors. Also, NTPC is having the highest ROE among domestic peers. Moreover, initiatives by the company to become less dependent resource wise (through back ward integration); reiterate our belief that NTPC deserves premium valuation over its domestic peers. Comparing with global peers (refer exhibit-25), we found that growth pegged with Indian companies and Asian companies justifies premium for Indian behemoth NTPC over global peers.

Exhibit 23: Domestic peer group - Valuation

	Installed Capacity (MW)	Installed Capacity (MW)	PLF (%)	P/BV (x)	EV/EBITDA (x)	RoE (%)	MCap/MW (Rs mn/MW)		EV/MW (Rs mn per MW)	
	FY09	FY12E	FY09	FY09	FY09	FY09	FY09	FY12E	FY09	FY12E
Tata Power	2,785	8,266	69.2	3.1	12.2	13.0	114.0	38.4	159.4	53.7
Neyvelli Lignite	2,490	3,440	79.0	2.3	24.8	8.9	87.0	62.9	81.9	59.3
Reliance Power	300	3,500	NA	2.4	NA	1.8	1,106	94.8	1,033	88.5
Torrent Power	500	1,648	91.6	4.1	23.3	11.9	268.9	81.6	321.1	97.4
CESC	975	975	97.0	0.8	9.1	7.4	47.7	47.7	57.4	57.4
GIPCL	560	1,310	80.1	1.4	11.7	7.4	29.3	12.5	43.9	18.7
Adani Power	0	6,600	NA	9.1	NA	-0.1	NA	32.3	NA	39.1
Indiabulls Power	0	1,335	NA	3.3	NA	3.8	NA	59.1	NA	50.2
NTPC	30,144	42,844	82.6	2.9	17.8	14.6	56.1	39.5	63.2	44.5

Source: Company, Karvy Research.
Note : Prices are as of 30 oct

As discussed above, based on P/BV we arrive at a fair value of ~ Rs 246/ share for the stock, on 3x FY11BV. However, on EV/MW basis, we believe the stock should get a value of Rs 244/share in one year horizon. Also, peer comparison suggest us that NTPC should command premium over domestic peers and further re rating is likely in future. However, we have not factored the probability of re rating currently. Therefore, we take average of value based on both BV and EV/MW and arrive at a target of Rs 245/ share. Consequently, we initiate coverage on NTPC with a 12 month target price of Rs 245/share and rate the stock an Outperformer.

Target price is based on average of EV/MW and BV method

Exhibit 24: Valuation

Target Price of NTPC	Rs / Share
Target Price on BV	246
Target Multiple on FY11E	3.0
Target price on EV/MW	244
Target multiple on FY11E	65
Target Price	**245**

KARVY STOCK BROKING LIMITED

Exhibit 25: Global Peer Group												
Company	Country	Installed Capacity (MW)	Market Cap (US$ Mn)	Revenue (US$ Mn)	Mcap/MW (US$ Mn per MW)	EV/MW (US$ Mn per MW)	ROE (%)		P/BV (X)		EV/EBITDA (X)	
							CY08	CY09	CY08	CY09	CY08	CY09
Datang International Power Generation Co.	China	25,097	5,388	6,133	0.57	1.26	2.7%	8.3%	4.5	3.9	23.3	14.4
Huaneng Power International	China	40,939	12,260	9,867	0.30	0.71	-9.4%	10.3%	2.5	2.3	28.2	10.7
Huadian Power Intlernational Corporation	China	23,294	4,032	4,388	0.17	0.61	-19.9%	10.0%	2.8	2.1	9.1	11.4
CLP Holdings	Hong Kong	17,000	16,252	7,006	0.96	1.36	16.4%	12.0%	2.0	1.9	10.3	10.8
Hong Kong Electric Holdings	Hong Kong	8,235	11,690	1,648	1.42	1.55	16.8%	13.1%	1.9	1.8	9.6	12.1
China Resource Power Holding	Hong Kong	12,981	10,815	3,454	0.83	1.23	6.6%	14.2%	2.8	2.2	19.0	11.9
Tenaga Nasional BHD	Malaysia	11,942	10,270	7,413	0.86	1.28	10.5%	8.0%	1.4	1.3	7.4	7.0
Korea Electric Power Corp.	South Korea	63,529	18,498	26,116	0.29	0.02	-7.0%	0.2%	0.5	0.5	NA	14.2
Asia - Ex Japan - Median					**0.70**	**1.24**	**4.7%**	**10.1%**	**2.2**	**2.0**	**10.3**	**11.6**
Exelon Corporation	US	33,000	33,857	18,859	1.03	1.36	25.8%	22.1%	3.1	2.8	6.0	7.2
Entergy Corporation	US	30,000	15,838	13,094	0.53	0.88	15.4%	14.8%	1.9	1.8	7.6	7.5
Southern Company	US	42,000	25,498	17,127	0.61	1.09	13.6%	12.6%	1.9	1.7	8.6	9.2
FPL Group	US	39,000	22,643	1,610	0.58	1.02	14.6%	13.7%	1.9	1.7	8.8	8.9
USA - Median					**0.59**	**1.06**	**15.0%**	**14.3%**	**1.9**	**1.8**	**8.1**	**8.2**
Electricite de France S.A.	France	159,313	106,019	94,670	0.67	1.18	13.5%	17.2%	3.1	2.8	8.3	6.7
E.ON AG	Germany	74,000	84,994	127,770	1.15	1.94	3.0%	14.9%	1.7	1.5	11.2	7.0
RWE AG	Germany	45,196	48,804	69,958	1.08	1.33	20.1%	29.4%	3.1	2.7	5.0	5.0
Enel SpA	Italy	94,300	60,071	87,745	0.64	1.79	26.5%	18.3%	1.5	1.3	7.6	6.8
Europe - Median					**0.87**	**1.56**	**16.8%**	**17.7%**	**2.4**	**2.1**	**7.9**	**6.8**
NTPC	**India**	**30,644**	**38,056**	**443,138**	**1.24**	**1.39**	**14.6%**	**14.2%**	**3.1**	**2.9**	**18.6**	**16.8**

Source: Bloomberg, Reuters, Company Reports & Karvy Research
Note:
(a) Tenaga Nasional BHD has a Financial Year ended August. Therefore, instead of CY08 & CY09 the data is of August 2008 & August 2009 respectively.
(b) NTPC has a Financial Year ended March. Therefore, instead of CY08 & CY09 the data is of March 2009 & March 2010 respectively.
(c) All price sensitive information is dated as of October 30, 2009.

Company Description

NTPC is the fifth largest power generating company in Asia and the largest in India; with an installed capacity of 30,644 MW (including 2,294 MW from JVs). The company owns 18 coal based and 8 gas based stations (including 4 JVs), located across the country. NTPC group constitutes of 6 subsidiaries and 15 joint venture (JV) companies engaged in the business of power generation, coal mining, power trading, power equipment manufacturing etc.; with a total assets of Rs 1,052 billion and has a net worth of Rs 576 billion.

NTPC was set up in 1975, to accelerate power development in India. In 1997, Government of India conferred the status of "Navratna" to it. The company got listed in the Indian stock markets in November 2004, post which it became the 3rd largest company in the country and is ranked 126th globally (Forbes 2009) in terms of market capitalisation.

Region	Coal-MW (Stations)	Gas-MW (Stations)	Total-MW (Stations)
Northern	7,035 (6)	2,312 (4)	9,347 (10)
Western	6,360 (3)	1,293 (2)	7,653 (5)
Southern	3,600 (2)	350 (1)	3,950 (3)
Eastern	7,400 (4)	0	7,400 (4)
Total	**24,395 (15)**	**3,955 (7)**	**28,350 (22)**
Joint Venture			
Eastern	814 (3)	0	814 (3)
Western	0	1,480 (1)	1,480 (1)
Grand Total	**25,209 (18)**	**5,435 (8)**	**30,644 (26)**

Source: Company and Karvy Research

About 60% of capacity is concentrated in the Northern & Western region. Eastern region ~27% & Southern region ~13%

82.3% of the capacity is coal based.

POWER INDUSTRY

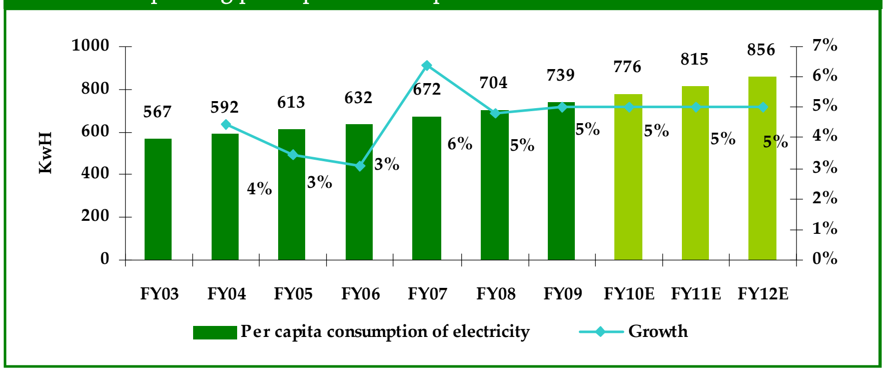
About the Indian Power Industry

Power is regarded as one of the prime movers of economic development and certainly availability and accessibility of affordable and quality power determines qualify of life. However, deficit ridden image of Indian power sector is long standing till date. The sector in India can be characterized by persistent shortages coupled with steady growth in demand. Moreover, as per latest energy outlook report of the International Energy Agency (IEA), till 2030 ~ 60 million people are likely to remain in dark, compared to current 412 million. This depicts the poor state of power sector in India.

On one hand India is striving to achieve targeted power generation to come out of continued shortage scenario, on the other hand, being one of the lowest per capita electricity consumption country in the world, rise in consumption of electricity in future is quite predictable. Hence, we believe the continued power deficit position of Indian power sector opens up a huge opportunity especially when it is placed in the priority list of government as basic infrastructure. Hence, we believe the sector is going to witness growth with significant capacity addition in next five years and beyond. Moreover, players with proven expertise and adequate financial as well as execution capability would see this coming few years as a huge growth platform. By end of 11th five year plan (FY07-12), India aims to cross 200,000 MW of installed power generation capacity.

Low per capita power consumptions in India indicates demand growth

Exhibit 26: Improving per capita consumption

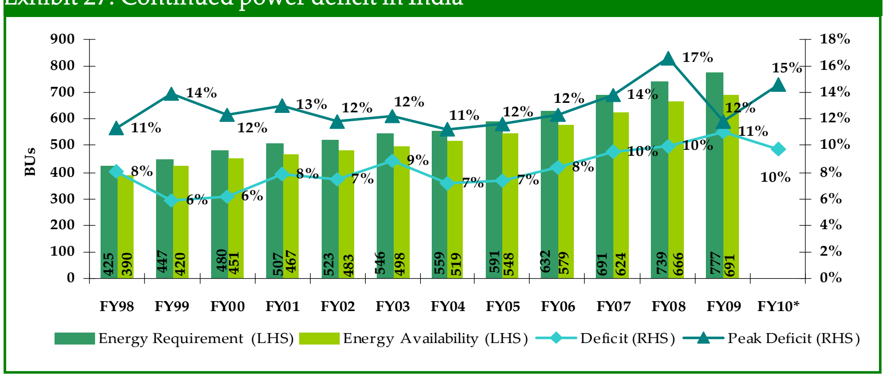


Source: Company & Karvy Research

India has been a one of the lowest power consuming country at per capita power consumption of ~ 550 kWh compared to above 2,300 kWh in China and Brazil and way below Russia which is above ~6,000 kWh. Not surprisingly, the figures for developed countries are almost 15-22 x of Indian per capita consumption rate. This suggests that power consumption or requirement is likely to go up assuming a continued positive GDP growth in future. On this backdrop, we expect power requirement in India to escalate with improving per capita consumption rate driven by better living standard and overall growth of the economy. We estimate per capita consumption to touch around 856 kWh against government's estimates of ~ 1,000 kWh with achieving the target of power for all by 2012. Moreover, attempts to achieve the status of power for all by FY12 will increase consumer base.

Power deficit scenario to stay here for some time….

Exhibit 27: Continued power deficit in India



Source: CEA. Note - ' * ' Upto Aug 09

History suggests since a long time, India has been a power deficit country and off late the deficit has gone up to un-precedentedly high levels, above 10% of total requirement. Increasing demand and low production pushed it to 11% in FY09. Peak deficit on the other hand was record around 12% in FY09 exhibiting a deepening trend from 11% in FY04.

The persistent deficit scenario in India can be attributed primarily to two factors 1) inadequate power generation capacity, 2) huge transmission & distribution (T&D) losses termed as Aggregate technical & commercial (AT&C) losses. Despite of enhanced focus on both the issues, we believe deficit is likely to stay here for longer than estimated time. On the capacity addition front, we believe target will be missed by at least 25-30% for the current five year plan and the target of reducing AT&C losses to 15% from current 35% would take much longer time than estimated. This reinforces our belief that deficit scenario is likely to stay here, at least beyond FY12.

Likely to miss capacity addition target of the 11th five year plan

The track record of power generation capacity addition achievement was abysmal in last decade. By and large Indian power sector has been missing out almost 50% of the targeted generation capacity (refer exhibit-28 capacity addition achievement). However, with accenting focus from central government, in the 11th five year plan (FY07-12) India's achievement in terms of capacity addition would be better than last decade. While, in FY08 and FY09, actual capacity addition achieved was 66% and 44% of the target respectively; in the first half of FY10, 69% of the targeted capacity was added. Hence, with about half (2 years 6 months i.e. 30 months out of 60 moths period) of the plan period over India has achieved just 26% of the planned target. This translates into a large target ahead in the next 2.5 years to accomplish by FY12. Given the progress till date and in light of historical track record, it is very likely that India will again miss the target of 11th five year plan. We believe meeting the target is a Herculean task as the remaining target enforces to add more than what it has done in last three five year plans put together and three times of what it has done in last ~2.5 years. This reinforces our belief that India may miss again target in 11th five year, though relatively by thin margin unlike previous five year plans.

Exhibit 28: 11th five year plan target achievement rate

Installed capacity in MW	Thermal	Hydro	Nuclear	Total
End of 10th Plan in 2007	*86,015*	*34,654*	*3,900*	*132,329*
Target addition in FY08	12,704	2,751	880	16,335
Actual addition in FY08	6,620	2,423	220	10,732
% Achievement	***52.1%***	***88.1%***	***25.0%***	***65.7%***
FY08	*91,907*	*35,909*	*4,120*	*143,061*
Target addition in FY09	9,304	1,097	660	11,061
Actual addition in FY09	2,485	969	0	4,904
% Achievement	***26.7%***	***88.3%***	***0.0%***	***44.3%***
FY09	*93,725*	*36,878*	*4,120*	*147,965*
Target addition in FY10 (Apr-Sep 09)	6,103	139	220	6,462
Actual addition in FY10 (Apr-Sep 09)	4,394	39	0	4,433
% Achievement	***72.0%***	***28.1%***	***0.0%***	***68.6%***
FY10 (upto Sep 09)	*98,044*	*36,885*	*4,120*	*152,360*
Target addition by FY12	59,693	15,627	3,380	78,700
Actual addition till now (Apr 07-Sep 09)	13,499	3,431	220	20,069
% Achievement	***22.6%***	***22.0%***	***6.5%***	***25.5%***
FY12E (Planning Commission Target)	*145,708*	*50,281*	*7,280*	*211,030*

Source: CEA & Karvy research
Note: Total cumulative capacity includes renewable energy sources which is now under Ministry of Renewable Energy

Exhibit 29: Capacity Addition / Achievement (MW)

Capacity Addition by Plan	Capacity	Target	Achieved	Achievement
End of 8th Plan in 1997	85,795	30,538	16,730	54.8%
End of 9th Plan in 2002	105,046	40,250	19,251	47.8%
End of 10th Plan in 2007	132,329	41,110	21,180	51.5%
End of 11th Plan in 2012	187,419	78,700	55,090	70.0%

Source: Five year plan, India

Reducing AT&C losses to 15% is likely to take longer than targeted time

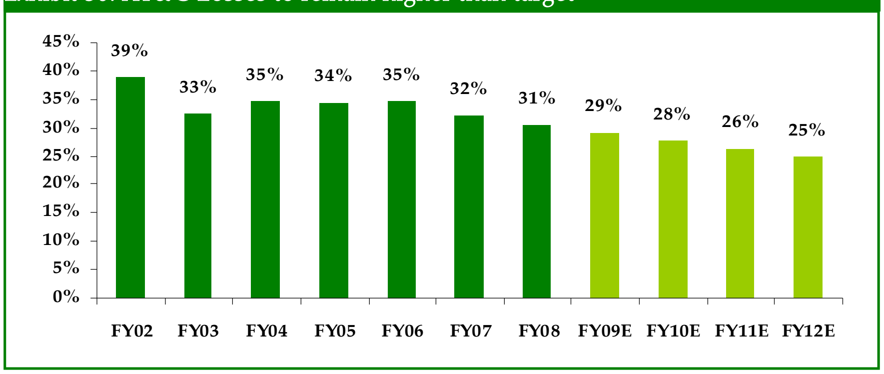
India has a history of high Aggregate Technical and Commercial (AT&C) losses with a record of ~40% in last decade and above 30% on this decade. Out of the 30-40% AT&C loss, at least 15% is lost on account of theft, 10% on account of unacceptable technical losses, and the balance of about 10-15% could be due to genuine technical problems. Therefore, cutting down of AT&C losses to ~15% is quite feasible. The technical losses can be brought down to by improving the distribution network and other infrastructure. Commercial losses can be eliminated with improving metering efficiency, proper energy accounting & auditing and improved billing & collection efficiency. Hence, the Accelerated Power Development & Reform Programme (APDRP) was launched in 2001, for the strengthening of sub-transmission and distribution network and reduction in AT&C losses in India. Though the program was introduced in 2001 with a target of reducing AT&C losses to 15% by end of 10th five year plan, it failed to meet.

What is AT&C: *Aggregate Technical and Commercial (AT&C) loss captures technical as well as commercial losses in the network which indicates total losses in the power transmission system. Indian power sector is suffering from high AT&C losses of around 30%. High technical losses in the system are primarily due to unplanned extensions of the distribution lines, overloading of the system elements like transformers and conductors and lack of adequate reactive power support. The commercial losses are mainly due to low metering efficiency, theft & pilferages.*

AT&C loss declined from 39% in FY02 to 32% in FY07. Further, the target of bringing down AT&C losses to ~15% was set to achieve during 11th five year plan, end of FY12. Though we can seen a steady decline in AT&C losses in the first two years of 11th five year plan, we believe brining AT&C losses to 15% is unlikely during 11th five year plan. Given the historical track record and considering pace of improvement in distribution system, we believe target of reducing AT&C losses to 15% would take longer than expected time. We expect the achievable loss level by end of 11th five year plan is ~25%, against 15% target set by government.

As discussed above, taking note of the current capacity addition and loss reduction achievement, power deficit scenario is likely to stay in India, at least beyond FY12. As per our study, we found out that despite the current slow down, India will record deficit.

Exhibit 30: AT&C Losses to remain higher than target

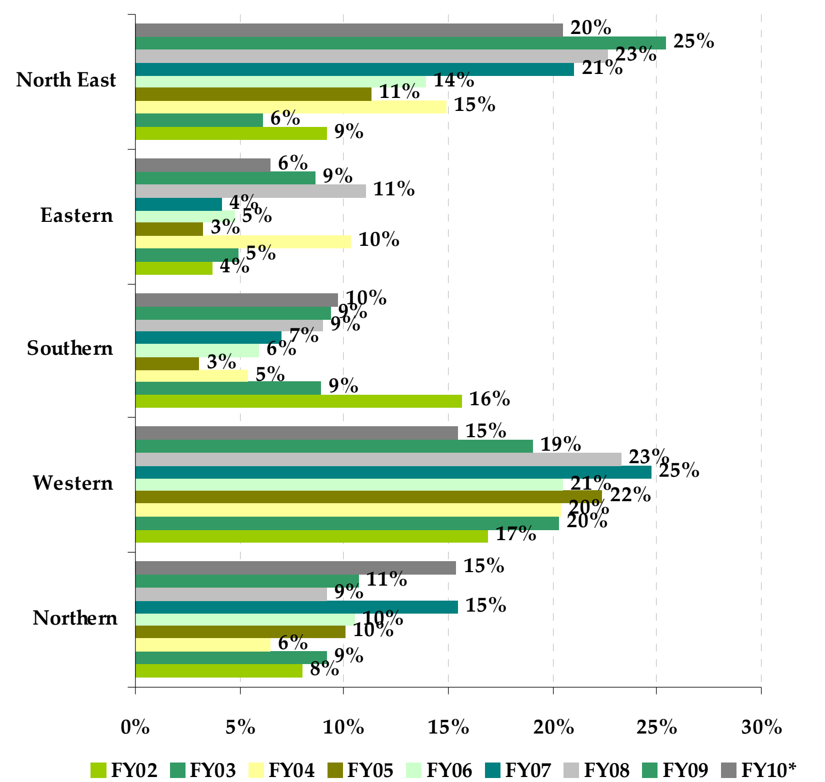


Source:CEA, Karvy Research

Regional deficit scenario: A closer look

Historically western region of India has been suffering from highest power deficit, which is the most industrialized region in India. Despite significant capacity addition (~9,000MW) since FY07 to till date in the same region, peak deficit is hovering around 15%, indicating ascending requirement in western region. Maharashtra is the most deficit states in western region with a whopping 25% deficit currently, followed by Madhya Pradesh at 20%. However, in the north-east region, especially Arunachal Pradesh and Meghalaya are literally struggling with huge deficit at ~20%. Though, eastern and southern region are considered to be the least deficit region; in last 2-3 years with increasing economic activities has pushed deficit ~4-5% upwards (refer exhibit -31). In both the regions, capacity added is ~24-26% of capacity addition targeted for the 11th five year plan. In the eastern and southern region, Bihar and Karnataka are considered to be the least deficit state with peak deficit at around 37% and 12%, respectively.

Exhibit 31: Regional Peak defecit

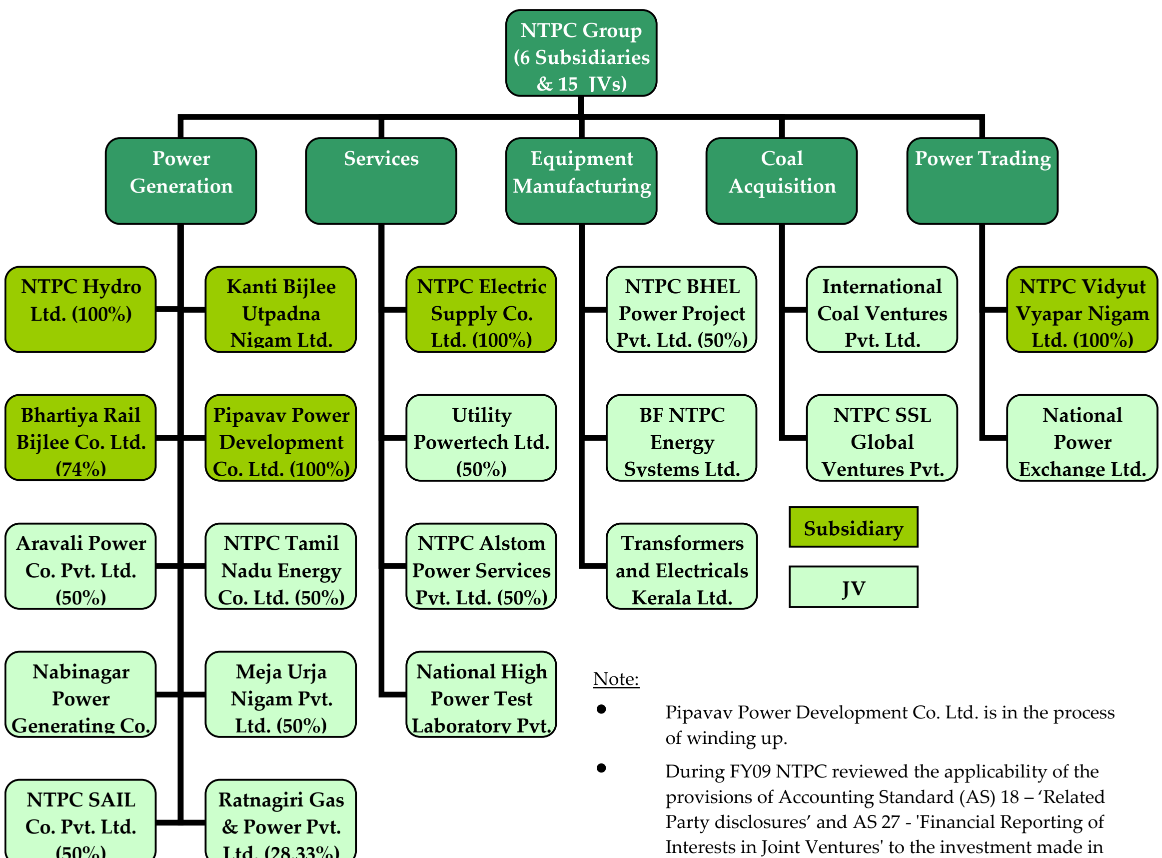


*Source: CEA. Note: ' * ' Upto Aug 09*

Annexure

Key CERC Norms	Previous Norm (FY2004-09)	Revised Norm (FY2009-14)
Regulated ROE	14%	*15.5%
Tax on UI and Efficiency Gains	Pass through allowed	Not allowed
O&M norms	Rs 1.165mn /MW	Rs 1.550/ MW
Depreciation/AAD	Lower depreciation rates compensated by AAD	Scrapped
Depreciation rate	3.6% & 6%	5.28%
Deferred Tax	Pass through allowed	Not allowed
Gross Station Heat Rate (GHR)	2445 Kcal/Unit	2426 Kcal/Unit
Secondary Fuel Oil Consumption	2 ML/unit	1 ML/ unit **
Incentive	25 paisa/unit	Proportionate to Tariff
Incentive related to efficiency	PLF @ 80% or above	PAF @ 85% or above

Source: CERC, Karvy Research,
*Note: * further incentive of 0.5% on timely completion of the project ** with savings to be shared 50:50*



Note:

- Pipavav Power Development Co. Ltd. is in the process of winding up.
- During FY09 NTPC reviewed the applicability of the provisions of Accounting Standard (AS) 18 – 'Related Party disclosures' and AS 27 - 'Financial Reporting of Interests in Joint Ventures' to the investment made in PTC India Ltd. The company is of the view that provisions of these Standards are not applicable to nvestment in PTC India Ltd.

15 JVs comprising of 4 generating stations (3 coal & 1 gas) and a power trading company		
Name	Business	Stake
Utility Powertech Ltd.	JV with Reliance Infrastructure formed to undertake construction, erection and supervision in power and other sectors in India and abroad	50%
NTPC SAIL Power Co. (Pvt.) Ltd.	To own and operate a capacity of 814 MW as captive power plants for SAIL's steel manufacturing facilities located at Durgapur, Rourkela and Bhilai.	50%
NTPC Alstom Power Services Pvt. Ltd.	JV with Alstom Power Generation, Germany formed for taking up renovation and modernisation assignment of power plants in India and abroad	50%
NTPC Tamil Nadu Energy Co. Ltd.	JV with TNEB to set up 1,000 MW coal based power station in the state of Tamil Nadu. (Vallur / Ennore)	50%
Ratnagiri Gas & Power Pvt. Ltd.	JV with GAIL (28.33%), MSEB (28.33%) and Indian financial institutions; presently operates 1,480 MW gas based Dhabol power project along with LNG terminal.	28.33%
Aravali Power Company Pvt. Ltd.	JV with IPGCL and for setting up 1,500 MW coal fired project in Jhajjar; Haryana. NTPC would also operate and maintain the station on management contract basis for at least 25 years.	50%
NTPC-SCCL Global Ventures Pvt. Ltd.	JV with Singareni Collieries Company Ltd to jointly undertake the development and operations and maintenance of coal blocks and integrated coal based power projects.	50%
Meja Urja Nigam Pvt. Ltd.	JV with Uttar Pradesh Rajya Vidyut Utpadan Nigam Ltd for setting up a coal based 1,320 MW power plant in Meja in UP.	50%
NTPC-BHEL Power Projects Pvt. Ltd.	JV with BHEL for taking up activities related to carrying out EPC and manufacturing of equipments in the field of power sector and infrastructure projects in India and abroad.	50%
BF-NTPC Energy Systems Ltd.	JV with Bharat Forge, to take up manufacturing of balance of plant (BoP) equipments for power sector.	49%
Nabinagar Power Generating Co. Pvt. Ltd.	JV with Bihar State Electricity Board, to set-up a coal based power project having capacity of 1,980 MW and operation & maintenance thereof at Nabinagar in Bihar.	50%
National Power Exchange Ltd.	JV with NHPC (16.67%), PFC (16.66%) and TCS (50%) to operate a Power Exchange at National level.	16.67%
International Coal Ventures Ltd.	JV with SAIL (25.57%), CIL (25.57%), RINL (14.29%) & NMDC (14.29%) for securing metallurgical and thermal coal assets overseas. Presently, the company is exploring various opportunities in Australia, Mozambique, Canada, Indonesia and USA, etc for acquisition of stake in coking coal and thermal coal mines.	14.29%
National High Power Test Laboratory Pvt. Ltd.	JV with NHPC (25%), Power Grid (25%) & DVC (25%) to set up an online high power test laboratory for short-circuit test facility in the country.	25%
Transformers & Electrical's Kerala Ltd.	JV with the Government of Kerala (55.40%) for synergy in the field of manufacturing and repair of Power Transformers etc.	44.60%

6 Subsidiaries comprising of a power trading and a generation station		
Name	Business	Stake
NTPC Electric Supply Co. Ltd.	Power distribution & rural electrification (In FY09 - Set up KINESCO Power and Utility Pvt. Ltd, a JV with Kerala Industrial Infrastructure Development Corporation(KINFRA) to take up retail distribution of power in various Ind+B17ustrial parks developed by KINFRA in Kerala and other SEZs and industrial areas)	100%
NTPC Vidyut Vyapar Nigam Ltd.	Power trading	100%
NTPC Hydro Ltd.	Hydro power generation below 250 MW (Pre award activities for 171 MW Lata Tapovan HEP and 120 MW Rammam HEP in Progress)	100%
Kanti Bijlee Utpadan Nigam Ltd.	A JV with Bihar State Electricity Board to renovate existing units & run plants of NTPC (In FY09 - Revival / R&M of existing 2*110 MW Units and Pre-award activities for 2*195 MW expansion in progress)	51%
Bhartiya Rail Bijlee Co. Ltd.	Process of setting up 1,000 MW power plant at Nabinagar; Bihar in JV with Indian Railways. (In FY09 – Land acquisition for the TPP is in progress)	74%
Pipavav Power Development Co. Ltd.	Under winding up	100%

KARVY
STOCK BROKING LIMITED

Profit & loss statement

(Rs mn)	FY2008	FY2009	FY2010E	FY2011E	FY2012E
Net Revenue	**386,823**	**443,138**	**501,762**	**540,712**	**611,128**
% growth	14.2	14.6	13.2	7.8	13.0
Cost of Fuel	222,187	273,464	302,066	318,254	352,143
Employee Cost	19,533	25,325	27,166	29,230	32,159
Other Expenses	27,751	37,131	44,869	52,642	62,267
Total Expenditure	269,471	335,920	374,101	400,126	446,569
EBITDA	**117,352**	**107,218**	**127,661**	**140,586**	**164,559**
% growth	15.4	(8.6)	19.1	10.1	17.1
EBITDA margin (%)	**30.3**	**24.2**	**25.4**	**26.0**	**26.9**
Other income	29,547	33,334	34,364	37,272	41,328
Interest & Finance Charges	18,581	21,435	22,797	24,082	27,884
Gross Profit	128,318	119,117	139,228	153,776	178,003
% growth	16.1	(7.2)	16.9	10.4	15.8
Depreciation	22,060	24,949	29,809	35,035	42,370
Prior Period Expenses	2,748	1,095	0	0	0
Profit Before Tax	**103,510**	**93,073**	**109,419**	**118,741**	**135,633**
% growth	15.5	(10.1)	17.6	8.5	14.2
Tax	28,811	12,148	24,072	26,123	29,839
Effective tax rate (%)	27.8	13.1	22.0	22.0	22.0
Profit After Tax (PAT)	74,699	80,925	85,347	92,618	105,794
% growth	8.3	8.3	5.5	8.5	14.2
Extraordinaries	0				
Net Profit	**74,699**	**80,925**	**85,347**	**92,618**	**105,794**
% growth	8.3	8.3	5.5	8.5	14.2
EPS Adjusted (Rs)	**9.06**	**9.81**	**10.35**	**11.23**	**12.83**
% growth	8.3	8.3	5.5	8.5	14.2
DPS (Rs)	3.50	3.60	3.90	4.25	4.90
Payout (%)	38.7	36.7	37.7	37.8	38.2

Balance sheet

(Rs mn)	FY2008	FY2009	FY2010E	FY2011E	FY2012E
Equity	82,455	82,455	82,455	82,455	82,455
Reserves	446,174	491,621	539,322	590,979	649,490
Net worth	**529,871**	**575,738**	**623,166**	**674,820**	**733,438**
Minority Interest	1,242	1,662	1,389	1,386	1,494
Short-term Loans	29	15	29	26	25
Long-term Loans	303,118	388,211	489,376	545,973	608,394
Total Loans	**303,147**	**388,226**	**489,405**	**546,000**	**608,418**
Deferred Revenue - AAD	13,734	19,360	25,883	32,912	40,857
Deferred Income - FCF	0	6,077	5,155	3,093	3,093
Deferred Foreign Currency	2,554	545	4,282	3,706	3,557
Deffered Tax Liability	2	1	1	1	1
Liabilities	**849,308**	**989,947**	**1,147,892**	**1,260,532**	**1,389,365**
Goodwill on Consolidation	6	6	6	6	6
Gross Block	556,472	647,410	808,381	959,659	1,154,847
Depreciation	274,868	297,755	329,637	367,208	412,670
Net Block	281,604	349,655	478,744	592,452	742,178
Capital work-in-progress	206,991	247,647	302,557	348,550	346,155
Construction Stores & Advnce	49,305	61,646	76,974	91,378	109,964
Long-term Investments	133,929	116,960	116,717	92,017	78,017
Deferred Foreign Currency Fluctuation Assets	0	9,734	6,444	3,866	3,866
Liquid Investments	541	0	0	0	0
Inventories	27,512	33,616	34,293	36,678	40,935
Sundry Debtors	31,727	38,189	39,026	40,553	42,439
Cash & Bank balances	153,605	172,505	124,791	94,450	73,856
Other Current Assets	9,272	9,934	10,286	10,814	11,611
Loans and Advances	41,041	70,389	77,905	83,412	93,663
Total Current Assets	263,698	324,633	286,301	265,907	262,505
Current liabilities	62,155	87,191	88,956	95,267	106,716
Provisions	24,070	33,143	30,895	38,378	46,610
Total Current Liabilities	86,225	120,334	119,851	133,645	153,326
Net Current Assets	177,473	204,299	166,451	132,263	109,179
Total Assets	**849,308**	**989,947**	**1,147,892**	**1,260,532**	**1,389,365**

Ratios

(Rsmn)	FY2008	FY2009	FY2010E	FY2011E	FY2012E
RoCE (%)	11.8	8.9	9.2	8.8	9.2
RoE (%)	14.7	14.6	14.2	14.3	15.0
Debt/Equity (x)	0.6	0.7	0.8	0.8	0.8
Cost of Fuel/Sales (%)	57.4	61.7	60.2	58.9	57.6
Employee Cost/Sales (%)	5.0	5.7	5.4	5.4	5.3
Other Expenses/Sales (%)	7.2	8.4	8.9	9.7	10.2
Interest Cover	7.91	6.56	7.11	7.39	7.38
Traiff / unit	1.80	1.97	2.13	2.17	2.19
Cost of generation / unit	1.29	1.57	1.61	1.64	1.64
Inventory Days	36	33	33	33	33
Debtors Days	21	28	28	27	25
Creditors Days	72	71	72	72	72
Revenue from Operations (Growth)	14.2%	14.6%	13.2%	7.8%	13.0%
EBITDA (Growth)	15.4%	-8.6%	19.1%	10.1%	17.1%
EPS (Growth)	8.3%	8.3%	5.5%	8.5%	14.2%
CEPS (Growth)	7.5%	9.4%	8.8%	10.9%	16.1%
BV	64.26	69.82	75.58	81.84	88.95
DPS	3.50	3.60	3.90	4.25	4.90
Cash/Share	18.63	20.92	15.13	11.45	8.96
Net debt/Share	18.14	26.16	44.22	54.76	64.83
P/E	22.6	20.9	19.8	18.3	16.0
P/BV	3.2	2.9	2.7	2.5	2.3
EV/EBITDA	15.7	17.8	16.1	15.2	13.5
EV/Sales	4.8	4.3	4.1	4.0	3.6

Cash flow

Rs mn	FY2008	FY2009	FY2010E	FY2011E	FY2012E
EBIT	95,292	82,269	97,852	105,551	122,189
(Inc.)/Dec in working capital	(9,018)	(8,467)	(9,865)	3,846	2,490
Cash flow from operations	**86,274**	**73,803**	**87,986**	**109,397**	**124,679**
Other income	29,547	33,334	34,364	37,272	41,328
Depreciation	22,060	24,949	29,809	35,035	42,370
Interest paid (-)	(18,581)	(21,435)	(22,797)	(24,082)	(27,884)
Tax paid (-)	(28,811)	(12,148)	(24,072)	(26,123)	(29,839)
Deferred Tax / Revenue	9,722	(41)	12,628	6,969	7,796
Dividends paid (-)	(33,868)	(34,784)	(37,646)	(40,961)	(47,283)
Minority Interest	1,242	1,662	1,389	1,386	1,494
Net cash from operations	**67,585**	**65,340**	**81,662**	**98,893**	**112,660**
Capital Expenditure (-)	(98,960)	(143,935)	(231,208)	(211,676)	(211,379)
Net cash after capex	**(31,375)**	**(78,595)**	**(149,547)**	**(112,783)**	**(98,718)**
Inc./(Dec.) in ST Borrowing	(21)	(14)	14	(3)	(2)
Inc./(dec.) in LT Borrowing	32,973	85,093	101,165	56,597	62,420
Inc./(dec.) in Borrowings	32,952	85,079	101,179	56,594	62,419
Inc./(Dec.) in Investments	16,958	17,510	243	24,700	14,000
Cash from Financial Activities	49,910	102,589	101,422	81,294	76,419
Others	(1,911)	(5,094)	411	1,147	1,706
Opening cash	136,981	153,605	172,505	124,791	94,450
Closing cash	153,605	172,505	124,791	94,450	73,856
Change in Cash	16,624	18,900	(47,714)	(30,342)	(20,594)

KARVY
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Stock Ratings		Absolute Returns	Stock Ratings		Absolute Returns
Buy	:	> 25%	Market Performer	:	0 - 15%
Out Performer	:	16 - 25%	Under Performer	:	< 0%
Sell	:	<(25%)			

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