Emkay Research

30th June, 2008

REDUCE

Price	Target
Rs197	**Rs187**

Sensex - 14504

Price Performance

(%)	1M	3M	6M	12M
Absolute	(3)	8	10	25
Rel. to Sensex	(8)	(27)	(31)	22

Source: Bloomberg

Stock Details

Sector	Power
Reuters	NTPC.BO
Bloomberg	NATP@IN
Equity Capital (Rs mn)	82455
Face Value	10
52 Week H/L	233/113
Market Cap	1,607/33,332
Daily Avg Volume (Shares)	10494492
Daily Avg Turnover (US$)	44.1

Shareholding Pattern (%)

	30/06/08	31/03/08	31/12/07
Promoters	89.5	89.5	89.5
FII/NRI	3.7	4.1	4.3
Institutions	3.4	3.0	2.7
Private Corp	1.2	1.1	1.0
Public	2.2	2.3	2.5

Source:Capitaline

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NTPC

'Tons of Expectations'

Re-initiating Coverage

We believe that the premium valuations of NTPC are discounting 'Tons of Expectations'. The valuations are pricing in (1) ROE improvement of 310 bps to 17.7% and thereby, convergence of reported ROE into core ROE and (2) earnings CAGR of 11% (consensus) during FY09P-FY12E. Our analysis of each of the factors driving the expectations indicates that NTPC is unlikely to meet them. Consequently, we expect negative surprises going forward. We expect an earnings CAGR of 9% and expect ROE to reduce by 60 bps to 14.0% during FY09P-FY12E. At CMP of Rs197, the stock is trading at 2.6xFY10E Book Value or 14% premium to its peers with comparable ROE. We forecast a 160bps contraction in spread between NTPC's 1-yr fwd core ROE and 10-year Treasury bond yield, putting pressure on NTPC's valuations. With the company unlikely to live up to market expectations, we rule out any possible re-rating triggers. We re-initiate coverage on the stock with a 'REDUCE' rating and SoTP based target price of Rs187/Share.

Premium valuations discounting 'Tons of Expectations' - The premium valuations of NTPC at 2.6x FY10E Book Value and 18.9x FY10E earnings are discounting 'Tons of Expectations'. The valuations are pricing in convergence of reported ROE (14.6%) into core ROE driven by (1) efficiency improvement, (2) benefit of conversion of cash into core assets, (3) positive impact of new CERC regulations and (4) additional ROE of 50 bps in new projects. The valuations are also discounting earnings CAGR of 11% (consensus) during FY09P-FY12E driven by (1) installed capacity addition of 13-14 GW, (2) identical commercial capacity additions, (3) the benefit of higher investment per MW, (4) earnings upside from coal mining and increase in fuel supplies and (5) lower effective tax rate at 22%.

NTPC unlikely to meet these expectations, negative surprises in store - Our analysis of each of the factors indicates that NTPC is unlikely to meet these expectations and consequently we expect negative surprises going forward. Closer scrutiny indicates (1) bleak probability of efficiency improvement, (2) substantial spillover in capacity commissioning and commercialization, (3) neutral impact of new CERC regulations, (4) conversion of cash into capital WIP, (5) negligible contribution from coal mining, (6) no impact of increased fuel supplies, (7) reduction in proportionate regulated equity base and (8) increase in effective tax rate.

Earnings growth to moderate, ROE to Reduce - Despite huge capacities planned, we expect NTPC's earnings growth to moderate to 9% CAGR during FY09P-FY12E versus 10% clocked during FY06-FY09P and 13% during FY03-FY06. We expect 60 bps and 310 bps reduction in reported ROE and core ROE to 14.0% and 16.2% respectively.

ROE spread over Treasury yield to contract, no re-rating triggers - At CMP of Rs197, the stock is trading at 2.6xFY10E Book Value or 14% premium to its peers with comparable ROE. We forecast a 160bps contraction in spread between NTPC's 1-yr fwd core ROE and 10-year Treasury bond yield, putting pressure on NTPC's valuations. With NTPC not meeting 'Tons of Expectations' we do not foresee any re-rating triggers. We re-initiate coverage on the stock with a 'REDUCE' rating and SoTP based target price of Rs187/ Share.

Key Financials (Rs.mn)

YE-Mar	Net Sales	EBITDA (Core)	(%)	APAT	AEPS (Rs)	EV/ EBITDA	P/BV	Div Yld (%)	ROE (%)	P/E
FY2009P	430,787	115,528	26.8	79,653	9.7	14.6	2.8	1.9	14.6	20.5
FY2010E	471,230	130,210	27.6	86,175	10.4	13.9	2.6	2.0	14.1	18.9
FY2011E	526,007	152,725	29.0	94,302	11.4	13.3	2.4	2.2	14.1	17.3
FY2012E	593,672	182,288	30.7	103,068	12.5	13.2	2.2	2.4	14.0	15.8

Source: Company, Emkay Research

Investment Argument

Premium valuations discounting 'Tons of Expectations', negative surprises in store

Premium Valuations discount 310 bps improvement in ROE & 11% earnings CAGR during FY09P-12E

The premium valuations of NTPC at 2.6x FY10E Book Value and 18.9x FY10E earnings are discounting 'Tons of Expectations'. The valuations are pricing in reported ROE improvement of 310 bps to 17.7% driven by (1) efficiency improvement, (2) benefit of conversion of cash into core assets, (3) positive impact of new CERC regulations and (4) additional ROE of 50 bps on new projects. The valuations are also discounting earnings CAGR of 11% (consensus) during FY09P-FY12E driven by (1) installed capacity addition of 13-14 GW (70-75% target achievement), (2) commercial capacity addition equivalent to installed capacity addition, (3) the benefit of higher investment per MW, (4) earnings upside from coal mining and increased fuel supplies and (5) lower effective tax rate of 22%.

We have analyzed each of the factors driving these expectations. Our analysis indicates that NTPC is unlikely to meet these expectations. Consequently we expect negative surprises going forward.

High operating efficiency offers limited scope for further improvement

Operting at close to best possible efficiency level

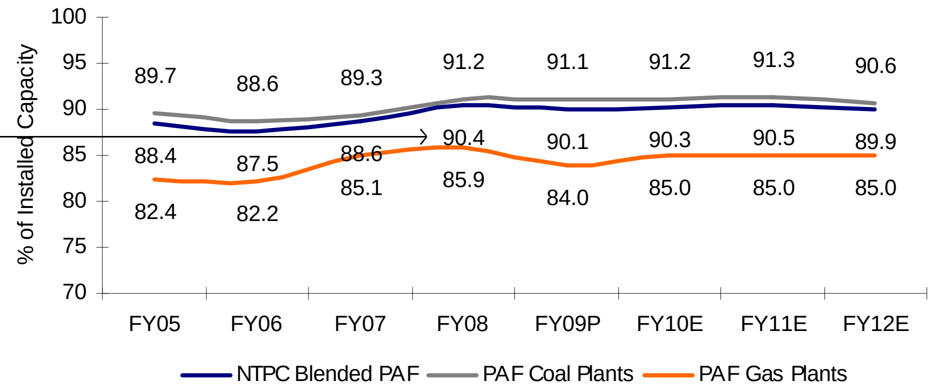
As per our assessment, NTPC is operating at close to its best possible efficiency level comparable with the most efficient utilities globally, thereby limiting further efficiency gains from its current projects. NTPC's operating efficiency is way above par on most parameters, making it difficult for them to further raise the bar. During FY09P, it had (1) plant availability factor (PAF) of 90.1% versus earlier norm of 80.0% and new norm of 85.0%, (2) auxiliary consumption (AUC) of 6.14% versus earlier norm of 7.59% and new norm of 6.90%, (3) secondary fuel consumption (SFC) of 0.253 ml/Unit versus earlier norm of 2 ml/Unit and new norm of 1 ml/Unit, (4) gross station heat rate (GHR) of 2,353 Kcal/Unit versus earlier norm of 2,445 Kcal/Unit and new norm of 2,426 Kcal/Unit. As a result of its performance being significantly better than the norm, NTPC earned about Rs27.3bn or 34% of adjusted net profit from efficiency gains and unscheduled interchange (UI) during FY09P. This provided an upside of about 4.9% to the reported ROE. With the actual efficiency level way above the new tightened norms, we do not see scope of further improvement in any of efficiency parameters - limiting the ROE upside.

A power plant requires normal planned maintenance of about 8 - 8.5% & there are forced outages of about 2 - 3% on an average

Plant availability factor (PAF) at 90.1%, way above the earlier norm of 80.0% - During FY09P, NTPC had plant availability factor (PAF) of 90.1% versus the earlier norm of 80.0% and new norm of 85.0%. This, we believe, is very efficient considering the normal planned maintenance and forced outages. Our analysis indicates that a power plant requires normal planned maintenance of 8 - 8.5% during a year. Further, there are 2-3% of forced outages on an average. NTPC had planned maintenance of about 6.5% and forced outage of about 2.7% during FY09P, performing much better than the average. The company has improved its PAF by 1.56% during FY05-FY09. Our sensitivity analysis indicates that a 1% improvement in PAF is likely to result in a 1% upgrade in earnings and 10bps improvement in ROE. However, we believe it would be very difficult for NTPC to improve its PAF from here on because of planned maintenance and forced outages constraints. Further, the availability of gas is likely to act as an added constraint, in the medium term at least. We expect a marginal reduction of 11 bps in its PAF during FY09P-FY12E - attributed to relatively lower PAF of new capacities.

Marginal reduction of 11 bps in PAF to 89.9% during FY09P-FY12E

Improved from 88.4% In FY05 to 90.4% in FY08.

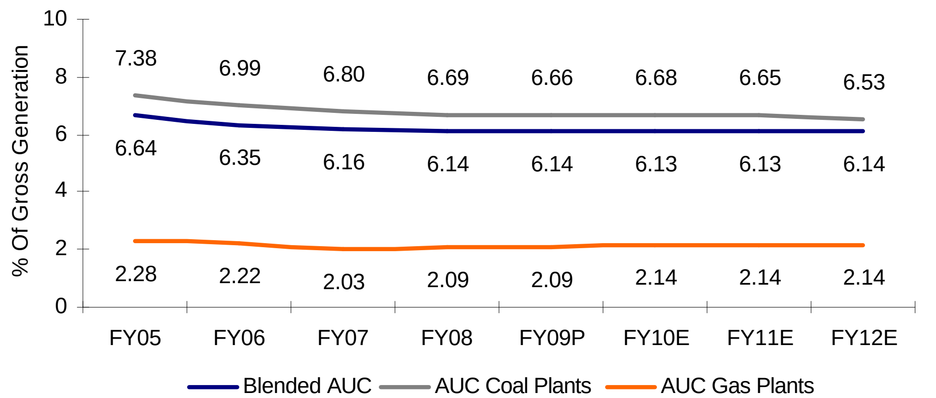


Source: Company, CERC, Emkay Research

Improved form 6.64% in FY05 to 6.16% in FY07 & is stagnant since then

Auxiliary consumption (AUC) of 6.14% versus earlier norm of 7.59% - The actual auxiliary consumption stood at 6.14% versus earlier norm of 7.59% and new norm of 6.90% (FY10E). The actual auxiliary consumption improved from 6.64% in FY05 to 6.16% in FY07 and is more or less stagnant since the last two years. Our sensitivity analysis indicates that a 1% reduction in AUC is likely to result in a 3% upgrade in earnings and 40bps improvement in ROE. However, we do not expect significant improvement in auxiliary consumption, going forward.

AUC stagnant since last two years. Expect the same, going forward

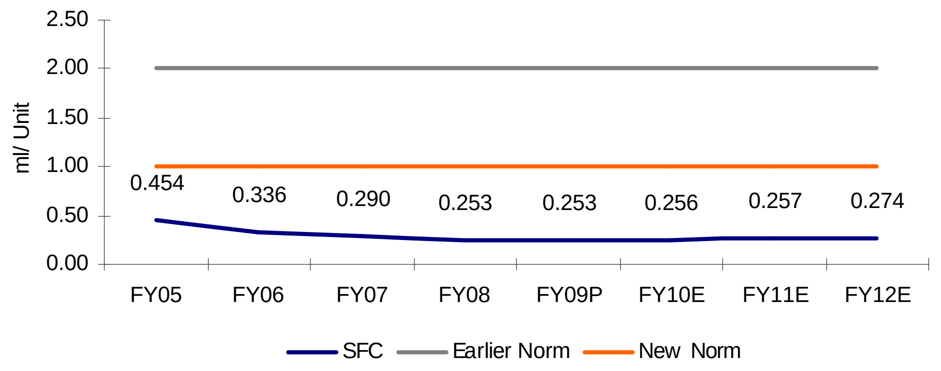


Source: Company, CERC, Emkay Research

Improved form 0.454 ml/unit in FY05 to 0.253 ml/unit in FY08

Secondary fuel oil consumption of 0.253 ml/unit versus earlier norm of 2 ml/unit
NTPC is one of the most efficient utility with regard to secondary fuel oil consumption (SFC). Our back-of-envelope calculations suggest that it consumed 0.253 ml/unit of secondary fuel oil in FY09P versus earlier norm of 2 ml/Unit and new norm of 1 ml/Unit. The SFC improved from 0.454 ml/Unit in FY05 to 0.253 ml/Unit in FY08 and was at same level in FY09P. We do not see scope of further improvement since the actual consumption is far better than even the reduced norms.

SFC far better than even the reduced norms

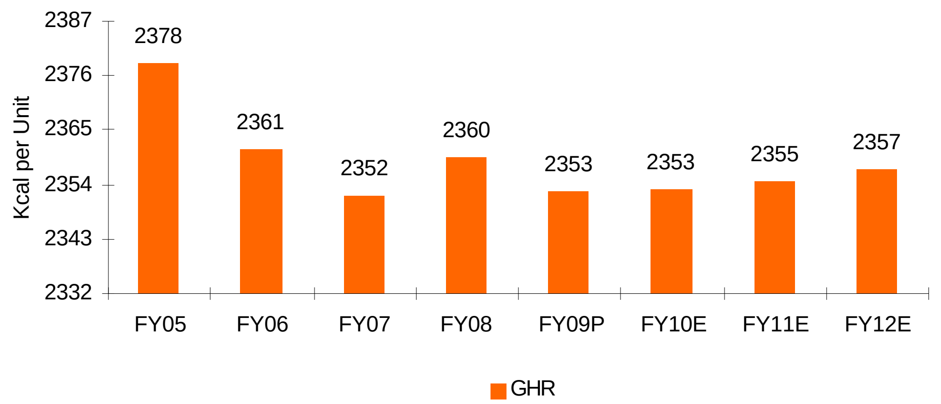


Source: Company, CERC, Emkay Research

Improved from 2378 Kcal/unit in FY05 to 2352 Kal/Unit in FY07 & is stagnant since then

Gross station heat rate of 2,353 Kcal /unit versus earlier norm of 2,445 Kcal/unit - The actual gross station heat rate (GHR) stood at 2,353 Kcal/Unit versus earlier norm of 2,445 Kcal/Unit and new norm of 2,426 Kcal/Unit (FY10E). The GHR improved from 2,378 Kcal/ Unit in FY05 to 2,352 Kcal/Unit in FY07 and is more or less stagnant since last two years. Our sensitivity analysis indicates that a 25 Kcal/Unit reduction in GHR is likely to result in a 3% upgrade in earnings and 40bps improvement in ROE. However, we do not expect significant reduction in the GHR, going forward.

GHR to remain in the range of 2,353-2,357 kcal/unit



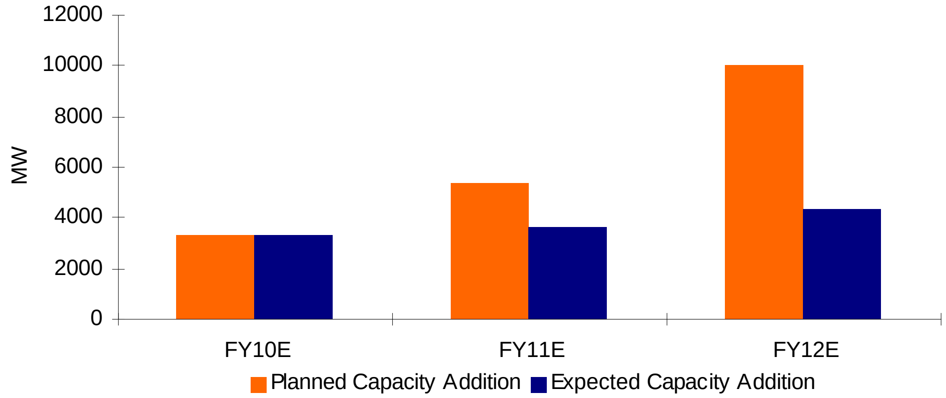
Source: Company, CERC, Emkay Research

Substantial spillover in capacity commissioning

Expert 11,280 MW installed capacity addition during FY09P-12E

NTPC has planned a capacity addition of 18,700 MW (including JVs) during FY09P-FY12E. However, most of the projects are running behind schedule and NTPC is likely to miss the FY09P-FY12E capacity addition target. Even during the first two years of the 11th five year plan, the company has been able to add only 2,740 MW (including JVs) versus a target of 5,100 MW. Based on the latest CEA project status update, NTPC is likely to add only 10,000 MW (including JVs) during FY09P-FY12E, indicating a capacity CAGR of 10% versus planned capacity CAGR of 17% during FY09P-FY12E. As per our assessment, NTPC is likely to add capacity to the tune of 11,280 MW during FY09P-FY12E. This is as against consensus expectations of 13,000-14,000 MW. We expect NTPC (including JVs) to add 3,300 MW, 3,660 MW and 4,320 MW versus target of 3,300 MW, 5,400 MW, and 10,000 MW in FY10E, FY11E and FY12E respectively.

Expect 60% achievement of target addition of 18,700 MW during FY09P-FY12E



Source: Company, Emkay Research

Capacity expansion and expected commissioning schedule

Project	Capacity (MW)	Expected Comm. Schedule (M/Y)	Fuel	Stake	Status
Dadri	980	09/09 and 12/09	Coal	100%	
Korba	500	02/10	Coal	100%	
Sipat - I	1,320	12/09 and 03/10	Coal	100%	
Kahalgaon II	500	06/09	Coal	100%	
FY10E	**3,300**				
Sipat I	660	09/10	Coal	100%	
Farakka III	500	08/10	Coal	100%	
Simhadri II	500	11/10	Coal	100%	
Bongoigaon	500	11/10 and 03/11	Coal	100%	
Aravali Jhajar	1,500	07/10, 10/10 and 01/11	Coal	50%	
FY11E	**3,660**				
Simhadri II	500	05/11	Coal	100%	
Barh I	1,320	06/11 and 12/11	Coal	100%	
Mauda	500	2/12	Coal	100%	
Bongoigaon	250	07/11	Coal	100%	
Ennore	1,000	04/11and 10/11	Coal	50%	
Nabhinagar	750	04/11, 08/11 and 12/11	Coal	74%	
FY12E	**4,320**				
Spillover	**8,130**				
Barh I	660	FY13	Coal	100%	Issues With Supplier
Barh II	1,320	FY14	Coal	100%	Boiler Erection Not Yet Started
Koldam	800	FY13	Hydro	100%	Overall Delays
NabhiNagar	250	FY13	Coal	50%	Land Acquisition Delays
Vindhyachal IV	1,000	FY13, FY14	Coal	100%	Coal Linkage Delay
Rihand TPP III	1,000	FY13, FY14	Coal	100%	Water Linkage
Mauda TPP	500	FY13	Coal	100%	Boiler Erection Not Yet Started
Kawas	1,300	-	Gas	100%	Yet To Take Off - Gas Supply Issues
Gandhar	1,300	-	Gas	100%	Yet To Take Off - Gas Supply Issues
Total	**19,410**				

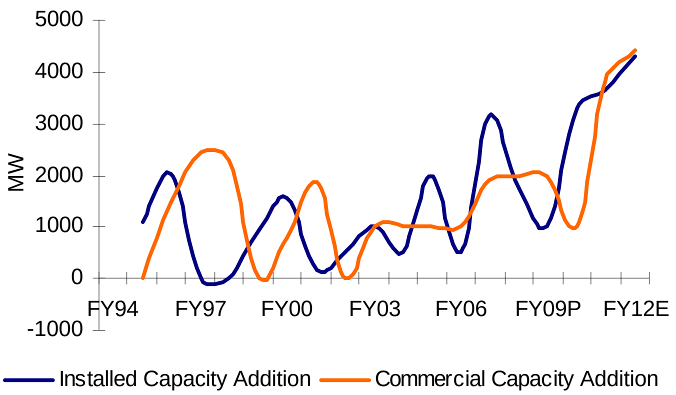
Source: Company, CEA, Emkay Research

Commercial capacity addition to be lower, large part of commissioned projects to contribute in FY13 and FY14

Commercial capacity addition CAGR of 9% versus installed capacity CAGR of 11%

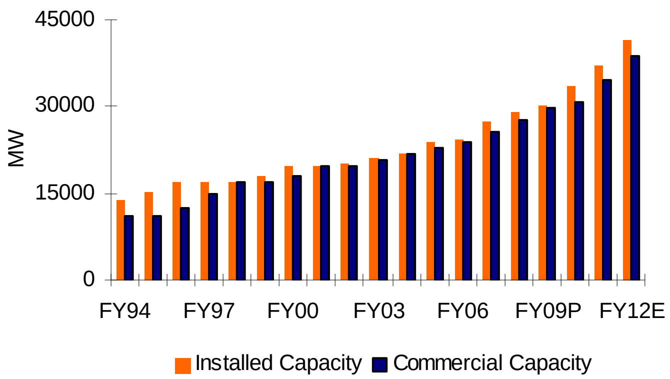
Based on our estimates, 71% of NTPC's planned capacity addition during FY09P-FY12E is likely to be commissioned in FY11E and FY12E. Further, our analysis of NTPC's 15 year installation and commercialization history indicates an average 6-9 month stabilization period. Consequently, the units commissioned during FY11E and FY12E are expected to be commercialized during FY12E and FY13E respectively. We expect commercial capacity addition of 9,210 MW (9% CAGR) versus installed capacity addition of 11,280 MW (11% CAGR) during FY09P-FY12E. Further, we expect 4,410 MW (48% of expected commercialization during FY09P-FY12E) to be commercialized during FY12E. Thus, the full earnings impact of a large part of the commissioned capacity would only be seen in FY13E and FY14E.

Gap of 6-9 months between installation & commercialization



Source: Emkay Research, Company

Commercial addition at 9,210 MW Vs 11,280 MW installed



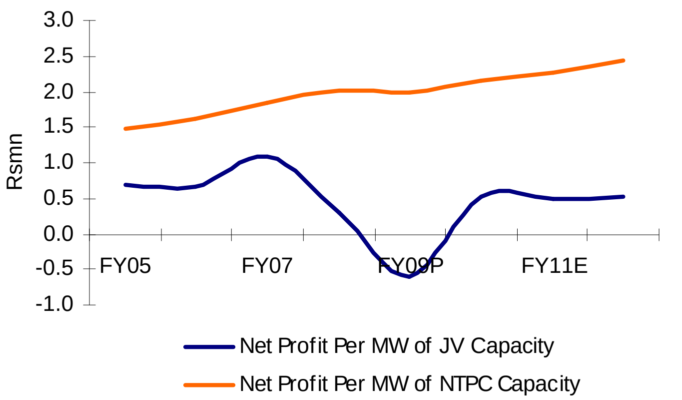
Source: Emkay Research, Company

Almost 29% of capacity addition through JVs, earnings potential limited to NTPC's share

JVs to contribute a meagre 2% to net profit in FY12E

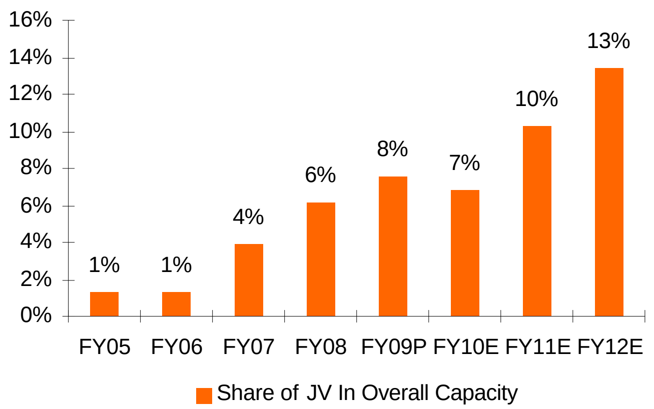
Out of the expected commissioning of 11,280 MW during FY09P-FY12E, 3,250 MW or 29% is expected to be added through JVs. This is likely to increase the JV contribution in NTPC's power generation capacity from 8% currently to 13% by FY12E, thus limiting NTPC's earnings potential to its share in the JVs. We expect JVs to contribute Rs2.5bn or 2% of the adjusted profits in FY12E versus the capacity contribution of 13%. NTPC's share of net profit is likely to be limited to Rs0.53mn/MW of JV capacity versus net profit of Rs2.43mn/MW in its standalone operations in FY12E. Further, NTPC's stake in companies like Ratnagiri could bring in negative surprises (as in FY09P) going forward, raising serious doubts on the profitability of such JVs.

Net profit of Rs0.5mn/ MW from JVs Vs Rs2.4mn standalone



Source: Emkay Research, Company

Share of JVs to increase to 13% by FY12E from current 8%



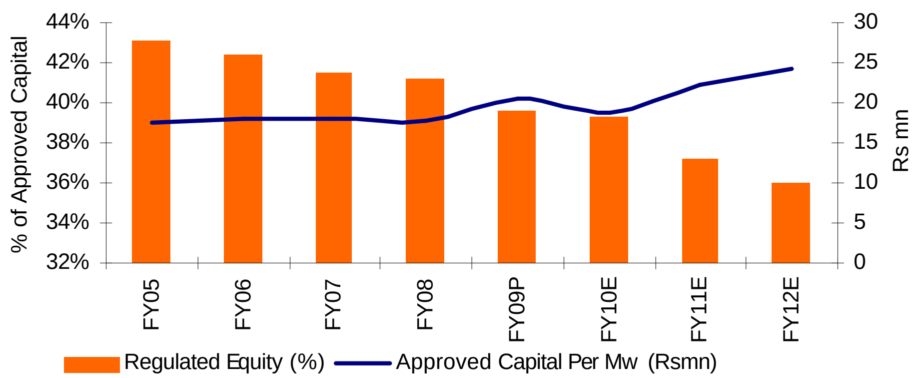
Source: Emkay Research, Company

Positive impact of higher investment per MW neutralized

Higher investment per MW to benefit NTPC - As per the estimated cost of new projects to be commissioned during FY09P-FY12E, the required investment has increased to Rs45mn/MW. This is as against the current approved capital base of Rs20mn/MW. We believe this is likely to trigger relatively higher growth in regulated equity and consequently regulated profits compared with growth in capacity.

But regulated equity being limited to 30% for new projects would neutralize the benefit
More than half of the current projects are enjoying 50% regulated equity base - attributed to commissioning before 01st April, 2004. Therefore, NTPC's current regulated equity base of Rs225bn is 40% of its approved capital base of Rs568bn at present. However, we expect this percentage to reduce to 36% of the approved capital base by FY12E, due to regulated equity being limited to 30% of the approved capital for the new projects. Consequently the reduction in proportionate regulated equity base to 36% of approved capital base is likely to neutralize the gains from higher investment per MW.

Regulated equity to reduce to 36% of approved capital by FY12E versus 40% currently



Source: Company, CERC, Emkay Research

Substantial delays in coal mining, negligible earnings contribution during FY09P-FY12E

Due to high base, coal mining to contribute a meagre 1% to the overall net profit during FY09P-12E

Substantial delays in its coal mining plans are likely to result in negligible earnings contribution from its coal mining activities. Going by the current status, the company is likely to start coal production by the end of FY10E. Thus, FY11E is likely to be the first year of coal mining operations. We have factored a production of 6 MT and 13 MT during FY11E and FY12E. We expect a capex of Rs40bn in coal mining during FY09P-FY12E. We have considered regulated equity of 30% and contracted ROE of 15.5% (similar to that of power). Based on the above assumptions, NTPC is likely to earn a net profit of Rs586mn and Rs1.3bn in FY11E and FY12E respectively from coal mining activities. Due to NTPC's high base, coal mining is likely to contribute a negligible 1% to the overall net profit during FY09P-FY12E.

	FY10E	FY11E	FY12E
Coal Production (MT)	-	6.0	13.0
Capex Required (Rs2bn Per MT Assumed)	8.4	14.9	17.1
Regulated Equity (Assumed Debt Equity of 70:30)	-	3.8	8.6
Net Profit (Assumed 15.5% Regulated ROE)	-	0.6	1.3

Source: Company, Emkay Research

New CERC regulations brings HOAX call to earnings and return ratios

CERC issued new tariff regulations recently for the period FY10-FY14. We believe that the regulations are ROE neutral. On the positive side, it increased the minimum ROE from 14% to 15.5% and on the flip side, it has withdrawn the pass through status of tax on UI and efficiency gains (additional returns). Closer scrutiny of the new regulations brought by CERC brings a HOAX call to the earnings growth and return ratios of NTPC.

New CERC regulations & likely impact

	Old Regulation	New Regulation	Positive / Negative
Regulated ROE	14.0%	15.5%	Positive
Tax on UI and Efficiency Gains	Pass Through	To be borne by NTPC	Negative
O&M Norms	Rs1.165mn / Mw	1.550mn/Mw	Positive
Gross Station Heat Rate (GHR)	2,445 Kcal /Unit	2,426 Kcal / Unit	Negative (To result in Lower Savings)
Secondary Fuel Oil Consumption	2 ML/Unit	1 ML/Unit*	Negative (To result in Lower Savings in SFC)
Incentive Mechanism	25 Paisa Per Unit	Proportionate to Tariff Per Unit	Positive (Tariff Being Higher than 0.25 Paisa/Unit)
Incentive Base	PLF (80%)	PAF (85%)	Negative (Due to Increase in Threshold)
Sharing of Incentives	No	Yes**	Negative (Has To Share With Beneficiaries Now)
Grossing up of ROE	Effective Tax Rate	Applicable Tax Rate	Positive (Benefit of Lower Effective Tax Rate)
Deferred Tax	Pass Through	Not a Pass Through	Negative
Depreciation Rates	3.6% and 6.0%***	5.3%	Positive (Higher Proportion of Coal Based Plants)
Advance Against Depreciation	Allowed	Not Allowed	Negative

With Savings to be Shared 50:50 ** Plants in Commercial operations for less than 10 years have to share the incentives with beneficiaries * For Coal and Gas Based Plants Respectively. Source: Company, Emkay Research*

Incentives based on PAF, better fuel supplies not to impact earnings

GAS plants have been operating at 85% PAF

The increased availability of fuel (especially KG basin gas) is not likely to impact NTPC's earnings/ROE. This is because (1) the new regulations specify PAF (above 85%) as the base for incentive calculations and (2) almost all of NTPC's plants have been operating at or above 85% PAF (threshold) during past three-four years. We do not expect the PAF of gas based plants to be more than 85% during FY09P-FY12E. Consequently, gas based plants are not likely to earn any incentives because the KG basin gas is likely to increase plant load factor (PLF) and not PAF.

Increase in fuel supplies to improve PLF, no significant impact on PAF

The increased PLF (especially of gas based plants) is not likely to impact earnings either. This is because the company is able to fully recover the capacity (fixed) charges even at the current PLF of 68% - attributed to CERC regulation specifying recovery based on PAF and not PLF.

Thus, as per our assessment the increase in fuel supplies for NTPC would only mean higher PLF and not higher earnings or ROE.

Projects delayed beyond CERC specified schedules, unlikely to earn additional 0.5% ROE

The new CERC regulations allow an additional ROE of 0.5% on new projects, which attain commercial operation date (COD) within the specified time schedule. However, looking at the expected COD of its key projects, we believe that most projects are lagging behind schedule. This makes the chances of NTPC earning the additional ROE of 0.5% very bleak.

Key projects and additional ROE benefit

Project	Capacity (MW)	Units	Investment Approval	Expected COD (M/Y)	Specified Schedule for 0.5% ROE	Additional ROE Benefit (Y/N)
Dadri	980	490*2	10/06	04/10 and 07/10 (Best Efforts)	42 Months	Y (But Very Tight)
Korba	500	500*1	08/06	08/10	42 Months	N
Sipat - I	1,980	660*3	12/03	06/10, 09/10, 03/11	52 Months	N
Kahalgaon II	500	500*1	05/04	09/09	42 Months	N
Farakka III	500	500*1	07/06	04/11	42 Months	N
Simhadri II	1,000	500*2	08/07	06/11 and 12/11	42 Months	N
Barh	1,980	660*3	02/05	12/11, 06/12 and 12/12	52 Months	N
Mauda	1,000	500*2	11/07	08/12 and 02/13	44 Months	N
Bongoigaon	750	250*3	01/08	05/11, 09/11, 01/12	36 Months	N

Source: Company, CERC, Emkay Research

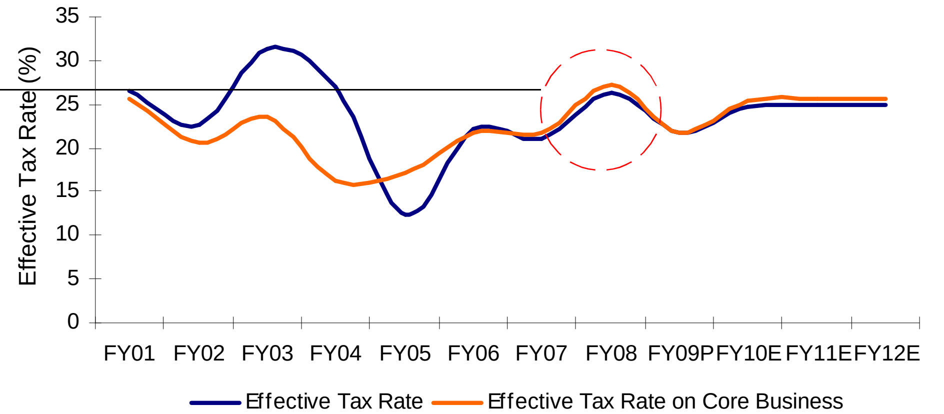
Effective tax rate to increase due to non-pass through status of deferred tax

Estimated deferred tax of Rs1.3bn or 1.2% of PBT was recovered from beneficiaries during FY09P

The company recovered an estimated Rs1.3bn or 1.2% of PBT during FY09P as deferred tax from beneficiaries which is not a part of effective tax rate as it is netted off directly. However, the new CERC regulations do not allow separate recovery of deferred tax and therefore in our view the deferred tax has to be borne by NTPC. This is likely to increase the effective tax rate going forward. Further the redemption of 10% every year of tax free OTSS bonds is likely to increase the effective tax rate going forward. We expect effective tax rate (including deferred tax) to increase to 24.7% in FY10E as against 21.8% in FY09P.

Expect increase in effective tax rate to 24.7% from 21.8% currently

Impact of deferred tax

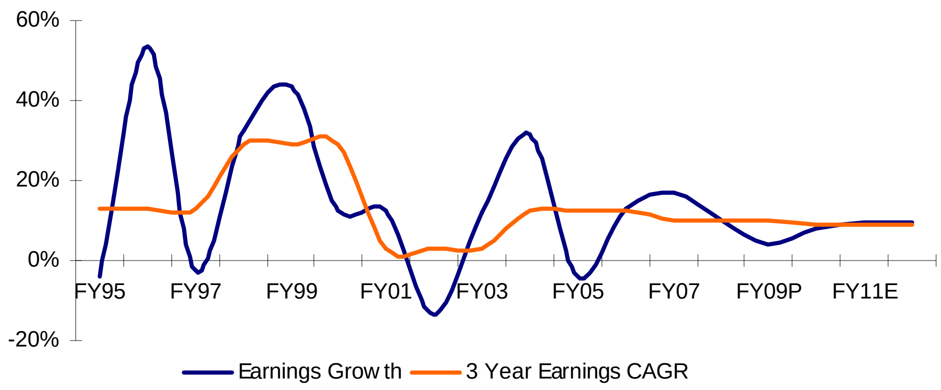


Source: Emkay Research, Company

Moderation in earnings growth, NTPC unlikely to meet earnings expectations

Despite huge capacity expansion planned, NTPC's earnings growth is likely to moderate to 9% CAGR during FY09P-FY12E versus 10% clocked during FY06-FY09P and 13% during FY03-FY06. This is as against consensus expectations of 11% earnings CAGR. The subdued single digit earnings growth is attributed to - (1) substantial spillover in capacity expansion, (2) delayed contribution from large proportion of commissioned projects, (3) capacity addition through JVs limiting the earnings upside to the share in JVs, (4) reduction in proportionate regulated equity base neutralizing the gains from higher investment per MW, (5) bleak probability of efficiency improvement and (6) negligible earnings contribution from coal mining.

Single digit earnings CAGR of 9% during FY09P-FY12E



Source: Emkay Research, Company

Conversion of cash into capital WIP: ROE to reduce instead of improving

By FY12E, cash & equivalents to reduce to 12% of equity from 43% in FY09P

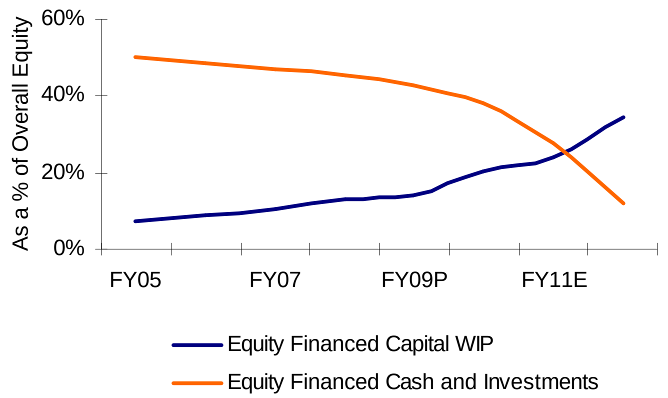
And capital WIP to increase to 34% of equity from 14% currently

NTPC's reported ROE at 14.6% is much lower than its core ROE of 19.3% in FY09P - attributed to 43% of the equity capital being locked in cash, liquid investments and SEB bonds. Given its huge capex plans, we expect a substantial part of cash and investments to be employed in core operations, going forward. As a result cash, liquid investments and SEB bonds are likely to constitute 12% of overall equity in FY12E versus 43% currently. However, those funds are likely to remain as capital WIP for the next three to four years - earning no returns. Consequently, equity locked in capital WIP is expected to increase substantially to 34% by FY12E as against 14% in FY09P.

The regulated equity as a proportion of overall equity is likely to increase moderately to 44% by FY12E from 39% in FY09P. However, this increase would provide insufficient support for sustenance of core ROE - attributed to huge increase in capital WIP. Thus, we expect core ROE to reduce to 16.2% in FY12E versus 19.3% in FY09P.

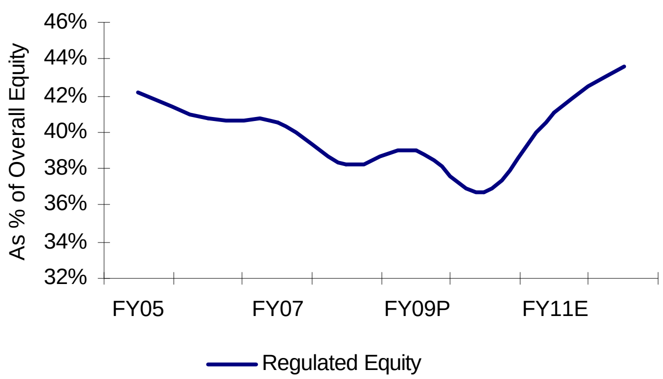
Further, the unutilized funds raised through debt are yielding positive impact on ROE currently. However, with cash being utilized in capital WIP going forward, the ROE impact would vanish. This is likely to trigger 60bps reduction in NTPC's reported ROE to 14.0% during FY09P-FY12E.

Cash and investments to get converted into capital WIP



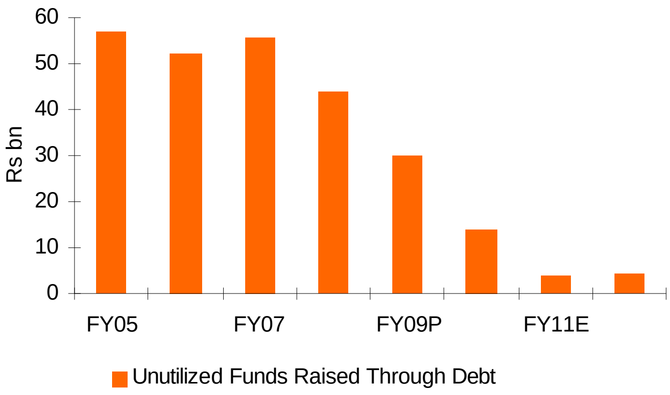
Source: Emkay Research, Company

Regulated equity to increase to 44% of overall equity



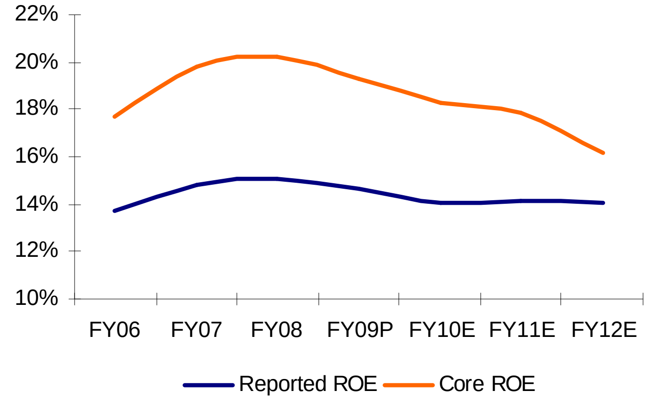
Source: Emkay Research, Company

Huge capex to consume unutilized funds raised through debt



Source: Emkay Research, Company

Expect 60 bps & 310 bps reduction in reported & core ROE



Source: Emkay Research, Company

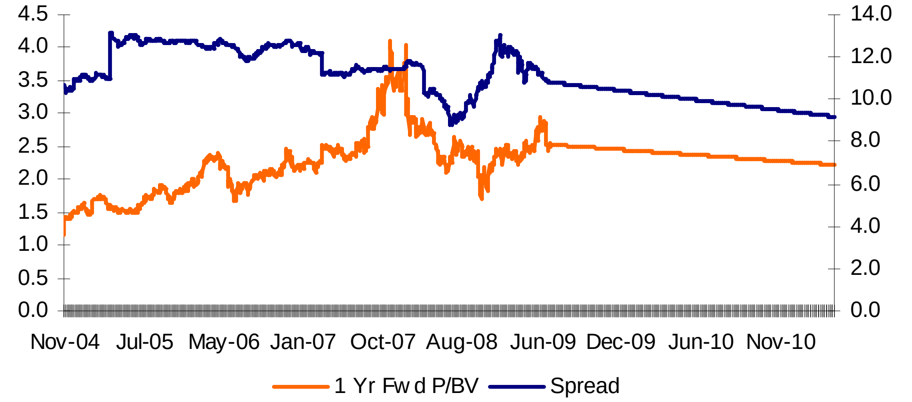
Valuations

Spread between NTPC's core ROE and Treasury yield likely to contract

Valuations directly linked with 10-yr treasury bond yield

NTPC's valuations are directly linked to the spread between its core ROE and the 10-yr Treasury bond Yield. Driven by reduction in core ROE, the spreads are likely to contract in the medium term at least - indicating pressure on NTPC's valuations going forward. We expect a 160bps reduction in spread between NTPC's 1-yr fwd core ROE and 10-yr Treasury bond yield.

Spread to contract to 9.2% versus current 10.8%



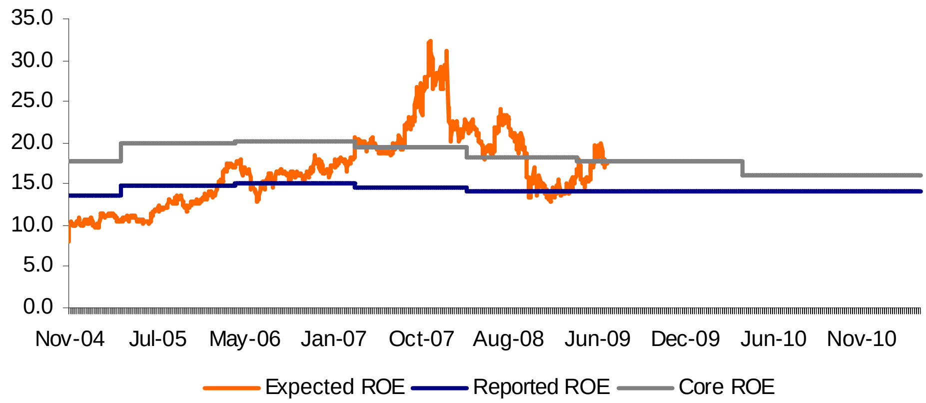
Source: Emkay Research, Company

Current valuations discounting convergence of core ROE into reported ROE

Current reported ROE is 14.6% & 1-yr fwd core ROE is 17.8%

NTPC's current valuations at 2.6x FY10E book value discounts 310 bps improvement in reported ROE to 17.7%. With the current reported ROE and 1-yr fwd core ROE at 14.6% and 17.8% respectively, the valuations are discounting convergence of reported ROE into core ROE.

Current valuations discounting improvement of 310 bps in reported ROE



Source: Emkay Research, Company

Nowhere close to meeting ROE expectations, rather hints of reverse convergence

Driven by multiple limiting factors, NTPC's earnings growth is likely to moderate to 9% CAGR during FY09P-FY12E versus 10% clocked during FY06-FY09P and 13% during FY03-FY06. This is as against consensus expectations of 11% earnings CAGR.

We do not expect NTPC to report ROE anywhere close to the current expectations of 17.7%. We believe that it would surely not be convergence of reported ROE of 14.6% into the 1 yr fwd core ROE of 17.8%. However, there are hints of reverse convergence of core ROE into reported ROE.

NTPC is the most expensive stock among the regional peers

Stock currently trading at 14% premium to its peers

NTPC is the most expensive stock among regional peers. NTPC currently trades at 2.6x FY10E Book Value. This is a premium of 14% compared to the valuations of its peers trading at about 2.3x FY10E Book Value with comparable ROEs.

Rs bn	Attributable Capacity (Mw)	Expansion* (Mw)	Market Cap	Net Worth		ROE (%)		ROIC (%)		P/BV (x)	
				FY10E	FY11E	FY10E	FY11E	FY10E	FY11E	FY10E	FY11E
NTPC	28,676	17,840	1,624	686	747	14.1	14.1	9.7	9.1	2.6	2.4
Tata Power**	2,788	5,012	250	104	120	14.6	14.5	10.1	10.3	2.4	2.1
Torrent Power	500	1,150	77	36	40	14.0	15.0	9.2	10.8	2.2	1.9
Neyveli Lignite**	2,490	2,650	215	99	108	13.8	12.7	9.0	9.8	2.2	2.0
Chinese Utilities											
China Power**	9,037	7,225	HK$ 9.0	11.3	11.9	8.3	10.4	8.0	8.9	0.8	0.8
CR Power**	12,981	15,100	HK$ 82.9	34.5	39.5	14.1	15.2	11.2	11.0	2.4	2.1

** Likely commissioning before FY14E ** Bloomberg Consensus*

No re-rating triggers

With NTPC failing to meet 'Tons of Expectations', we do not expect any re-rating triggers, going forward. The 14% premium over the regional players is unjustified considering (1) comparable reported ROE, (2) moderation in earnings growth, (3) substantial delays in its coal mining plans, (4) no room for further efficiency improvement, and (5) its unsuccessful track record in garnering projects based on competitive bidding.

Added pressure on market cap due to expected 13% CAGR in EV

NTPC to look more expensive on EV/EBITDA basis, going forward

Driven by huge capex plans, we expect NTPC to raise substantial debt going forward. This is likely to result in net debt equity of 1.2x at the end of FY12E versus current net debt equity of 0.3x. Consequently, we expect EV to grow at a CAGR of 13% to Rs240bn by the end of FY12E versus current EV of Rs168bn. This in our view is likely to put pressure on market capitalization, as NTPC will look more expensive on EV/EBITDA basis, going forward.

Re-initiate coverage with a 'REDUCE' rating, SoTP based target price of Rs187/Share

At CMP of Rs197/Share, the stock is trading at 2.6x FY10E Book Value and 18.9x FY10E earnings. We re-initiate coverage on the stock with a 'REDUCE' rating and SoTP based target price of Rs187/Share. We have valued (1) NTPC's core business at 2.7x Book Value - based on the spread of its core ROE over 10-yr Treasury bond yield of 7% currently. Consequently, NTPC's core Book Value of Rs400bn at the end of FY10E is valued at Rs1068bn or Rs.129/Share, (2) we have valued cash, liquid investments and SEB bonds of Rs238bn at 2x resulting in a value of Rs476bn or Rs58/Share.

Key risks to our call

Regulatory changes having positive impact on NTPC, Key risk

Any regulatory changes having positive impact on NTPC's earnings and/or ROE, remains a key risk to our call.

Concrete steps by the Government to accelerate the generation capacity addition

Currently, utilities like NTPC are facing project execution issues like (1) environment clearance, (2) land acquisition, (3) local protests, (4) equipment shortage (5) shortage of BOP contractors, (6) fuel linkages / supply etc. The spillover in capacity addition is the result of all these stumbling blocks. However, any concrete steps by the government to accelerate capacity addition would result into higher than expected capacity addition.

Growth through acquisition of power plants

NTPC for quite some time has been looking at acquiring stressed power plants across the country. Any favorable acquisition and faster turnaround might lead to better than expected performance.

Significant drop in 10 year treasury yields

We are of the view that NTPC's valuations are directly linked with 10 year government Treasury bond yields, currently at 7%. Consequently, any drop in treasury yield should be a positive catalyst for NTPC's valuations and vice versa.

Annexure

Company brief - NTPC is the largest power generation utility in India with a capacity of 30144 Mw including Jvs. It is a central sector PSU with Govt. holding of 89.5%. NTPC contributes 21% to the country's installed generation capacity and about 28% to the electricity generation. Currently, all its projects are under regulated return regime earning 15.5% regulated ROE (14.0% until FY09). However, the core ROE of NTPC is in the much higher range of 18-20% - attributed to operational efficiency. The company has planned a capacity expansion of 22430 Mw during 11th plan period.

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.

Financials

Profit & Loss Account

Rs Mn

	FY09P	FY10E	FY11E	FY12E
Revenues	430,787	471,230	526,007	593,672
Growth	17%	9%	12%	13%
Expenses	315,259	341,020	373,282	411,384
% of Sales	73%	72%	71%	69%
Fuel Cost	271,106	292,384	318,360	348,317
% of Sales	63%	62%	61%	59%
Employee Cost	24,631	26,863	30,929	37,508
% of Sales	6%	6%	6%	6%
Other Expenses	19,521	21,773	23,994	25,560
% of Sales	5%	5%	5%	4%
EBITDA	115,528	130,210	152,725	182,288
Growth	3%	13%	17%	19%
EBITDA %	26.8%	27.6%	29.0%	30.7%
Other Income	30,994	29,358	25,410	19,910
Interest	19,360	22,199	24,935	31,431
Depreciation	23,645	24,142	29,123	36,498
Extra Ordinary Items	1,627	-	-	-
PBT	105,145	113,227	124,077	134,268
Tax	23,132	28,227	31,128	33,754
PAT before EO Items	82,013	85,001	92,949	100,514
EO Items	(1,272)	0	0	0
Adjusted PAT	80,741	85,001	92,949	100,514
Share of Profit from JVs	(1,088)	1,174	1,353	2,554
Consolidated PAT	79,653	86,175	94,302	103,068

Source: Company, Emkay research

Balance Sheet

Rs Mn

	FY09P	FY10E	FY11E	FY12E
Equity Share Cap	82,455	82,455	82,455	82,455
Reserves	494,519	546,437	603,210	664,603
Networth	576,974	628,892	685,665	747,058
Deferred Forex Liab	2,555	2,555	2,555	2,555
Advance Against Dep	13,734	13,734	13,734	13,734
Long term Loans	337,873	426,373	593,413	874,337
Loan Funds	337,873	426,373	593,413	874,337
Total Liabilities	931,137	1,071,554	1,295,367	1,637,684
Gross Block	614,882	637,745	804,463	944,529
Less: Depreciation	296,388	320,530	349,653	386,151
Net Block	318,494	317,215	454,810	558,378
Capital WIP	270,441	424,578	545,860	851,705
Investments	137,384	136,149	142,483	158,983
Current Assets	297,840	295,368	265,799	196,814
Inventories	31,388	34,335	38,326	43,256
Debtors	44,849	49,060	54,762	61,807
Cash & Bank	163,452	148,363	101,706	11,612
Loans & advances	58,151	63,611	71,005	80,139
Current Liab. & Prov	93,023	101,757	113,585	128,196
Net Current Assets	204,817	193,612	152,214	68,618
Total Assets	931,137	1,071,554	1,295,367	1,637,684

Source: Company, Emkay research

Cash Flow Statement

Rs Mn

	FY09P	FY10E	FY11E	FY12E
PAT	82,013	85,001	92,949	100,514
Depreciation	23,645	24,142	29,123	36,498
Change in Working Cap	14,508	3,883	5,260	6,497
Operating Cash Flow	91,150	105,259	116,812	130,515
Capex	130,606	187,239	304,660	471,705
Free Cash Flow	(39,456)	(81,980)	(187,847)	(341,190)
Equity Capital	-	-	-	-
Loans	65,967	88,500	167,040	280,924
Dividend	31,425	33,083	36,176	39,121
Others				
Net Change in Cash	(4,914)	(26,562)	(56,984)	(99,387)
Opening cash & equival	283,102	278,188	251,626	194,642
Closing cash & equival	278,188	251,626	194,642	95,255

Source: Company, Emkay research

Key Ratios

	FY09P	FY10E	FY11E	FY12E
Profitability (%)				
EBITDA Margin	26.8%	27.6%	29.0%	30.7%
Adj. PAT Margin	18.7%	18.0%	17.7%	16.9%
ROCE	11.0%	10.2%	9.5%	8.5%
ROE	14.6%	14.1%	14.1%	14.0%
Core ROE	19.3%	18.3%	17.8%	16.2%
Per Share Data (Rs)				
Adj. EPS	9.7	10.4	11.4	12.5
Adj. CEPS	12.8	13.4	15.0	16.9
BVPS	70	76	83	91
DVPS	3.8	4.0	4.4	4.7
Valuations (X)				
PER	20.4	18.9	17.2	15.8
CPER	15.3	14.7	13.2	11.6
P/BV	2.8	2.6	2.4	2.2
EV / Sales	3.9	3.6	3.2	2.8
EV / EBITDA	14.6	13.8	13.2	13.2
Dividend Yield (%)	1.9%	2.0%	2.2%	2.4%
Turnover Days (x)				
Working Capital Cycle	35	35	35	35
Debtors Cycle	38	38	38	38
Inventory Cycle	27	27	27	27
Gearing Ratios				
Net Debt / Equity	0.3	0.4	0.7	1.2
Total Debt to Equity	0.6	0.7	0.9	1.2

Source: Company, Emkay research

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Emkay Rating Distribution

BUY	Expected total return (%) of stock price appreciation and dividend yield) of over 25% within the next 12-18 months.
ACCUMULATE	Expected total return (%) of stock price appreciation and dividend yield) of over 10% within the next 12-18 months.
REDUCE	Expected total return (%) of stock price appreciation and dividend yield) of below 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.