

Company Focus

4 December 2008 | 10 pages

NTPC (NTPC.BO)

Downgrade to Sell: Stock Outperformance + Severe Coal Shortages

- Intrinsically strong business model The Indian regulatory system of cost pass-throughs works well and provides a defensive characteristic to NTPC's financials, quite unlike any other Asian generator. The company's capex is well funded with low gearing (0.52x), high cash balance of Rs170bn, strong credit rating and high annual CFO.
- **Downgrade to Sell/Low Risk (3L)** Given (1) the outperformance of the stock year to date vis-à-vis the BSE Sensex of 19%, (2) the downside to our new target price of Rs149 and (3) the severe coal shortages that the company is facing. Our target price is based on a P/BV of 2.0x FY10E.
- India's coal-based stations face severe shortages India's 77 coal-based stations totaling 69,965MW are facing severe coal shortages. According to the CEA, as of December 1, 2008, of the 77 stations 47 stations had coal stocks of less than seven days while 34 stations had stock of less than four days.
- 11 out of 15 NTPC stations have super-critical shortages Of the 15 NTPC owned coal-based power plants, 11 stations had coal stocks of less than four days. Coal shortages lead to lower generation, which in turn leads to lower efficiency gain over and above the normative 14% return on regulatory equity.
- Earnings revised downwards— By 2–7% over FY09E-12E to factor in (1) lower generation due to coal shortages and (2) lower incentives (PLF, UI charges and fuel cost savings). We expect NTPC to grow EPS at a CAGR of 7% (9% earlier) over FY08–11E and RoEs at 14.5%-15.4% levels.

Figure 1. Statistical Abstract

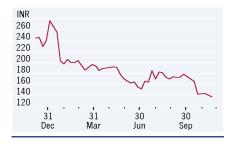
Mar31	Net Profit (Rs mn)	Diluted EPS (Rs)	EPS growth (%)	P/E	P/B	ROE (%)	Yield (%)
2007A	72,088	8.7	18.8%	18.8	2.8	15.4%	1.9%
2008A	80,528	9.8	11.7%	16.8	2.6	15.9%	2.1%
2009E	79,678	9.7	-1.1%	17.0	2.4	14.5%	2.3%
2010E	85,027	10.3	6.7%	16.0	2.2	14.4%	2.5%
2011E	99,094	12.0	16.5%	13.7	2.0	15.4%	2.7%

Source: Citi Investment Research estimates

Change in opinion ☑
Rating change ☑
Target price change ☑
Estimate change ☑

Sell/Low Risk	3L
from Buy/Low Risk	
Price (04 Dec 08)	Rs164.55
Target price	Rs149.00
from Rs152.00	
Expected share price return	-9.5%
Expected dividend yield	2.3%
Expected total return	-7.1%
Market Cap	Rs1,356,791M
	US\$27,166M

Price Performance (RIC: NTPC.BO, BB: NATP IN)



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¹Citigroup Global Markets India Private Limited

Fiscal year end 31-Mar	2007	2008	2009E	2010E	2011E
Valuation Ratios					
P/E adjusted (x)	18.8	16.8	17.0	16.0	13.7
EV/EBITDA adjusted (x)	14.2	12.4	12.3	11.3	9.4
P/BV (x)	2.8	2.6	2.4	2.2	2.0
Dividend yield (%)	1.9	2.1	2.3	2.5	2.7
Per Share Data (Rs)					
EPS adjusted	8.74	9.77	9.66	10.31	12.02
EPS reported	8.33	8.99	9.66	10.31	12.02
BVPS	58.94	63.84	69.06	74.57	81.44
DPS	3.20	3.50	3.80	4.10	4.40
Profit & Loss (RsM)					
Net sales	326,358	370,974	391,748	430,026	515,453
Operating expenses	-254,625	-284,105	-303,509	-329,556	-388,390
EBIT	71,733	86,869	88,239	100,469	127,063
Net interest expense	-10,217	-10,778	-14,773	-18,046	-23,183
Non-operating/exceptionals	27,449	29,203	28,483	26,384	22,178
Pre-tax profit	88,965	105,294	101,949	108,807	126,057
Tax	-16,877	-24,766	-22,271	-23,781	-26,963
Extraord./Min.Int./Pref.div.	-3,441	-6,380	0	0	0
Reported net income	68,647	74,148	79,678	85,027	99,094
Adjusted earnings	72,088	80,528	79,678	85,027	99,094
Adjusted EBITDA	92,487	108,254	111,691	129,162	169,154
Growth Rates (%)	00.4	40.7		• •	100
Sales	22.1	13.7	5.6	9.8	19.9
EBIT adjusted	49.9	21.1	1.6	13.9	26.5
EBITDA adjusted	35.4	17.0	3.2	15.6 6.7	31.0
EPS adjusted	18.8	11.7	-1.1	0.7	16.5
Cash Flow (RsM)	00 110	00.040	100 027	111 700	125.070
Operating cash flow	82,112	89,648	100,637	111,722	135,978
Depreciation/amortization	20,754	21,385	23,453	28,692	42,091
Net working capital	-7,289	-8,439	-2,493	-1,997	-5,207
Investing cash flow Capital expenditure	- 44,285	-66,794 -82,232	-106,785 -115,871	- 169,670	- 250,143
Acquisitions/disposals	-78,392 0	-oz,zsz 0	-115,671	-176,647 0	-245,827 0
Financing cash flow	10,605	- 6,668	10,462	44,221	79,281
Borrowings	42,871	27,062	47,121	83,774	121,729
Dividends paid	-30,281	-33,764	-36,659	-39,553	-42,448
Change in cash	48,432	16,186	4,314	-13,728	-34,884
Balance Sheet (RsM)					
Total assets	807,643	893,880	988,806	1,123,835	1,312,700
Cash & cash equivalent	133,146	149,332	153,646	139,919	105,034
Accounts receivable	12,523	29,827	32,188	35,005	42,072
Net fixed assets	424,873	485,720	578,138	726,093	929,829
Total liabilities	321,675	367,494	419,401	508,957	641,175
Accounts payable	41,635	48,263	51,481	55,689	64,599
Total Debt	244,844	271,906	319,027	402,802	524,530
Shareholders' funds	485,968	526,386	569,405	614,878	671,525
Profitability/Solvency Ratios (%)					
EBITDA margin adjusted	28.3	29.2	28.5	30.0	32.8
ROE adjusted	15.4	15.9	14.5	14.4	15.4
ROIC adjusted	12.9	12.5	11.3	10.8	11.3
		00.0	00.0	40.0	CO F
Net debt to equity Total debt to capital	23.0 33.5	23.3 34.1	29.0 35.9	42.8 39.6	62.5 43.9

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Downgrade to Sell/Low Risk (3L) from Buy/Low Risk (1L)

- The Indian regulatory system of cost pass-throughs works well and provides a defensive characteristic to NTPC's financials, quite unlike any other Asian generator. The company's capex is well funded with low gearing (0.52x), high cash balance of Rs170bn, strong credit rating and high annual CFO cash of Rs135bn over FY09E-12E.
- However, given (1) the outperformance of the stock year to date, (2) the downside to our new target price of Rs149 and (3) the severe coal shortages that the company is facing, we downgrade NTPC to Sell/Low Risk (3L) from Buy/Low Risk (1L) earlier.

Figure 2. NTPC vs. BSE Sensex Price Performance

	1 Month	2 Months	3 Months	4 Months	5 Months	6 Months	7 Months	8 Months	9 Months	10 Months	YTD
NTPC	8.4%	-4.2%	-5.9%	-6.1%	6.4%	4.2%	-18.0%	-13.3%	-13.5%	-23.3%	-35.9%
BSE	-13.2%	-26.3%	-38.1%	-36.7%	-31.4%	-40.5%	-47.6%	-39.8%	-43.5%	-50.5%	-54.5%
Relative Performance	21.5%	22.1%	32.2%	30.6%	37.8%	44.8%	29.5%	26.6%	30.0%	27.3%	18.6%

Source: DataCentral and Citi Investment Research

Figure 3	. NTPC	- DCF	Fair V	alue
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Part	Rationale	Rs
Core	DCF (WACC-10.2%/g- 2.5%)	164
Coal Min	ing NPV of Cash Flows	5
SEB Bon	ds PV of bonds	19
Value		188

Source: Citi Investment Research estimates

■ We have cut our target price to Rs149 (from Rs152 earlier) to factor in our downward earnings revision. We continue to use a target multiple of 2.0x FY10E to value NTPC. Our target multiple is set at a ~ 9% discount to the average P/BV of the company post listing given the global credit crisis and the de-rating of most stocks globally. Our target price is set at a 20% discount to our DCF-based fair value of Rs188.

Figure 4. NTPC - 1 Year Forward Rolling P/BV Bands



Figure 5. NTPC – 1 Year Forward Rolling P/E Bands



Source: DataCentral and Citi Investment Research estimates

Source: DataCentral and Citi Investment Research estimates

Coal based stations face acute coal shortages

■ India's 77 coal-based stations totaling 69,965MW are facing severe coal shortages. According to the CEA, as of December 1, 2008, of the 77 stations 47 stations had coal stocks of less than seven days while 34 stations had stock of less than four days. According to the CEA, so far 5.6 bn kWh have been lost by these power stations by October due to unavailability of adequate coal. The current peaking shortages of 14% and energy shortages of 8% could worsen because of coal shortages.

- Of the 77 monitored stations, 15 are NTPC owned coal-based power plants. Out of these 15 stations, 11 stations had coal stocks of less than four days.
- Anticipating similar shortages in FY10 the Power Ministry has asked generation utilities to import 25mn tonnes of coal in FY10E and accordingly place necessary orders in January 2009. Railways and shipping authorities have been requested to make necessary arrangements for coal movement to coal-based power plants.
- The Coal Ministry has asked Coal India and its subsidiaries to increase coal production by 6mn tonnes from the original estimate of 313mn tonnes for FY09E. Coal India also plans to import 4mn tonnes of coal to overcome the coal shortage in the country. Generation utilities have failed to implement their plans to import coal, and this has further added fuel to the problem.

Figure 6. Coal Shortages in NTPC's Power Plants

	Transport	Station	Agency	MW	Normative Stock (Days)	Daily Linkage in '000 tons	Actual Stock in '000 tons	Actual stock (Days)	Critical <7 days	Super Critical Reasons <4 days
1	RAIL	Badarpur	NTPC	705	30	13.7	96	7		
2	RAIL	Dadri	NTPC	840	30	13.7	44	3	Yes	Yes Less Receipt - CCL
3	Pithead	Rihand	NTPC	2000	15	32.9	51	2	Yes	Yes Less Receipt -NCL
4	Pithead	Singrauli	NTPC	2000	15	31	21	1	Yes	Yes Linkage < Demand
5	RAIL	Tanda	NTPC	440	25	7.1	22	3	Yes	Yes Less Receipt - CCL
6	RAIL	Unchahar	NTPC	1050	25	17.7	16	1	Yes	Yes Less Receipt CCL/BCCL
7	Pithead	Korba	NTPC	2100	15	31.6	661	21		
8	RAIL	Sipat	NTPC	1000	20	9.7	79	8		
9	Pithead	Vindhayachal	NTPC	3260	15	50	44	1	Yes	Yes Less Receipt — CCL/NCL
10	Pithead	Ramangundam	NTPC	2600	15	39.4	344	9		
11	RAIL	Simhadri	NTPC	1000	25	19.4	67	3	Yes	Yes Less Receipt
12	Pithead	Kahalgaon	NTPC	1840	15	26.8	0	0	Yes	Yes Less Receipt : ECL
13	Pithead	Talcher	NTPC	470	15	7.6	14	2	Yes	Yes Linkage < Demand
14	Pithead	Talcher	NTPC	3000	15	58.1	52	1	Yes	Yes Linkage < Demand
15	Pithead	Farakka	NTPC	1600	15	31.3	36	1	Yes	Yes Less Receipt - ECL

Source: CEA and Citi Investment Research

Earnings revised downwards

We cut our earnings estimates by 2–7% over FY09E- FY12E to factor in:

- Lower generation on account of coal shortages
- Lower incentives (PLF, UI Charges and fuel cost savings) on lower generation

We now expect NTPC to grow EPS at a CAGR of 7% (EPS CAGR of 9% earlier) over FY08–11E and RoEs at 14.5%-15.4% levels (RoEs at 15.2%-15.7% levels earlier).

Figure 7. Earnings Revision Table

	FY09E	FY10E	FY11E	FY12E	FY13E
Total Operating Income					
Old	398,941	439,353	521,937	645,288	747,806
New	391,748	430,026	515,453	639,639	741,986
Change	-1.8%	-2.1%	-1.2%	-0.9%	-0.8%
Recurring PAT					
Old	83,695	91,515	102,860	125,008	145,895
New	79,678	85,027	99,094	122,021	142,670
Change	-4.8%	-7.1%	-3.7%	-2.4%	-2.2%
EPS					
Old	10.15	11.10	12.47	15.16	17.69
New	9.66	10.31	12.02	14.80	17.30
Change	-4.8%	-7.1%	-3.6%	-2.4%	-2.2%

Source: Citi Investment Research estimates

NTPC

Company description

NTPC is India's largest power generator with 31GW of capacity (23% of India's installed capacity) and generates 206bu (29% of India's generation). The company's capacity is spread across 21 locations with coal-based units (22.4GW), gas-based units (3.9GW) and JV projects (1.0GW). NTPC's output is contracted through long-term PPAs (25 years for coal-based and 15 years for gas-based) with its customers (SEBs 99% of its sales). Currently, the entire billing to the SEBs is secured through letters of credit. NTPC plans to double capacity by FY12E and triple capacity by FY17E.

Investment strategy

We have a Sell/Low Risk (3L) rating on NTPC.

- The Indian regulatory system of cost pass-throughs works well and provides a defensive characteristic to NTPC's financials, quite unlike any other Asian generator. The company's capex is well funded with low gearing (0.52x), high cash balance of Rs170bn, strong credit rating and high annual CFO cash Rs135bn over FY09E-12E.
- However, (1) the recent outperformance of the stock vis-à-vis the BSE Sensex, (2) the downside to our new target price of Rs149 and (3) the severe coal shortages that the company is facing lead us to set a Sell/Low Risk (3L) rating on the company.
- NTPC has been facing quite a few roadblocks over the last 1.5 years: (1) a number of projects have been delayed; (2) coal supply has been inadequate to generate very high generation efficiency gains; (3) poor quality coal supply in some of its plants; and (4) lack of gas supply preventing higher utilization of gas plants.

Valuation

We have a Rs149 target price on NTPC. Even though investors might give credence to NTPC's long-term growth opportunity, the current global credit crisis means they would likely be hesitant to assign too much value to future growth prospects. As a consequence we use a P/BV based methodology to value NTPC. We prefer P/BV to P/E given (1) India's regulatory regime of providing a 14% RoE on regulated equity base + incentives and (2) because this neutralizes to some extent the effect of foreign exchange and fuel costs fluctuations. We use a target P/BV multiple of 2.0x FY10E to value NTPC, which is set at a ~9% discount to the average P/BV of the company post listing, given the global credit crisis and the de-rating of most stocks globally.

Risks

We rate NTPC as Low Risk according to our quantitative risk-rating system, which tracks 260-day historical share price volatility.

Key upside risks to our target price include:

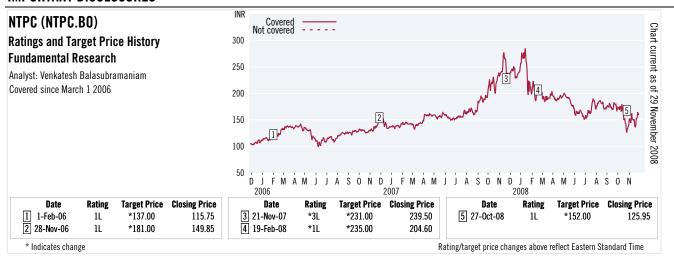
- NTPC increasing its capacity additions plans for the XIth plan
- Faster-than-expected ramp-up of capacity
- Positive change in the regulatory structure in terms of returns and incentives
- Significant drop in interest rates leading to a fall in the cost of capital
- Additional allocation of coal mines by the Ministry of Coal.

Appendix A-1

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