

NTPC IN  
NTPC

INDIA / INDEPENDENT POWER PRODUCERS



**BUY**  
UNCHANGED

TARGET	INR204.00
PRIOR TP	INR204.00
CLOSE	INR163.95
UP/DOWNSIDE	+24.4%

## HOW WE DIFFER FROM THE STREET

	BNPP	Consensus	% Diff
Target Price (INR)	204.00	199	2.5
EPS 2012 (INR)	11.05	11.99	-7.8
EPS 2013 (INR)	12.69	13.23	-4.1
	Positive	Neutral	Negative
Market Recs	30	14	4

## INDUSTRY OUTLOOK ↓

## Opportunity to accumulate


**CHANGE**

Weak 2QFY12E generation due to disruptions

NTPC's 2QFY12 power generation was below our expectation by 7.5% due to unforeseen disruptions in operations at its Ramagundam and Korba plants. We trim our FY12 EPS estimates slightly to account for the disruption, and we believe that any weakness in the stock price is an opportunity to buy NTPC.

**CATALYST**

Resumption of operations and capacity adds to drive upside

Barring near-term issues, which we expect to be out of the way soon, we continue to like NTPC as we believe it is best positioned in terms of fuel security at times of coal shortage, is a defensive with a strong balance sheet and earnings visibility, and is due to add capacity of 3.6GW in FY12. NTPC is also protected from discom defaults by sovereign guarantees.

**VALUATION**

Trading at trough valuations

Our DCF-based TP of INR204 is based on a WACC of 11.4% (unchanged) and a terminal growth rate of 3% (unchanged). NTPC trades at 1.7x FY13E P/BV – one standard deviation below its seven-year median NTM P/BV. Key risks to our TP are delays in completion of new power plants and lower power plant availability due to fuel shortages or forced outages.

**KEY CHART**

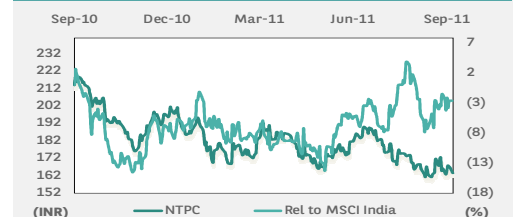
2QFY12 power generation (standalone)

	-----2Q12-----		-----2Q11-----		Generation Growth (y-y %)
	Capacity (MW)	Gen (MU)	Capacity (MW)	Gen (MU)	
Coal	27,545	45,525	25,385	46,134	(1.3)
Gas/Naphtha	4,017	5,399	4,017	6,030	(10.5)
Total	31,562	50,923	29,402	52,164	(2.4)

Sources: NTPC; BNP Paribas

## KEY STOCK DATA

YE Mar (INR m)	2012E	2013E	2014E
Revenue	624,604	715,861	854,326
Rec. net profit	91,152	104,669	113,807
Recurring EPS (INR)	11.05	12.69	13.80
Chg. In EPS est. (%)	(1.9)	(0.3)	(1.1)
EPS growth (%)	13.5	14.8	8.7
Recurring P/E (x)	14.8	12.9	11.9
Dividend yield (%)	2.2	2.3	2.5
EV/EBITDA (x)	10.8	9.3	8.3
Price/book (x)	1.8	1.7	1.5
Net debt/Equity (%)	42.2	48.0	52.1
ROE (%)	12.8	13.5	13.5



Share price performance	1 Month	3 Month	12 Month
Absolute (%)	(1.5)	(11.1)	(24.8)
Relative to country (%)	3.7	5.1	(0.4)
Next results	October 2011		
Mkt cap (USD m)	27,500		
3m avg daily turnover (USD m)	9.8		
Free float (%)	16		
Major shareholder	Government of India (85%)		
12m high/low (INR)	217.95/162.05		
3m historic vol. (%)	26.0		
ADR ticker	-		
ADR closing price (USD; Date)	-		
Issued shares (m)	8,246		

Sources: Bloomberg consensus; BNP Paribas estimates



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# RISK EXPERTS

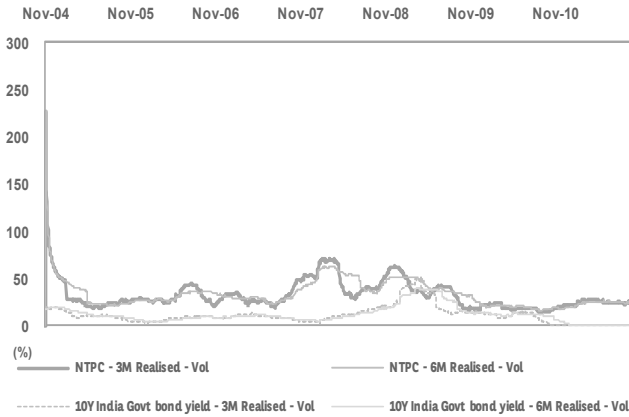
## Key Earnings Drivers & Sensitivity

- A 5% reduction in overall utilization rate reduces our FY12 EPS estimates by 4%

	-----Base-----		-----Best-----		-----Worse-----	
	FY12E	FY13E	FY12E	FY13E	FY12E	FY13E
Utilization (%)	80	80	85.4	86.1	75.7	76.4
EPS	11.05	12.69	11.72	13.25	10.59	11.96
Change (%)			6.0	4.4	(4.2)	(2.0)

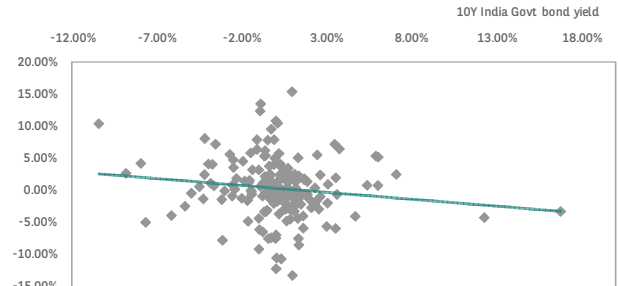
Source: BNP Paribas Estimates

## NTPC and 10Y India Govt bond yield (3M and 6M Realised-Vol)



Sources: Bloomberg; BNP Paribas

## Regression - NTPC to 10Y India Govt bond yield



$NTPC = 187 + -0.1603 * GIND10YR INDEX$   
R Square = 0.0186

Regression based on 261 observations of 5 years weekly data. Please refer to Appendix 1 for the explanation of R-square  
Sources: Bloomberg; BNP Paribas

## India sector correlation matrix at 25 July 2011

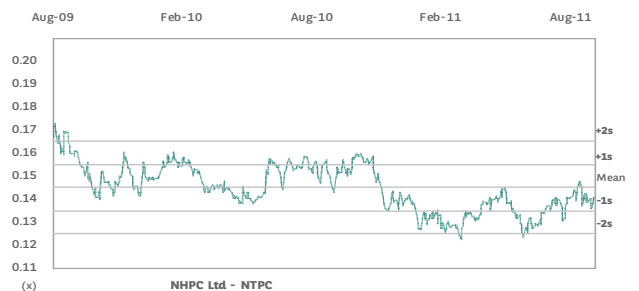
	Autos	Banks	Engineering & Construction	Metals & Mining	Oil & Gas	IT Services	Telecom	Utilities	Property
Autos	1.00	0.67	0.64	0.66	0.50	0.43	0.36	0.58	0.62
Banks		1.00	0.71	0.70	0.58	0.46	0.36	0.63	0.66
Engineering & Construction			1.00	0.71	0.58	0.46	0.41	0.65	0.68
Metals & Mining				1.00	0.66	0.50	0.40	0.69	0.72
Oil & Gas					1.00	0.40	0.30	0.57	0.57
IT Services						1.00	0.27	0.45	0.38
Telecom							1.00	0.43	0.43
Utilities								1.00	0.63
Property									1.00

Source: BNPP Paribas Sector Strategy

## The Risk Experts

- Our starting point for this page is a recognition of the macro factors that can have a significant impact on stock-price performance, sometimes independently of bottom-up factors.
- With our Risk Expert page, we identify the key macro risks that can impact stock performance.
- This analysis enhances the fundamental work laid out in the rest of this report, giving investors yet another resource to use in their decision-making process

## Long/Short Chart



Sources: Bloomberg; BNP Paribas

Sources: Bloomberg, BNPP Paribas

## Overview of power generation in 2QFY12

NTPC's 2QFY12 power generation from its standalone operation was lower than our estimate by 7.5% and was down 2.4% y-y despite 7.3% y-y growth in installed capacity.

Coal-fired generation was below our estimate by 8.5% and down 1.3% y-y.

2Q is a weak quarter seasonally, as demand is lower and hydro power supplies pick up. NTPC undertakes annual maintenance shutdowns during 2Q of every fiscal year. However, generation in 2QFY12 was particularly hit by unforeseen factors. The company's 2,600MW Korba power plant had to halt production on ash disposal issues while its 2,600MW Ramagundam power plant faced coal shortages because of a strike at its supplier – Singareni Collieries Ltd (SCCL; Not listed).

Gas/naphtha-based generation was above our expectation by 2.4% and down 10.5% y-y. In line with our expectations, the utilisation rate for gas/naphtha-fired power plants in 2QFY12 was at 61%, down from 68% in 2QFY11.

### EXHIBIT 1: NTPC Q2FY12 generation

	-----2Q11-----		-----2Q12-----		Growth (y-y %)
	Capacity (MW)	Gen (MU)	Capacity (MW)	Gen (MU)	
BADARPUR	705	981	705	1,209	23.2
DADRI (NCTPP)	1,820	2,798	1,820	3,381	20.8
FARAKKA STPS	1,600	2,812	2,100	2,349	(16.5)
KAHALGAON	2,340	3,155	2,340	2,967	(5.9)
KORBA STPS	2,100	4,577	2,600	4,483	(2.1)
RAMAGUNDEM STPS	2,600	5,082	2,600	5,326	4.8
RIHAND	2,000	3,876	2,000	3,709	(4.3)
SIMHADRI	1,000	1,867	1,500	2,378	27.4
SINGRAULI STPS	2,000	3,806	2,000	3,608	(5.2)
SIPAT STPS Stage II	1,000	2,206	1,660	2,569	16.4
TALCHER	470	888	470	830	(6.6)
TALCHER STPS	3,000	4,830	3,000	4,471	(7.4)
TANDA	440	851	440	683	(19.7)
UNCHAHAR	1,050	2,054	1,050	1,989	(3.2)
VINDHYACHAL STP	3,260	6,350	3,260	5,573	(12.2)
Coal Total	25,385	46,134	27,545	45,525	(1.3)
ANTA	419	675	419	688	2.0
AURAIYA	663	1,010	663	1,014	0.4
DADRI	830	1,183	830	1,207	2.0
FARIDABAD	432	808	432	748	(7.4)
GANDHAR	657	1,077	657	862	(20.0)
KAWAS	656	935	656	874	(6.5)
KAYAM KULAM	360	342	360	7	(97.9)
Gas/Naphtha Total	4,017	6,030	4,017	5,399	(10.5)
Total - Standalone	29,402	52,164	31,562	50,923	(2.4)

Source: CEA

### Korba production curtailed due to fly ash disposal issues

Production at NTPC's 2,600MW Korba power plant in Chattisgarh was affected as the company did not have an alternative site for ash disposal after the project's ash pond was damaged, leading to leakage of fly ash that contaminated the nearby fields. (Fly ash is a hazardous waste powder produced when coal is burnt to generate power.)

Power generation at Korba fell 2.1% y-y despite installed capacity going up from 2,100MW to 2,600MW. Capacity utilization, which was 101% in 2QFY11, fell to 80% in 2QFY12.

NTPC's earlier plans to put up a new ash disposal site for Korba were stuck due to difficulties in acquiring land. The company is repairing the ash pond and has made temporary arrangements for disposing ash at an alternative site. The company expects to resume normal operations at Korba by the end of this month. NTPC believes that clean-up costs will not be material and that it can make up for the loss in availability through the rest of the year. Note that, as per tariff regulation, NTPC can recover its fixed costs as well as 15.5% ROE only if the availability of its plants is at least 85% during a year. In case annual availability is below 85%, NTPC recovers less than the regulated ROE of 15.5%.

#### Ramagundam coal supplies hit by strike at SCCL

Production at NTPC's 2,600MW Ramagundam plant has been hit on account of a strike at Singareni Collieries (SCCL), from where the plant sources its entire coal requirement under a Fuel Supply Agreement. Ramagundam's utilisation rates, which were in excess of 95% in July and August, fell to 83% in September 2011. Workers at SCCL are on strike since 13 September 2011 in support of a demand for a separate state of Telengana carved out of certain areas of the state of Andhra Pradesh. We have no indication as to when the strike would be called off.

SCCL could possibly declare a *force majeure* under its Fuel Supply Agreement with NTPC to avoid paying a penalty for failure to supply coal.

NTPC has to maintain an annual availability of 85% for each of its power plants under its Power Purchase Agreement (PPA), and any failure to do so leads to under-recovery of its regulated ROE. NTPC's management has indicated that it cannot declare *force majeure* under the PPA with its customers in case of coal supply disruptions to its power projects arising from strikes at SCCL. NTPC has to source coal from alternative sources and meet its availability targets. When the strike is called off, NTPC may be able to make up for the supply disruptions by declaring higher availability during 3Q and 4QFY12, and thus avoid paying a penalty for failing to meet its annual availability target of 85%. Ramagundam plant's availability was well above the mandated 85% until September and this would help it avoid paying penalties at the end of FY12.

#### Lower utilisation rate at gas plant not an issue

The decline in NTPC's gas/naphtha-based generation is due to lower demand for expensive Liquefied Natural Gas (LNG)-based power in the face of dwindling supplies of cheap domestic gas supplies. Management has indicated that the availability of gas-based generation is above the mandated availability and therefore it is recovering its regulated ROE and fixed charge, as well as earning an incentive, even though the customer is not taking the power. Thus, lower utilisation of its gas-based power generation does not impact NTPC's profitability. However, revenue declines as fuel costs, which are pass-through, go down due to lower power generation. Also NTPC loses the opportunity to earn some efficiency related gains. NTPC's gas-fired power plants operated at 69.8% utilisation in 1QFY12 but their availability was 90% in 1QFY12.

#### NTPC best positioned in terms of fuel

Barring near-term issues arising out of uncontrollable factors, we reiterate that NTPC is one of the best positioned in the sector in terms of fuel security.

NTPC has fuel supply agreements (FSA) with Coal India (CIL, COAL IN, Not rated) and SCCL for supply of 125m tonnes of coal. As per the FSA, CIL/SCCL will have to pay a penalty if coal supplies fall below 90% of the agreed 125m tonnes.

In addition, in May 2011 the government allocated an additional 13m tonnes of coal to NTPC's new projects completed in FY10 and FY11. In times of coal shortage, the government tends to prioritize supply of cheap domestic coal supplies to NTPC's fixed-return plants over merchant power plants as this leads to lower power prices for the buyers, i.e the cash-strapped power distribution companies.

Thus, out of its total requirement of 160m tonnes of domestic coal, NTPC will procure 138m tonnes from CIL and SCCL. It plans to source about 2m tonnes from e-auctions. The remaining 20m tonne shortfall is to be bridged by importing 14m tonnes of high grade coal. NTPC already has contracts in place to import 12m tonnes of coal.

Recall that the Ministry of Coal has taken back five coal blocks allocated to NTPC, citing poor progress in execution. Management indicated that NTPC received a letter from the Ministry of Coal, asking it to provide the status of progress on new power projects that were linked to the captive coal blocks that were deallocated. Based on the progress NTPC has made on these projects, it is confident of getting back the deallocated blocks.

Recall also that NTPC recently placed orders for 9x800MW Boiler Turbine Generator (BTG) units for its upcoming power projects at Lara (1,600MW), Darlipali (1,600MW), Gajmara (2x800MW) and Kudgi

(3x800MW). Management has indicated that the government is likely to allocate NTPC five additional coal blocks to ensure fuel security for these projects.

## Changes in estimates

Our sales estimates are down 5.4% for FY12 and 5.3% for FY13, as we assume lower utilisation for NTPC's coal-fired power plants. We have reduced our assumptions for volume of power sold by 5.9% for FY12 and 6.2% for FY13.

Our EPS estimates go down only slightly by 1.9% for FY12 and 0.4% for FY13 as part of the decline in operational profits is offset by higher other income due to higher interest that NTPC earns on cash in the current high interest scenario. Other income accounts for 20% of our estimated FY12 profit before tax.

### EXHIBIT 2: Changes in estimates

	-----2012E-----			-----2013E-----		
	New	Previous	Change	New	Previous	Change
	(INR m)	(INR m)	(%)	(INR m)	(INR m)	(%)
Power sold (b kwh)	216	229	(5.85)	233	248	(6.23)
Average tariffs (INR/kwh)	2.90	2.89	0.24	3.08	3.05	0.93
Adjusted Sales	624,604	659,934	(5.35)	715,861	755,579	(5.26)
Fuel costs	400,564	427,801	(6.37)	454,115	487,608	(6.87)
Operating expenses	68,417	71,154	(3.85)	77,203	81,969	(5.81)
Adjusted EBITDA	155,622	160,980	(3.33)	184,543	186,002	(0.78)
Depreciation	33,748	34,098	(1.03)	39,143	39,493	(0.89)
Adjusted EBIT	121,874	126,882	(3.95)	145,401	146,509	(0.76)
Interest expense	29,460	29,633	(0.58)	32,949	33,470	(1.56)
Other income	22,757	19,577	16.24	19,792	19,618	0.89
Pre-tax profit - recurring	115,171	116,825	(1.42)	132,244	132,657	(0.31)
Total tax	23,929	23,846	0.35	27,474	27,534	(0.22)
Effective tax rate (%)	21	20	1.79	21	21	0.09
Minority interest	89.97	-		100.71	-	
PAT - recurring	91,152	92,887	(1.87)	104,669	105,028	(0.34)
Recurring EPS (INR)	11.05	11.27	(1.87)	12.69	12.74	(0.34)
ROE (%)	12.8	13.0		13.5	13.6	

Source: BNP Paribas estimates

## Valuation and TP

We value NTPC using DCF. We continue to assume a WACC of 11.4% based on a cost of equity of 13.1%, cost of debt of 8%, tax rate of 30% and a debt-equity ratio of 31%. We retain our terminal growth rate assumption of 3%. Key risks to our TP are delays in completion of new power plants, and lower availability of power plants because of fuel shortages or forced outages.

NTPC currently trades at 1.7x FY13E P/BV, which is at a historical low. We believe that any weakness in the share price on account of lower-than-expected power generation in 2QFY12 will be an opportunity to accumulate the stock.

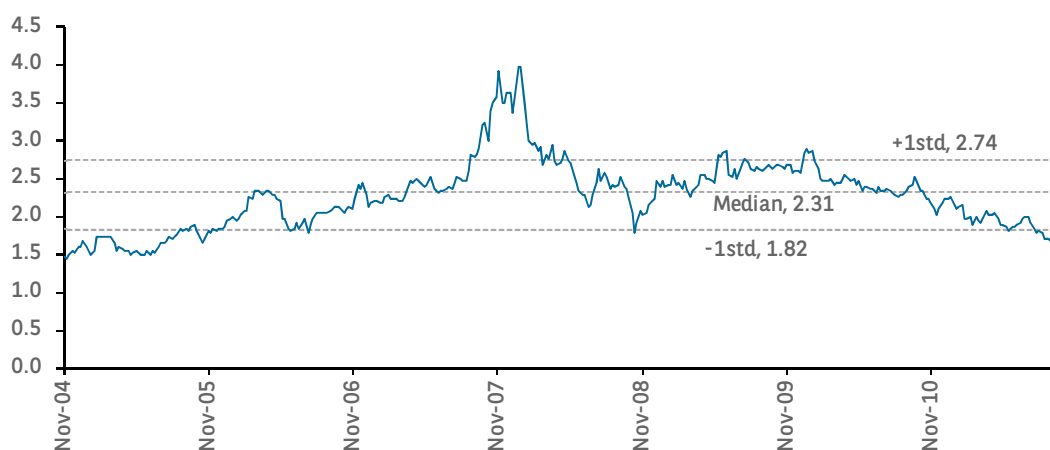
## EXHIBIT 3: Relative valuation

Company	Ticker	Price (LC)	Mcap (USD m)	---EV-EBITDA---		2-Yr	-----PE-----		-----PB-----		-----ROE-----	
				FY12E (x)	FY13E (x)	EBITDA Growth (%)	FY12E (x)	FY13E (x)	FY12E (x)	FY13E (x)	FY12E (%)	FY13E (%)
<b>NTPC^</b>	<b>NTPC IN</b>	<b>163.95</b>	<b>27,364</b>	<b>10.6</b>	<b>9.1</b>	<b>16.9</b>	<b>15.0</b>	<b>13.3</b>	<b>1.8</b>	<b>1.7</b>	<b>12.3</b>	<b>12.3</b>
NHPC^	NHPC IN	23.35	5,814	10.5	8.8	15.7	14.8	11.8	1.0	1.0	7.2	8.5
Power Grid^	PWGR IN	95.85	8,982	10.1	8.4	18.7	15.4	12.9	1.9	1.7	12.9	14.0
Tata Power	TPWR IN	96.75	4,647	8.1	6.8	8.8	7.9	7.7	1.0	0.9	13.9	14.0
Reliance Power^	RPWR IN	78.25	4,443	63.8	18.7	141.9	31.1	22.5	1.2	1.2	4.0	5.3
Adani Power^	Adani IN	81.5	3,596	13.1	10.7	80.1	12.7	31.8	2.3	2.1	19.9	7.0
JSW Energy	JSW IN	50.9	1,690	7.4	6.2	9.1	9.3	9.0	1.3	1.1	13.6	12.9
Jindal Steel & Power	JSP IN	456.85	8,642	7.5	6.4	8.7	9.9	8.6	2.4	1.9	24.2	24.8
CESC	CESC IN	269.75	682	7.1	5.3	16.0	9.6	6.5	0.6	0.6	9.9	9.0
Lanco Infratech	LANCI IN	15.1	736	6.0	4.4	16.4	6.3	4.6	0.7	0.6	15.7	15.9
<b>India Power Utilities Median ( ex NTPC)</b>				<b>8.1</b>	<b>6.8</b>	<b>16.0</b>	<b>9.9</b>	<b>9.0</b>	<b>1.2</b>	<b>1.1</b>	<b>13.6</b>	<b>12.9</b>
Southern Co	SO US	USD 42.01	36,030	9.7	9.1	3.5	16.5	15.6	2.0	1.9	12.5	12.5
Nextera Energy	NEE US	USD 52.87	22,329	8.7	7.9	4.5	11.9	11.3	1.4	1.3	12.2	12.2
Duke Energy Corp	DUK US	USD 19.71	26,250	8.5	8.2	1.9	14.2	14.0	1.1	1.1	8.0	8.1
Dominion Resources Inc	D US	USD 49.84	28,369	9.9	9.3	2.9	15.8	15.3	2.4	2.2	14.8	15.3
FirstEnergy Corp	FE US	USD 43.61	18,238	8.4	7.8	3.7	13.1	13.1	1.4	1.3	10.0	9.9
China Resources Power	836 HK	USD 11.40	6,940	9.6	7.9	10.3	10.0	8.5	1.1	1.0	12.8	13.9
SDIC Huajing power	600886 CH	USD 6.02	1,887	16.5	14.7	6.3	24.7	21.3	1.3	1.2	5.6	7.6
Datang International	991 HK	USD 1.83	779	14.2	12.1	8.0	10.9	8.8	0.6	0.6	7.2	7.6
<b>Global Power Utilities - Median (ex NTPC)</b>				<b>9.7</b>	<b>8.6</b>	<b>4.1</b>	<b>13.7</b>	<b>13.5</b>	<b>1.3</b>	<b>1.3</b>	<b>11.1</b>	<b>11.1</b>
<b>Overall Median (ex NTPC)</b>				<b>8.9</b>	<b>7.7</b>	<b>10.1</b>	<b>11.8</b>	<b>11.3</b>	<b>1.3</b>	<b>1.2</b>	<b>12.3</b>	<b>12.0</b>

Note: Year ending March for India. For China and North America estimates are for immediate previous year ending December.

Sources: Bloomberg consensus estimates, ^ BNP Paribas estimates

## EXHIBIT 4: Historical NTM P/B chart



Sources: Bloomberg, BNP Paribas estimates

## Financial statements

## NTPC

Profit and Loss (INRm)Year Ending Mar	2010A	2011A	2012E	2013E	2014E
Revenue	483,596	565,316	624,604	715,861	854,326
Cost of sales ex depreciation	(301,888)	(364,144)	(400,564)	(454,115)	(550,036)
<b>Gross profit ex depreciation</b>	<b>181,708</b>	<b>201,173</b>	<b>224,039</b>	<b>261,746</b>	<b>304,290</b>
Other operating income	0	0	0	0	0
Operating costs	(50,526)	(66,245)	(68,417)	(77,203)	(89,435)
<b>Operating EBITDA</b>	<b>131,182</b>	<b>134,928</b>	<b>155,622</b>	<b>184,543</b>	<b>214,855</b>
Depreciation	(28,944)	(29,993)	(33,748)	(39,143)	(46,205)
Goodwill amortisation	0	0	0	0	0
<b>Operating EBIT</b>	<b>102,238</b>	<b>104,935</b>	<b>121,874</b>	<b>145,401</b>	<b>168,650</b>
Net financing costs	7,821	2,145	(6,703)	(13,157)	(25,015)
Associates	0	0	0	0	0
Recurring non operating income	0	0	0	0	0
Non recurring items	4,247	13,195	0	0	0
<b>Profit before tax</b>	<b>114,306</b>	<b>120,275</b>	<b>115,171</b>	<b>132,244</b>	<b>143,634</b>
Tax	(25,929)	(26,793)	(23,929)	(27,474)	(29,074)
<b>Profit after tax</b>	<b>88,377</b>	<b>93,482</b>	<b>91,242</b>	<b>104,770</b>	<b>114,560</b>
Minority interests	0	52	(90)	(101)	(754)
Preferred dividends	0	0	0	0	0
Other items	0	0	0	0	0
<b>Reported net profit</b>	<b>88,377</b>	<b>93,534</b>	<b>91,152</b>	<b>104,669</b>	<b>113,807</b>
Non recurring items & goodwill (net)	(4,247)	(13,195)	0	0	0
<b>Recurring net profit</b>	<b>84,130</b>	<b>80,339</b>	<b>91,152</b>	<b>104,669</b>	<b>113,807</b>
<b>Per share (INR)</b>					
Recurring EPS *	10.20	9.74	11.05	12.69	13.80
Reported EPS	10.72	11.34	11.05	12.69	13.80
DPS	3.81	3.82	3.65	3.84	4.09
<b>Growth</b>					
Revenue (%)	18.1	16.9	10.5	14.6	19.3
Operating EBITDA (%)	46.7	2.9	15.3	18.6	16.4
Operating EBIT (%)	58.5	2.6	16.1	19.3	16.0
Recurring EPS (%)	13.5	(4.5)	13.5	14.8	8.7
Reported EPS (%)	9.2	5.8	(2.5)	14.8	8.7
<b>Operating performance</b>					
Gross margin inc depreciation (%)	31.6	30.3	30.5	31.1	30.2
Operating EBITDA margin (%)	27.1	23.9	24.9	25.8	25.1
Operating EBIT margin (%)	21.1	18.6	19.5	20.3	19.7
Net margin (%)	17.4	14.2	14.6	14.6	13.3
Effective tax rate (%)	22.7	22.3	20.8	20.8	20.2
Dividend payout on recurring profit (%)	37.3	39.2	33.0	30.2	29.6
Interest cover (x)	-	-	18.2	11.1	6.7
Inventory days	41.7	37.3	36.5	35.1	34.1
Debtor days	41.1	50.0	51.7	49.3	45.6
Creditor days	111.7	111.2	118.4	114.7	106.2
Operating ROIC (%)	10.4	9.4	9.9	10.6	10.7
Operating ROIC - WACC (%)	(2.6)	(3.7)	(3.2)	-	-
ROIC (%)	8.9	8.4	9.2	10.0	10.4
ROIC - WACC (%)	(4.0)	(4.7)	(3.9)	-	-
ROE (%)	14.0	12.3	12.8	13.5	13.5
ROA (%)	6.7	6.1	6.8	7.4	7.8

Assuming capacity addition of 3,570MW in FY12.

Assuming that NTPC will pay taxes at the MAT rate of 20%.

\*Pre exceptional, pre-goodwill and fully diluted

Sources: NTPC; BNP Paribas estimates

## NTPC

Cash Flow (INRm)Year Ending Mar	2010A	2011A	2012E	2013E	2014E
Recurring net profit	84,130	80,339	91,152	104,669	113,807
Depreciation	28,944	29,993	33,748	39,143	46,205
Associates & minorities	0	(52)	90	101	754
Other non-cash items	0	0	0	0	0
<b>Recurring cash flow</b>	<b>113,074</b>	<b>110,280</b>	<b>124,990</b>	<b>143,913</b>	<b>160,766</b>
Change in working capital	(9,001)	(25,858)	4,430	(7,014)	(12,755)
Capex - maintenance	0	0	0	0	0
Capex - new investment	(140,093)	(137,358)	(101,246)	(194,191)	(194,191)
<b>Free cash flow to equity</b>	<b>(36,020)</b>	<b>(52,936)</b>	<b>28,174</b>	<b>(57,292)</b>	<b>(46,180)</b>
Net acquisitions & disposals	0	0	0	0	0
Dividends paid	(36,720)	(36,722)	(35,156)	(37,002)	(39,453)
Non recurring cash flows	(812)	34,199	21,624	18,265	11,824
<b>Net cash flow</b>	<b>(73,552)</b>	<b>(55,460)</b>	<b>14,642</b>	<b>(76,030)</b>	<b>(73,809)</b>
Equity finance	0	0	0	0	0
Debt finance	65,982	65,874	56,165	70,706	62,525
<b>Movement in cash</b>	<b>(7,570)</b>	<b>10,414</b>	<b>70,807</b>	<b>(5,324)</b>	<b>(11,284)</b>

Aggressive capex to ramp up capacity to 64GW by FY17 and capex for captive coal mines.

Per share (INR)					
Recurring cash flow per share	13.71	13.37	15.16	17.45	19.50
FCF to equity per share	(4.37)	(6.42)	3.42	(6.95)	(5.60)

Balance Sheet (INRm)Year Ending Mar	2010A	2011A	2012E	2013E	2014E
Working capital assets	171,625	201,855	208,874	230,728	263,947
Working capital liabilities	(129,082)	(152,744)	(164,194)	(179,033)	(199,497)
<b>Net working capital</b>	<b>42,543</b>	<b>49,111</b>	<b>44,681</b>	<b>51,695</b>	<b>64,450</b>
Tangible fixed assets	764,862	897,182	964,680	1,119,728	1,267,714
<b>Operating invested capital</b>	<b>807,405</b>	<b>946,293</b>	<b>1,009,361</b>	<b>1,171,423</b>	<b>1,332,163</b>
Goodwill	6	6	6	6	6
Other intangible assets	0	0	0	0	0
Investments	117,776	83,573	61,949	43,685	31,861
Other assets	3,853	4,592	4,592	4,592	4,592
<b>Invested capital</b>	<b>929,040</b>	<b>1,034,464</b>	<b>1,075,908</b>	<b>1,219,705</b>	<b>1,368,622</b>
Cash & equivalents	(160,530)	(178,598)	(249,496)	(244,273)	(233,742)
Short term debt	0	0	0	0	0
Long term debt *	441,485	507,548	563,714	634,420	696,945
<b>Net debt</b>	<b>280,955</b>	<b>328,950</b>	<b>314,218</b>	<b>390,147</b>	<b>463,203</b>
Deferred tax	2,297	6,717	6,717	6,717	6,717
Other liabilities	717	2,181	2,181	2,181	2,181
Total equity	626,173	683,846	739,932	807,699	882,807
Minority interests	2,790	4,851	4,940	5,041	5,795
<b>Invested capital</b>	<b>929,040</b>	<b>1,034,464</b>	<b>1,075,908</b>	<b>1,219,705</b>	<b>1,368,622</b>

\* includes convertibles and preferred stock which is being treated as debt

Per share (INR)					
Book value per share	75.94	82.94	89.74	97.96	107
Tangible book value per share	75.94	82.93	89.74	97.96	107

Financial strength					
Net debt/equity (%)	44.7	47.8	42.2	48.0	52.1
Net debt/total assets (%)	23.1	24.1	21.1	23.7	25.7
Current ratio (x)	2.6	2.5	2.8	2.7	2.5
CF interest cover (x)	-	-	20.3	11.4	6.9

Valuation	2010A	2011A	2012E	2013E	2014E
Recurring P/E (x) *	16.1	16.8	14.8	12.9	11.9
Recurring P/E @ target price (x) *	20.0	20.9	18.5	16.1	14.8
Reported P/E (x)	15.3	14.5	14.8	12.9	11.9
Dividend yield (%)	2.3	2.3	2.2	2.3	2.5
P/CF (x)	12.0	12.3	10.8	9.4	8.4
P/FCF (x)	(37.5)	(25.5)	48.0	(23.6)	(29.3)
Price/book (x)	2.2	2.0	1.8	1.7	1.5
Price/tangible book (x)	2.2	2.0	1.8	1.7	1.5
EV/EBITDA (x) **	12.2	12.3	10.8	9.3	8.3
EV/EBITDA @ target price (x) **	14.7	14.8	12.9	11.1	9.8
EV/invested capital (x)	1.8	1.6	1.6	1.4	1.3

\* Pre exceptional, pre-goodwill and fully diluted

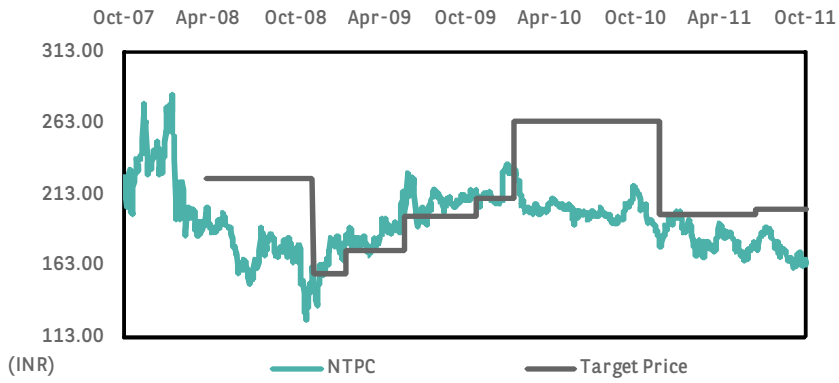
\*\* EBITDA includes associate income and recurring non-operating income

Sources: NTPC; BNP Paribas estimates



## History of change in investment rating and/or target price

## NTPC (NTPC IN)



Date	Reco	TP
25-Mar-08	BUY	225.00
11-Nov-08	HOLD	158.00
15-Jan-10	BUY	265.00

Girish Nair started covering this stock from 27-May-2009

Price and TP are in local currency

**Valuation and risks:** Key risks to our DCF-based TP are delays in completion of new power plants, and lower availability of power plants because of fuel shortages or forced outages

Source: Bloomberg, BNP Paribas

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-	-

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### Stock Ratings

Stock ratings are based on absolute upside or downside, which we define as (target price\* - current price) / current price.

BUY (B). The upside is 10% or more.

HOLD (H). The upside or downside is less than 10%.

REDUCE (R). The downside is 10% or more.

Unless otherwise specified, these recommendations are set with a 12-month horizon. Thus, it is possible that future price volatility may cause a temporary mismatch between upside/downside for a stock based on market price and the formal recommendation.

*\* In most cases, the target price will equal the analyst's assessment of the current fair value of the stock. However, if the analyst doesn't think the market will reassess the stock over the specified time horizon due to a lack of events or catalysts, then the target price may differ from fair value. In most cases, therefore, our recommendation is an assessment of the mismatch between current market price and our assessment of current fair value.*

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Hold	150	Hold	1.99
Reduce	52	Reduce	1.92

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