



## National Thermal Power Corporation

STOCK INFO.	BLOOMBERG
BSE Sensex: 19,786	NTPC IN
	REUTERS CODE
S&P CNX: 5,869	NTPC.BO

30 October 2007

Neutral

Previous Recommendation: Neutral

Rs234

Equity Shares (m)	8,245.5
52-Week Range	240/125
1,6,12 Rel. Perf. (%)	-1/4/28
M.Cap. (Rs b)	1,929
M.Cap. (US\$ b)	48.5

YEAR	NET SALES	PAT *	EPS*	EPS	P/E	P/BV	ROE	ROCE	EV/	EV/
END *	(RS M)	(RS M)	(RS)	GROWTH (%)	(X)	(X)	(%)	(%)	SALES	EBITDA
03/07A	326,317	65,681	8.0	23.6	29.4	4.0	13.9	21.2	5.8	16.1
03/08E	375,248	73,976	9.0	13.8	26.1	3.6	14.4	22.9	5.1	13.6
03/09E	420,215	80,517	9.8	8.8	24.0	3.3	14.3	20.3	0.3	13.5

\* Pre Exceptional Earnings

**2QFY08: pre exceptional net profit inline with estimates:** During 2QFY08, NTPC reported revenues of Rs80.2b (up 17.7% YoY), EBIDTA of Rs27.5b (up 49.3% YoY) and net profit of Rs19.3b (up 30.6% YoY). There were several one-time income/expenses during the quarter which includes 1) Prior period arrears Rs5,272m, 2) Foreign exchange loss Rs813m, 3) Wage revision Rs1,251m. Adjusted net profit stood at Rs16.3b (up 12.9% YoY), largely in line with our expectations of Rs15.4b.

**Higher generation driven by improved PLF of Gas station:** Electricity generation stood at 45.4BUs (up 6.6% YoY), while sale of electricity stood at 45.3BUs (up 13.9% YoY). Gas based power plants recorded PLFs of 57.4% during 2QFY08 (vs 55.2% in 2QFY07) and PLF for coal based power plant for 2QFY08 stood at 83.4%, vs 82.6% YoY.

**Eleventh Plan capacity addition: 13,360MW under construction:** Power capacity as at September 2007 stood at 26,850MW (Excl JV capacity of 1054MW), up from 26,350MW in March 07. For Eleventh Plan, the company plans to add 22,350 MW and of this, capacity under construction stands at 13,360MW, and expects to issue the main plant award for the balance 8,990MW by March 2008.

**Valuation and recommendation:** We expect NTPC to report net profit of Rs74b in FY08 (up 13.8% YoY) and Rs80.5b in FY09 (up 8.8% YoY). At the CMP of Rs234/sh, NTPC quotes at PER of 26x FY08E and 24x FY09E (reported pre-exceptional earnings). Maintain **Neutral**.

Y/E MARCH	QUARTERLY PERFORMANCE									
	FY07				FY08E				FY07	FY08E
	1Q	2Q	3Q	4Q	1Q	2Q	3QE	4QE		
<b>Sales</b>	71,536	68,138	81,468	88,603	89,697	80,169	93,812	111,570	326,317	375,248
Change (%)	18.1	15.0	18.6	21.5	25.4	17.7	15.2	25.9	24.8	21.1
<b>EBITDA</b>	19,960	18,408	22,595	23,397	26,945	27,490	30,051	38,522	100,932	123,008
Change (%)	29.4	41.9	24.2	33.1	35.0	49.3	33.0	64.6	57.3	21.9
As of % Sales	27.9	27.0	27.7	26.4	30.0	34.3	32.0	34.5	30.9	32.8
Depreciation	4,755	4,780	5,138	6,081	4,914	5,134	6,936	8,842	20,754	25,826
Interest	5,238	4,630	2,807	5,919	278	4,964	4,912	9,125	18,594	19,279
Other Income	6,369	6,505	7,752	6,864	7,181	7,323	7,674	7,899	27,490	30,078
<b>PBT</b>	16,336	15,503	22,402	18,261	28,934	24,715	25,877	28,454	89,074	107,980
Tax	808	764	1,369	914	5,235	5,460	6,469	7,804	20,427	24,968
Effective Tax Rate (%)	4.9	4.9	6.1	5.0	18.1	22.1	25.0	27.4	22.9	23.1
<b>Reported PAT</b>	15,528	14,739	21,033	17,347	23,699	19,255	19,408	20,651	68,647	83,013
<b>Adjusted PAT (Pre Exceptional)</b>	15,318	14,410	17,415	18,539	17,648	16,269	19,408	20,651	65,681	73,976
Change (%)	25.4	24.8	37.4	18.4	15.2	12.9	11.4	11.4	23.6	12.6

E: MOSt Estimates

## 2QFY08: pre exceptional net profit in line with estimates

During 2QFY08, NTPC reported revenues of Rs80.2b (up 17.7% YoY), EBIDTA of Rs27.5b (up 49.3% YoY) and net profit of Rs19.3b (up 30.6% YoY). There were several one-time income/expenses during the quarter which includes 1) Prior period arrears Rs5,272m, 2) Foreign exchange loss Rs813m, 3) Wage revision Rs1,251m. The company has made adhoc provision (Rs952m in 2QFY08) towards incremental staff cost to factor in the possible recommendations of the Sixth Pay Commission. Adjusted net profit stood at Rs16.3b (up 12.9% YoY), largely in line with our expectations of Rs15.4b.

### ADJUSTED NET PROFIT COMPARISON (RS M)

	2QFY08	1QFY08	4QFY07	3QFY07	2QFY07
Reported PAT	19,255	23,699	17,347	21,033	14,739
<b>Income</b>					
OTSS Bonds (prior period)				-	-139
Tariff Orders (prior period)	5,272	5,111	2,682	1,155	720
Forex (prior period)	-	3,828	285	1,567	-
Income Tax Refund	-	-		896	
<b>Expenditure</b>					
Wage Revisions	1,251	2,888	3,243		
Forex	-	-	915		-
ERV (Forex)	813				252
<b>Adjusted</b>	<b>16,269</b>	<b>17,648</b>	<b>18,538</b>	<b>17,415</b>	<b>14,410</b>

Source: Company

## Higher generation driven by improved PLF of Gas stations

Electricity generation during 2QFY08 stood at 45.4BUs (up 6.6% YoY), while sale of electricity stood at 45.3BUs (up 13.9% YoY). Gas based power plants recorded PLFs of 57.4% during 2QFY08 (vs 55.2% in 2QFY07) and PLF for coal based power plant for 2QFY08 stood at 83.4%, vs 82.6% YoY. Key reason for improved PLF factor for gas based stations is increased gas availability (13.2 mmscmd

### OPERATIONAL PERFORMANCE

	2QFY08	2QFY07	% YOY	1QFY08	1QFY07	% YOY
Electricity Sales (MUs)	45,283	39,770	13.9	47,600	42,190	6.4
Electricity Generation (MUs)	45,438	42,609	6.6	51000	45061	6.5
Capacity (MW)	26,850	25,350	5.9	27404	25140	6.8
Avg Selling Price (Rs/kwh)	1.77	1.71	3.3	1.75	1.67	9.9
PLF (%) - Coal based	83.4	82.6		94.00	87.76	
PLF (%) - Gas based	57.4	55.2		77.98	72.03	

Source: Company

in 2QFY08 vs 11.1 in 2QFY07) due to spot market purchases (~3.75 mmscmd).

## Eleventh Plan capacity addition: 13,360MW under construction

Power capacity as at September 2007 stood at 26,850MW (excl capacity of 1054MW through JV), up from 26,350MW in March 07, adding 500MW Sipat power plant (stage II) in May 2007. For Eleventh Plan, the company plans to add 22,350 MW and of this, capacity under construction stands at 13,360MW and expects to issue the main plant award for the balance 8,990MW by March 2008. The company has already invited the tender for ~6,000+ MW of the total balance capacity to be awarded.

The targeted capacity of 22,350 MW is expected to be ramped up as: FY08- 2500 MW, FY09- 2580MW, FY10- 3000MW, FY11-5960MW and FY12-8310MW. The management has indicated that expected capacity addition during FY08 will be 2500MW (Kahalgaoon 1,000 MW, Sipat 1,000 MW and Bhillai JV 500 MW) During FY09, capacity addition is expected at 2580MW (Sipat 1,320 MW, Barh 660 MW and Koldam hydro power 600 MW).

## Coal mining: delay due to land acquisition, Lack of clarity on returns remain

The coal mining activity for the company has been delayed, primarily due to issues in terms of land acquisition. However, as the mines are open cast mines and does not have major overburden to lift before starting the mining, the lead time post completion of land acquisition is not significant. The company is in the process of selecting the mine developer and operator.

NTPC has been allotted eight coal blocks with aggregate reserves of 5.6b ton including recently allotted Chhatti Bariatu block with an estimated reserves of 354m tons. It plans to ramp up the production of coal from all its mines to 50m tons by FY17 and total capex for the same is estimated at Rs100b. The company plans to fund the capex in the DER of 70:30 while uncertainty over the return on the mining operations continues.

### Key initiatives

- ✍ **MoU with BHEL:** NTPC has signed MoU with BHEL to take up power projects on EPC basis both in India and outside India. It is currently working on the formation of the JV and expects to complete the same in an around 3-4 months time.
- ✍ **MoU with Nigerian government:** NTPC has signed MoU with the Government of Nigeria to ensure fuel security for its gas based plant. The company will installed 700MW power plant in Nigeria and in return will get 3mtpa gas for use in India. The details are being worked out.
- ✍ **Coal blocks:** The Company is looking at various overseas opportunities in coal mining / stakes in coal mines, to provide fuel security.
- ✍ **MoU with Asian Development Bank (ADB):** NTPC has entered into MoU with ADB to install renewable energy of 1,000 MW by 2017.
- ✍ **MoU with Rashtriya Ispat Nigam Limited (RINL):** NTPC has entered into MoU with RINL to set up a power generation plant using blast furnace gas.
- ✍ **Stake in TELK, Kerala:** NTPC has acquired 44.6% stake in TELK in Kerala. TELK would carryout refurbishment of the transformers at NTPC's plants.
- ✍ **JV with Singaruli coal mines:** The JV would setup coal mines in India and would also look for overseas opportunity.

### Valuation and recommendation

We expect NTPC to report net profit of Rs74b in FY08 (up 13.8% YoY) and Rs80.5b in FY09 (up 8.8% YoY). At the CMP of Rs234/sh, NTPC quotes at PER of 26x FY08E and 24x FY09E (reported pre-exceptional earnings). Maintain **Neutral**.

## National Thermal Power Corporation: an investment profile

### Company description

NTPC is the largest power generator in India with installed capacity of 27,904MW, generating ~28% of the electricity in the country. Its cost of power at Rs1.52 per unit is amongst the lowest. It aims to reach a capacity of 50,000 MW by the end of FY12. It also intends to venture into related areas like coal mining, distribution, transmission, merchant sales, gas exploration, etc.

### Key investment arguments

- ✎ Outlined expansion projects during Xth and XIth Plan represents 24% of country's planned generation capacity addition.
- ✎ Enjoys significant growth option across entire spectrum: transmission, distribution, coal mining, merchant power plants, gas exploration, etc.
- ✎ Efficiency incentives results in ROE from core business at 21% vs 14% permitted by CERC.
- ✎ Growth will not be equity dilutive.

### Key investment risks

- ✎ Tightening of efficiency norms may reduce quantum of incentives.
- ✎ Slowdown in the pace of reforms would impact growth plans.

### Recent developments

- ✎ NTPC has altered its Memorandum of Understanding (MoU) with BHEL to take up EPC contracts for the power projects..

### Valuation and view

- ✎ At the CMP of Rs234/sh, NTPC quotes at PER of 26x FY08E and 24x FY09E (reported pre-exceptional earnings).
- ✎ Maintain **Neutral**.

### Sector view

- ✎ We believe that the Indian power sector is interestingly poised, offering significant growth potential. Incumbents, especially the CPSUs and private players, enjoy growth optionality, which could be in multiples of the current size. While COSU's like NTPC and Neyveli Lignite have embarked on a capex programme to double existing capacity by FY12, private players have also announced large projects.

#### COMPARATIVE VALUATIONS

		NTPC	REL	TATA POWER
P/E (x)	FY08E	26.1	42.3	19.8
	FY09E	24.0	43.1	20.9
P/BV (x)	FY08E	3.7	4.3	3.5
	FY09E	3.4	4.0	3.3
RoE (%)	FY08E	13.9	10.7	8.9
	FY09E	15.0	10.7	7.6

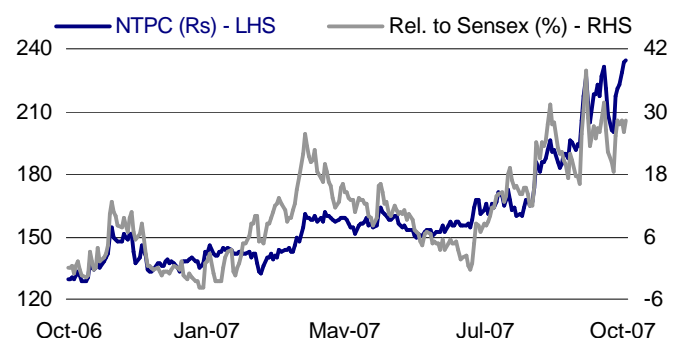
#### SHAREHOLDING PATTERN (%)

	SEP-07	JUN-07	SEP-06
Promoter	89.5	89.5	89.5
Domestic Inst	1.6	1.4	1.3
Foreign	6.6	7.0	7.0
Others	2.3	2.1	2.2

#### EPS: MOST FORECAST VS CONSENSUS (RS)

	MOST FORECAST	CONSENSUS FORECAST	VARIATION (%)
FY08	10.1	9.4	6.9
FY09	9.8	10.3	-5.1

#### STOCK PERFORMANCE (1 YEAR)



INCOME STATEMENT						(Rs Million)					
Y/E MARCH	2005	2006	2007	2008E	2009E						
<b>Net Sales</b>	<b>225,650</b>	<b>261,429</b>	<b>326,317</b>	<b>375,248</b>	<b>420,215</b>						
Change (%)	19.6	15.9	24.8	5.0	2.0						
<b>EBITDA</b>	<b>67,484</b>	<b>72,232</b>	<b>100,932</b>	<b>123,008</b>	<b>133,435</b>						
Margin (%)	29.9	27.6	30.9	32.8	31.8						
Depreciation	19,584	20,477	20,754	25,826	29,299						
<b>EBIT</b>	<b>47,900</b>	<b>51,755</b>	<b>80,178</b>	<b>97,181</b>	<b>104,136</b>						
Int. and Finance Charges	16,955	17,632	18,594	19,279	28,538						
Other Income - Rec.	17,597	26,101	27,490	30,078	29,710						
<b>Profit before Tax</b>	<b>48,542</b>	<b>60,224</b>	<b>89,074</b>	<b>107,980</b>	<b>105,308</b>						
Current Tax	2,712	2,022	20,427	24,968	24,791						
Deferred Tax	0	0	0	0	0						
Tax Rate (%)	5.6	3.4	22.9	23.1	23.5						
<b>Adjusted PAT</b>	<b>45,830</b>	<b>58,202</b>	<b>65,681</b>	<b>83,013</b>	<b>80,517</b>						
EO Expense/(Income)	-12,224	0	-2,966	-9,037	0						
<b>Reported PAT</b>	<b>58,053</b>	<b>58,202</b>	<b>68,647</b>	<b>92,050</b>	<b>80,517</b>						
Change (%)	10.4	0.3	17.9	34.1	-2.5						
Margin (%)	25.7	22.3	21.0	24.5	19.2						
Less: Minority Interest	0	0	0	0	0						
<b>Net Profit</b>	<b>58,053</b>	<b>58,202</b>	<b>68,647</b>	<b>92,050</b>	<b>80,517</b>						
				<b>34.1%</b>	<b>-12.5%</b>						
BALANCE SHEET						(Rs Million)					
Y/E MARCH	2005	2006	2007	2008E	2009E						
Equity Share Capital	82,455	82,455	82,455	82,455	82,455						
Total Reserves	335,308	367,132	403,513	456,063	506,118						
<b>Net Worth</b>	<b>417,763</b>	<b>449,587</b>	<b>485,968</b>	<b>538,518</b>	<b>588,573</b>						
Deferred liabilities	1	1	1	1	1						
Total Loans	174,252	206,381	251,411	338,345	449,525						
<b>Capital Employed</b>	<b>592,016</b>	<b>655,969</b>	<b>737,380</b>	<b>876,865</b>	<b>1,038,099</b>						
Gross Block	431,062	460,396	507,273	666,392	831,083						
Less: Accum. Deprn.	207,914	229,501	250,792	276,618	305,918						
<b>Net Fixed Assets</b>	<b>223,148</b>	<b>230,895</b>	<b>256,481</b>	<b>389,774</b>	<b>525,165</b>						
Capital WIP	99,285	136,340	168,392	182,818	236,905						
Investments	207,977	192,891	160,943	208,477	224,527						
<b>Curr. Assets</b>	<b>129,073</b>	<b>157,245</b>	<b>221,827</b>	<b>219,157</b>	<b>191,288</b>						
Inventory	17,777	23,405	25,102	31,870	34,538						
Account Receivables	13,747	8,678	12,523	18,505	23,026						
Cash and Bank Balance	60,783	84,714	133,146	133,674	98,188						
Others	36,766	40,448	51,056	35,108	35,536						
<b>Curr. Liability &amp; Prov</b>	<b>67,467</b>	<b>61,402</b>	<b>70,263</b>	<b>122,080</b>	<b>138,505</b>						
Account Payables	52,306	49,102	54,221	82,906	98,895						
Provisions	15,161	12,300	16,042	39,174	39,610						
<b>Net Current Assets</b>	<b>61,606</b>	<b>95,843</b>	<b>151,564</b>	<b>97,077</b>	<b>52,783</b>						
<b>Appl. of Funds</b>	<b>592,016</b>	<b>655,969</b>	<b>737,380</b>	<b>878,145</b>	<b>1,039,380</b>						

E: Most Estimates

RATIOS					
Y/E MARCH	2005	2006	2007	2008E	2009E
<b>Basic (Rs)</b>					
<b>EPS (Pre Excep)</b>	<b>5.6</b>	<b>7.1</b>	<b>8.0</b>	<b>10.1</b>	<b>9.8</b>
Cash EPS	9.4	9.5	10.8	14.3	13.3
BV/Share	50.7	54.5	58.9	65.3	71.4
DPS	2.4	2.8	3.2	3.2	3.2
Payout (%)	49.0	45.2	46.1	36.7	37.8
<b>Valuation (x)</b>					
P/E		33.2	29.4	23.2	24.0
Cash P/E		24.5	21.6	16.4	17.6
P/BV		4.3	4.0	3.6	3.3
EV/Sales		7.1	5.8	5.1	4.9
EV/EBITDA		21.2	16.1	13.6	13.5
Dividend Yield (%)		12	14	14	14
<b>Return Ratios (%)</b>					
EBITDA Margins (%)	29.9	27.6	30.9	32.8	31.8
Net Profit Margins (%)	25.7	22.3	21.0	24.5	19.2
RoE	11.9	12.3	13.9	14.4	14.3
RoCE	18.1	16.8	21.2	22.9	20.3
<b>Working Capital Ratios</b>					
Fixed Asset Turnover (x)	0.5	0.6	0.6	0.6	0.5
Asset Turnover (x)	0.4	0.4	0.4	0.4	0.4
Debtor (Days)	22	12	14	18	20
Inventory (Days)	29	33	28	31	30
Working Capital Turnove	1	16	21	-36	-39
<b>Leverage Ratio (x)</b>					
Current Ratio	19	2.6	3.2	18	14
Interest Cover Ratio	2.8	2.9	4.3	5.0	3.6
Debt/Equity	0.4	0.5	0.5	0.6	0.8

CASH FLOW STATEMENT						(Rs Million)					
Y/E MARCH	2005	2006	2007	2008E	2009E						
Oper. Profit/(Loss) before	80,349	80,701	109,828	133,807	134,607						
Direct Taxes Paid	-2,712	-2,022	-20,427	-24,968	-24,791						
(Inc)/Dec in WC	47,613	-10,306	-7,289	55,015	8,809						
<b>CF from Operations</b>	<b>125,250</b>	<b>68,373</b>	<b>82,112</b>	<b>163,854</b>	<b>118,625</b>						
EO Expense	0	0	0	0	0						
<b>CF from Operating in</b>	<b>125,250</b>	<b>68,373</b>	<b>82,112</b>	<b>163,854</b>	<b>118,625</b>						
(inc)/dec in FA	-55,113	-66,389	-78,929	-173,545	-218,778						
(Pur)/Sale of Investment	-34,597	15,086	31,948	-47,534	-16,050						
<b>CF from Investment</b>	<b>-89,710</b>	<b>-51,303</b>	<b>-46,981</b>	<b>###</b>	<b>-234,828</b>						
Issue of Shares	26,841	0	0	0	0						
(Inc)/Dec in Debt	14,349	32,129	45,030	86,934	111,180						
Dividend Paid	-22,470	-26,325	-30,281	-30,462	-30,462						
<b>CF from Fin. Activit</b>	<b>18,720</b>	<b>5,804</b>	<b>14,749</b>	<b>56,472</b>	<b>80,717</b>						
<b>Inc/Dec of Cash</b>	<b>54,260</b>	<b>22,874</b>	<b>49,880</b>	<b>-753</b>	<b>-35,485</b>						
Add: Beginning Balance	6,091	60,783	84,714	133,146	133,674						
<b>Closing Balance</b>	<b>60,351</b>	<b>83,657</b>	<b>134,594</b>	<b>132,393</b>	<b>98,188</b>						



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2. Group/Directors ownership of the stock
3. Broking relationship with company covered
4. Investment Banking relationship with company covered

**NTPC**

No  
No  
No  
No

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