



## National Thermal Power Corporation

STOCK INFO.	BLOOMBERG
BSE SENSEX: 14,986	NTPC IN
	REUTERS CODE
S&P CNX: 4,356	NTPC.BO

2 August 2007

Neutral

Previous Recommendation: Neutral

Rs162

Equity Shares (m)	8,245.5
52-Week Range	171/116
1,6,12 Rel. Perf. (%)	4/10/-3
M.Cap. (Rs b)	1,338
M.Cap. (US\$ b)	33.2

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	20.4	2.7	13.9	17.6	4.3	13.0
03/08E	349,983	75,330	9.1	15.4	17.8	2.5	14.7	17.8	3.9	10.9
03/09E	393,669	79,886	9.7	6.0	16.8	2.3	14.3	18.2	0.3	10.9

\* Pre Exceptional Earnings; FY05 reported Net Profit Rs58.1b

- 1QFY08: pre exceptional net profit up 15% YoY:** During 1QFY08, NTPC reported revenue of Rs89.7b (up 25.4% YoY), EBIDTA of Rs26.9b (up 35% YoY) and net profit of Rs23.7b (up 52.6% YoY). There were several one-time income/expenses during the quarter which includes 1) Prior period arrears Rs5,111m, 2) Foreign exchange gain Rs3828m, 3) Wage revision Rs2,888m. Adjusted net profit stood at Rs17.7b (up 15.2% YoY), in line with our expectations of Rs17.4b.
- Higher generation driven by improved PLF of Gas station:** Electricity generation stood at 51BUs (up 13.3% YoY) during 1QFY08 while sales for the quarter stood at 47.6BUs (12.8% YoY). Gas based power plants recorded PLFs of 78% during 1QFY08 (vs 72% in 1QFY07), while PLF during 4QFY07 stood at 83.5%. Coal based PLF for 1QFY08 stood at 94%, vs 87.8% YoY (4QFY07 PLF at 96.1%).
- Eleventh Plan capacity addition: 13,360MW under construction:** Power capacity as at June 2007 stood at 27,904MW, up from 27,404MW in March 07. For Eleventh Plan, the company plans to add 21,941 MW and of this, capacity under construction stands at 13,360MW, and expects to issue the main plant award for the balance 7,900MW by Dec 07.
- Valuation and recommendation:** We estimate NTPC to report a net profit of Rs75.3b in FY08 (up 9.7% YoY) and Rs79.9b in FY09 (up 6% YoY). At the CMP of Rs162/sh, NTPC quotes at PER of 20.4x FY07E, 17.8x FY08E and 16.8x FY09E (reported pre-exceptional earnings). Maintain **Neutral**.

QUARTERLY PERFORMANCE										(Rs Million)	
Y/E MARCH	FY07				FY08E				FY07	FY08E	
	1Q	2Q	3Q	4Q	1Q	2QE	3QE	4QE			
<b>Sales</b>	<b>71,536</b>	<b>68,138</b>	<b>81,468</b>	<b>88,603</b>	<b>89,697</b>	<b>75,246</b>	<b>90,996</b>	<b>94,044</b>	<b>326,317</b>	<b>349,983</b>	
Change (%)	18.1	15.0	18.6	21.5	25.4	10.4	11.7	6.1	24.8	13.0	
<b>EBITDA</b>	<b>19,960</b>	<b>18,408</b>	<b>22,595</b>	<b>23,397</b>	<b>26,945</b>	<b>21,721</b>	<b>26,323</b>	<b>30,020</b>	<b>100,932</b>	<b>105,009</b>	
Change (%)	29.4	41.9	24.2	33.1	35.0	18.0	16.5	28.3	57.3	4.0	
As of % Sales	27.9	27.0	27.7	26.4	30.0	28.9	28.9	31.9	30.9	30.0	
Depreciation	4,755	4,780	5,138	6,081	4,914	6,214	7,193	10,734	20,754	29,055	
Interest	5,238	4,630	2,807	5,919	278	5,556	4,912	12,784	18,594	23,530	
Other Income	6,369	6,505	7,752	6,864	7,181	7,156	7,946	5,955	27,490	28,238	
<b>PBT</b>	<b>16,336</b>	<b>15,503</b>	<b>22,402</b>	<b>18,261</b>	<b>28,934</b>	<b>17,107</b>	<b>22,164</b>	<b>12,458</b>	<b>89,074</b>	<b>80,662</b>	
Tax	808	764	1,369	914	5,235	1,026	1,441	-2,370	20,427	5,332	
Effective Tax Rate (%)	4.9	4.9	6.1	5.0	18.1	6.0	6.5	-19.0	22.9	6.6	
<b>Reported PAT</b>	<b>15,528</b>	<b>14,739</b>	<b>21,033</b>	<b>17,347</b>	<b>23,699</b>	<b>16,081</b>	<b>20,723</b>	<b>14,828</b>	<b>68,647</b>	<b>75,330</b>	
<b>Adjusted PAT (Pre Exceptional)</b>	<b>15,318</b>	<b>14,410</b>	<b>17,415</b>	<b>18,539</b>	<b>17,648</b>	<b>16,081</b>	<b>20,723</b>	<b>14,828</b>	<b>65,681</b>	<b>75,330</b>	
Change (%)	25.4	24.8	37.4	18.4	15.2	11.6	19.0	-20.0	23.6	5.5	

E: MOST Estimates

### 1QFY08: pre exceptional net profit in line with estimates

During 1QFY08, NTPC reported revenue of Rs89.7b (up 25.4% YoY), EBIDTA of Rs26.9b (up 35% YoY) and net profit of Rs23.7b (up 52.6% YoY). There were several one-time income/expenses during the quarter which includes 1) Prior period arrears Rs5,111m, 2) Foreign exchange gain Rs3828m, 3) Impact from wage revision Rs2,888m. Adjusted net profit stood at Rs17.7b (up 15.2% YoY), in line with our estimates of Rs17.4b.

#### ADJUSTED NET PROFIT COMPARISON (RS M)

	1QFY08	4QFY07	3QFY07	2QFY07	1QFY07
Reported PAT	23,699	17,347	21,033	14,739	15,528
<b>Income</b>					
OTSS Bonds*	-	-	-	-139	-
Tariff Orders*	5,111	2682	1155	720	1114
Forex (prior period)	3,828	285	1567	-	-
Income Tax Refund	-	-	896	-	-
<b>Expenditure</b>					
Wage Revisions	2,888	3243	-	-	-
Forex	-	915	-	-	-
ERV (Forex)	-	-	-	252	904
<b>Adjusted</b>	<b>17,648</b>	<b>18,538</b>	<b>17,415</b>	<b>14,410</b>	<b>15,318</b>

\*(Prior period)

Source: Company

### Higher generation driven by improved PLF of Gas stations

Electricity generation stood at 51BUs (up 13.3% YoY) during 1QFY08 while sales for the quarter stood at 47.6BUs (12.8% YoY). Gas based power plants recorded PLFs of 78% during 1QFY08 (vs 72% in 1QFY07), while PLF during 4QFY07 stood at 83.5%. Coal based PLF for 1QFY08 stood at 94%, vs 87.8% YoY (4QFY07 PLF at 96.1%). Key reason for improved PLF factor for gas based stations is increased gas availability (14.8 mmscmd in 1QFY08 vs 12.3 mmscmd in 1QFY07) due to imports and spot market purchases (5.2 mmscmd).

#### OPERATIONAL PERFORMANCE (MUS)

	1QFY08	1QFY07	% YOY	4QFY07	4QFY06	% YOY
Electricity Sales	47,600	42,190	12.8	48,640	44,269	9.9
Electricity Gen.	51,000	45,000	13.3	51,660	46,323	11.5
Capacity (MW)	27,904	25,140	9.0	27,904	23,935	16.6
Avg Selling Price*	1.75	1.67	4.8	1.82	1.65	10.6
PLF (%) - Coal based	94.0	87.8		96.1	95.7	
PLF (%) - Gas based	77.9	72.0		83.5	65.8	

\*(Rs/kwh)

Source: Company

### Tenth plan capacity addition at 7,155 MW

NTPC commissioned 7,155MW of capacity in the Tenth plan (FY02-FY07). There has been a slippage of 1,500MW, due to delay in commissioning of 1,000 MW Kahalgaon and 1,000 MW Sipat project. 500 MW of Vindhyachal unit was commissioned in FY07 (scheduled in FY08), resulting in net slippage of 1,500 MW. The installed capacity for the company as of Mar 2007 stood at 27,404 MW.

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

Power capacity as at June 2007 stood at 27,904MW, up from 27,404MW in March 07. During FY07, NTPC commissioned 3,155MW of power capacity (vs targeted capacity addition of 3,710 MW). Total capacity addition during Tenth plan stood at 7,155 MW. For Eleventh Plan, the company plans to add 21,941 MW and of this, capacity under construction stands at 13,360MW. It has invited LoIs for 7,900MW and expects to issue the main plant award for the same by December 2007.

The management has indicated that expected capacity addition during FY08 will be 2500MW (Kahalgaon 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. The management indicated that during FY07, capex of Rs491m has been incurred on mining operations. The commercial production from all its mines is expected to reach 47mtpa by 2017. The production from

Pakri Barwadih mine would be 15 mtpa and total capex for the mining would be Rs5.43b.

### Key initiatives

- ✍ **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 estimate NTPC to report a net profit of Rs75.3b in FY08 (up 9.7% YoY) and Rs79.9b in FY09 (up 6% YoY). At the CMP of Rs162/sh, NTPC quotes at PER of 20.4x FY07E, 17.8x FY08E and 16.8x 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) to venture into Nuclear Power Generation.
- ✍ News flow on diversification efforts like distribution, transmission, coal mining, international foray, merchant sales, etc continue to be positive.

### Valuation and view

- ✍ At the CMP of Rs162/sh, NTPC quotes at PER of 20.4x FY07E, 17.8x FY08E and 16.8x 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(ADJ)*	REL	TATA POWER
P/E (x)	FY08E	17.8	18.1	21.2
	FY09E	16.8	17.5	20.8
P/BV (x)	FY08E	2.6	1.7	2.1
	FY09E	2.3	1.5	2.0
RoE (%)	FY08E	15.5	10.8	8.6
	FY09E	14.9	10.8	8.5

\* Adjusted for higher depreciation in books as compared to tariff Order and write-back of Rebate on OTSS bonds

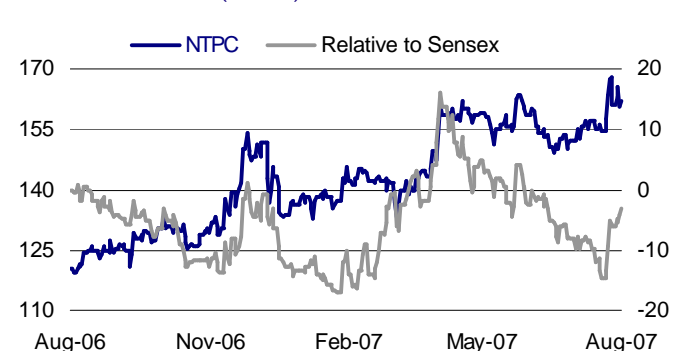
#### SHAREHOLDING PATTERN (%)

	JUN-07	MAR-07	JUN-06
Promoter	89.5	89.5	89.5
Domestic Inst	1.4	1.3	1.2
Foreign	7.0	7.1	6.9
Others	2.2	2.1	2.4

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

	MOST FORECAST	CONSENSUS FORECAST	VARIATION (%)
FY08	9.1	9.3	-2.2
FY09	9.7	10.5	-7.3

#### 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>349,983</b>	<b>393,669</b>						
Change (%)	19.6	15.9	24.8	7.3	12.5						
<b>EBITDA</b>	<b>67,484</b>	<b>72,232</b>	<b>100,932</b>	<b>105,009</b>	<b>115,209</b>						
Margin (%)	29.9	27.6	30.9	30.0	29.3						
Depreciation	19,584	20,477	20,754	29,055	29,299						
<b>EBIT</b>	<b>47,900</b>	<b>51,755</b>	<b>80,178</b>	<b>75,955</b>	<b>85,910</b>						
Int. and Finance Charges	16,955	17,632	18,594	23,530	28,824						
Other Income - Rec.	17,597	26,101	27,490	28,238	28,792						
<b>Profit before Tax</b>	<b>48,542</b>	<b>60,224</b>	<b>89,074</b>	<b>80,662</b>	<b>85,879</b>						
Current Tax	2,712	2,022	20,427	5,332	5,993						
Deferred Tax	0	0	0	0	0						
Tax Rate (%)	5.6	3.4	22.9	6.6	7.0						
<b>Adjusted PAT</b>	<b>45,830</b>	<b>58,202</b>	<b>65,681</b>	<b>75,330</b>	<b>79,886</b>						
EO Expense/(Income)	-12,224	0	-2,966	0	0						
<b>Reported PAT</b>	<b>58,053</b>	<b>58,202</b>	<b>68,647</b>	<b>75,330</b>	<b>79,886</b>						
Change (%)	10.4	0.3	17.9	9.7	6.0						
Margin (%)	25.7	22.3	21.0	21.5	20.3						
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>75,330</b>	<b>79,886</b>						
				9.7%	6.0%						
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	407,485	452,353	501,777						
<b>Net Worth</b>	<b>417,763</b>	<b>449,587</b>	<b>489,940</b>	<b>534,808</b>	<b>584,232</b>						
Deferred liabilities	1	1	1	1	1						
Total Loans	174,252	206,381	276,613	321,780	435,030						
<b>Capital Employed</b>	<b>592,016</b>	<b>655,969</b>	<b>766,555</b>	<b>856,590</b>	<b>1,019,264</b>						
Gross Block	431,062	460,396	655,862	666,392	831,083						
Less: Accum. Deprn.	207,914	229,501	249,758	278,813	308,112						
<b>Net Fixed Assets</b>	<b>223,148</b>	<b>230,895</b>	<b>406,104</b>	<b>387,579</b>	<b>522,970</b>						
Capital WIP	99,285	136,340	80,444	182,818	236,905						
Investments	207,977	192,891	223,666	228,218	244,268						
<b>Curr. Assets</b>	<b>129,073</b>	<b>157,245</b>	<b>165,418</b>	<b>163,433</b>	<b>156,724</b>						
Inventory	17,777	23,405	26,145	29,725	32,356						
Account Receivables	13,747	8,678	12,256	17,259	21,571						
Cash and Bank Balance	60,783	84,714	95,197	80,669	66,589						
Others	36,766	40,448	31,820	35,779	36,207						
<b>Curr. Liability &amp; Pro</b>	<b>67,467</b>	<b>61,402</b>	<b>109,077</b>	<b>105,458</b>	<b>141,604</b>						
Account Payables	52,306	49,102	75,510	69,736	105,620						
Provisions	15,161	12,300	33,567	35,721	35,984						
<b>Net Current Assets</b>	<b>61,606</b>	<b>95,843</b>	<b>56,341</b>	<b>57,975</b>	<b>15,120</b>						
<b>Appl. of Funds</b>	<b>592,016</b>	<b>655,969</b>	<b>766,554</b>	<b>856,589</b>	<b>1,019,263</b>						

E: M O S t 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>9.1</b>	<b>9.7</b>
Cash EPS	9.4	9.5	10.8	12.7	13.2
BV/Share	50.7	54.5	59.4	64.9	70.9
DPS	2.4	2.8	3.0	3.2	3.2
Payout (%)	49.0	44.9	43.5	40.4	38.1
<b>Valuation (x)</b>					
P/E		23.0	20.4	17.8	16.8
Cash P/E		17.0	15.0	12.8	12.3
P/BV		3.0	2.7	2.5	2.3
EV/Sales		4.8	4.0	3.9	3.7
EV/EBITDA		14.5	13.0	10.9	10.9
Dividend Yield (%)		17	18	2.0	2.0
<b>Return Ratios (%)</b>					
EBITDA Margins (%)	29.9	27.6	30.9	30.0	29.3
Net Profit Margins (%)	25.7	22.3	21.0	21.5	20.3
RoE	11.9	12.3	13.9	14.7	14.3
RoCE	18.1	16.8	17.6	17.8	18.2
<b>Working Capital Ratios</b>					
Fixed Asset Turnover (x)	0.5	0.6	0.5	0.5	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	29	31	30
Working Capital Turnove	1	16	-43	-24	-48
<b>Leverage Ratio (x)</b>					
Current Ratio	19	2.6	1.5	1.5	1.1
Interest Cover Ratio	2.8	2.9	4.3	3.2	3.0
Debt/Equity	0.4	0.5	0.6	0.6	0.7

CASH FLOW STATEMENT						(Rs Million)					
Y/E MARCH	2005	2006	2007	2008E	2009E						
Oper. Profit/(Loss) before	80,349	80,701	93,398	109,717	115,178						
Direct Taxes Paid	-2,712	-2,022	-4,229	-5,332	-5,993						
(Inc)/Dec in WC	47,613	-10,306	49,985	-16,162	28,775						
<b>CF from Operations</b>	<b>125,250</b>	<b>68,373</b>	<b>139,154</b>	<b>88,223</b>	<b>137,960</b>						
EO Expense	0	0	0	0	0						
<b>CF from Operating in</b>	<b>125,250</b>	<b>68,373</b>	<b>139,154</b>	<b>88,223</b>	<b>137,960</b>						
(inc)/dec in FA	-55,113	-66,389	-139,570	-112,904	-218,778						
(Pur)/Sale of Investment	-34,597	15,086	-30,775	-4,552	-16,050						
<b>CF from Investment</b>	<b>-89,710</b>	<b>-51,303</b>	<b>-170,345</b>	<b>-117,456</b>	<b>-234,828</b>						
Issue of Shares	26,841	0	0	0	0						
(Inc)/Dec in Debt	14,349	32,129	70,232	45,167	113,250						
Dividend Paid	-22,470	-26,158	-28,558	-30,462	-30,462						
<b>CF from Fin. Activit</b>	<b>18,720</b>	<b>5,971</b>	<b>41,674</b>	<b>14,705</b>	<b>82,788</b>						
<b>Inc/Dec of Cash</b>	<b>54,260</b>	<b>23,041</b>	<b>10,483</b>	<b>-14,528</b>	<b>-14,080</b>						
Add: Beginning Balance	6,091	60,783	84,714	95,197	80,669						
<b>Closing Balance</b>	<b>60,351</b>	<b>83,824</b>	<b>95,197</b>	<b>80,669</b>	<b>66,589</b>						



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1. Analyst ownership of the stock
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

This information is subject to change without any prior notice. MOST reserves the right to make modifications and alternations to this statement as may be required from time to time. Nevertheless, MOST is committed to providing independent and transparent recommendations to its clients, and would be happy to provide information in response to specific client queries.