

## National Thermal Power Corporation

STOCK INFO. BLOOMBERG  
BSE Sensex: 7,686 NTPC IN  
REUTERS CODE  
S&P CNX: 2,316 NTPC.BO

28 October 2005

Neutral

Previous Recommendation: Neutral

Rs94

Equity Shares (m)	8,245.5
52-Week Range	110/72
1,6,10 Rel. Perf. (%)	-1/-10/-6
M.Cap. (Rs b)	776.3
M.Cap. (US\$ b)	17.7

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
03/05A	221,990	47,952	5.8	14.0	16.2	1.9	12.4	17.0	2.9	8.1
03/06E	266,847	52,433	6.4	9.3	14.8	1.7	12.1	14.9	2.5	7.6
03/07E	307,915	59,898	7.3	14.2	13.0	1.6	12.8	15.8	2.4	7.1

\* Pre-exceptional earnings; FY05 reported Net Profit Rs58.1b

**2QFY06 net profit: reported up 6% YoY; pre exceptionals up 20% YoY:** During 2QFY06, NTPC reported net profit of Rs11.6bn, vs Rs10.9b in 2QFY05, up 6.4% YoY. 2QFY06 numbers are lower by Rs733m, due to change in accounting policy pertaining to foreign currency loans taken prior to April 2000. 2QFY05 reported numbers were higher by Rs656m, which pertains to 1QFY05 as CERC revised Tariff Order in August 2004, permitting tariffs for old generation stations to be calculated at 50:50 DER. Adjusted for these, 2QFY06 net profit stands at Rs12.4b vs Rs10.3b in 2QFY05, up 20% YoY.

**Generation up 3.9% YoY, Capacity add of 500MW QoQ:** Electricity generation increased to 36.1BUs during 2QFY06 (up 3.9%). During 2QFY06, 500MW Unit 4 at Rihand was commenced, taking installed capacity at 23935MW. PLF in Oct 05 ytd has increased to 87.93% for coal based projects vs 79.3% in 2QFY06.

**News flow on capacity addition continue to be positive:** Reliance has indicated that Gas Supply Agreement is expected to be finalized within the next one month, which would facilitate Kawas / Gandhar (1450MW) getting commissioned during FY08. Tie up between Alstom and BHEL for 800MW super critical boilers will facilitate coal based projects for NTPC. Capacity add is expected at 1710MW during FY06 and 4000MW+ during FY07.

**Valuation and Recommendation:** At the CMP of Rs94/sh, NTPC quotes at a PER of 14.8x FY06E and 12.9x FY07E; 11.9x FY06 and 11.2x FY07E adjusted profit (adjusted for excess depreciation in accounts as compared to Tariff Order and rebate on OTSS bonds). We maintain our **Neutral** rating on the stock.

### QUARTERLY PERFORMANCE

Y/E MARCH	FY05				FY06E				(Rs Million)	
	1Q	2Q	3Q	4Q	1Q	2Q	3QE	4QE	FY05	FY06E
<b>Sales</b>	<b>51,916</b>	<b>52,497</b>	<b>56,982</b>	<b>64,269</b>	<b>60,567</b>	<b>59,259</b>	<b>68,253</b>	<b>78,768</b>	<b>225,650</b>	<b>266,847</b>
Change (%)	8.4	50.7	6.3	22.8	16.7	12.9	19.8	22.6	19.6	18.3
<b>EBITDA</b>	<b>13,277</b>	<b>13,807</b>	<b>15,724</b>	<b>17,904</b>	<b>15,426</b>	<b>12,977</b>	<b>16,953</b>	<b>21,981</b>	<b>60,698</b>	<b>67,337</b>
Change (%)	-13.0	-213.2	10.1	452.4	16.2	-6.0	7.8	22.8	194.9	10.9
As of % Sales	25.6	26.3	27.6	27.9	25.5	21.9	24.8	27.9	26.9	25.2
Depreciation	4,785	4,866	4,981	4,952	4,873	5,280	6,232	8,099	19,584	24,484
Interest	2,764	2,713	2,401	2,264	2,357	1,545	3,541	5,292	10,142	12,735
Other Income	5,380	5,278	5,724	13,414	5,528	6,315	7,150	6,908	29,810	25,901
Extraordinary Income/(Expense)	1	2	0	0	0	0	0	0	0	0
<b>PBT</b>	<b>11,108</b>	<b>11,506</b>	<b>14,066</b>	<b>24,102</b>	<b>13,724</b>	<b>12,467</b>	<b>14,330</b>	<b>15,498</b>	<b>60,782</b>	<b>56,019</b>
Tax	567	566	411	1,168	637	832	987	1,129	2,712	3,585
Effective Tax Rate (%)	5.1	4.9	2.9	4.8	4.6	6.7	6.9	7.3	4.5	6.4
<b>Reported PAT</b>	<b>10,541</b>	<b>10,940</b>	<b>13,655</b>	<b>22,934</b>	<b>13,087</b>	<b>11,635</b>	<b>13,343</b>	<b>14,368</b>	<b>58,070</b>	<b>52,433</b>
<b>Adjusted PAT (Pre Exceptional)</b>	<b>11,197</b>	<b>10,284</b>	<b>12,999</b>	<b>13,472</b>	<b>12,587</b>	<b>12,368</b>	<b>13,343</b>	<b>14,368</b>	<b>47,952</b>	<b>52,433</b>
Change (%)	23.9	11.3	58.7	0.6	12.4	20.3	2.6	6.7	10.4	9.3

E: MOST Estimates

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### 2QFY06 net profit: reported up 6% YoY; pre exceptionals up 20%YoY

During 2QFY06, NTPC reported net profit of Rs11.6bn, vs Rs10.9b in 2QFY05, up 6.4% YoY. 2QFY06 numbers are lower by Rs733m, due to change in accounting policy pertaining to foreign currency loans taken prior to April 2000. 2QFY05 reported numbers were higher by Rs656m, which pertains to 1QFY05 as CERC revised Tariff Order in August 2004, permitting tariffs for old generation stations to be calculated at 50:50 DER. Adjusted for these, 2QFY06 net profit stands at Rs12.4b vs Rs10.3b in 2QFY05, up 20% YoY.

### Generation up 3.9%YoY, PLF in Oct 05 ytd improved to 87.9%

Electricity generation increased to 36.1BUs during 2QFY06 (up 3.9%). 2Q is seasonally the leanest quarter as generation from hydro power station improves, resulting in lower generation from thermal power projects. Demand also drops down during 2Q. PLF in Oct 05 ytd has increased to 87.93% for coal based projects vs 79.3% in 2QFY06.

Increased generation YoY was achieved despite serious concerns on coal availability as NTPC successfully made alternate arrangements in terms of imported coal (2QFY06 coal imports: Simhadri - 239K tons, Talcher - 502K tons and Farakka - 145K tons). Going forward, the management indicated that Coal India is outsourcing mining activities at several of its mines, which would make available additional coal of 2m tons to NTPC by end FY2006. Also, Coal India is expediting the development of linkage mines at Talcher which will provide incremental 1.2m tons of coal per annum to NTPC.

### Capacity Addition: FY06 - 1710MW, FY07 - 4000MW+

During 2QFY06, 500MW Unit 4 at Rihand was commenced, taking installed capacity at 23935MW (1QFY06 – 23435MW). Installed capacity during 2QFY05 was 22435MW. During 2HFY06, 210MW at Unchahar and 500MW at Vindhyachal would be commissioned, taking the capacity addition during FY06 at 1710MW. During FY07, we expect capacity addition of 4000MW+.

### NTPC has been recovering 100% of its dues

As at Sept 2005, all the SEBs had opened and maintained Letters of Credit (LoC) equal to or more than 105% of average monthly billing as per One-Time Settlement Scheme. NTPC has been recovering 100% of its dues, for the third year in a row.

### Coal mining: Pakri Barwadih could produce 20m tons pa

NTPC has been allocated the Pakri Barwadih coal block in North Karanpura. The company intends to commence production by December 2007. The initial capacity of 10m tons can be expanded to 20m tons. Further, the Pakri Barwadih mine would be operated as a basket mine, and would meet the requirement of both Barh and North Karanpura. Recoverable reserves stand at ~425m tons.

The recommendation from the Ministry of Power to the Ministry of Coal for allocation of 11 coal blocks has been received by the company. Also, the recommendation of allocation of 4 blocks on priority basis has also been received. If successful, the company intends to produce 50m ton of coal from captive mines by FY2010.

#### NTPC: OPERATIONAL PERFORMANCE

PARTICULARS	1QFY06	1QFY05	% YOY	2QFY06	2QFY05	% YOY
Electricity Sales (MUs)	38,523	36,203	6.4	36,152	34,806	3.9
Electricity Generation (MUs)	41,406	38,871	6.5	39,263	37,635	4.3
Capacity (MW)	23,435	21,935	6.8	23,935	22,435	6.7
Avg Selling Price (Rs/kwh)	1.57	1.43	9.9	1.64	1.51	8.7
PLF (%) - Coal based				79.3	82.6	
PLF (%) - Gas based				60.2	62.6	

Source: Company/Motilal Oswal Securities

### **Intends to set up Integrated projects (3000MW each with captive mines)**

NTPC proposes to set up two projects of 3000MW each in Raipur and Talcher during the Eleventh Plan (FY08-FY12), as integrated power projects with captive mines. This is over and above the capacity addition program of 17052MW during the period and would depend on the successful allocation of mines from the Ministry of Coal. Estimated capex on these projects are Rs250b, while the development of mines is likely to cost Rs25b. We believe that this is fairly positive, as the key issue with NTPC has been the large cash and investment portfolio in the books.

### **Hydro projects – diversifying fuel mix**

NTPC is currently working on three hydro power projects: Koldam 800MW, Loharinag Pala 600MW, Tapovan Vishnugad 520MW – totaling 1920MW. During the Eleventh Plan, NTPC intends to complete 2500MW of hydro power projects. During the Thirteenth Five Year Plan (FY2013-2017), NTPC has already identified hydro projects of 3000MW+. The management indicated that in the current initiative of the Government of India to add 50000MW of hydro power capacity during the Thirteenth Plan, the company would continue to identify more projects to be executed by NTPC.

### **Dabhol project**

The management stated that Ratnagiri Gas and Power Limited would have an equity capital of Rs15b, to be financed as: NTPC Rs5b, GAIL Rs5b and Indian Financial Institutions Rs5b. Gas would be made available by GAIL.

Estimated time to restart Phase 1 and complete construction of Phase 2 and regassification terminal is estimated at 1 year from zero date. Fixed charges are estimated at Rs1.1 per unit (Rs0.93 per unit for power plant and Rs0.17 per unit for the regassification terminal), while the fuel cost would be Rs1.2 per unit. Commercial generation is expected to commence by November 2006.

### **News flow on capacity addition would continue to be positive**

✍ **Gas based projects:** Reliance Industries has indicated that the Gas Supply Agreement is expected to be finalized within the next one month. NTPC's management seemed confident that the Letter of Award issued on Reliance tantamounts to a firm contract. Thus, this will pave the way for Kavas / Gandhar (725 X 2 = 1450MW) projects getting commissioned during FY08.

✍ **Coal based projects:** Alstom has signed the technology transfer pact with BHEL for 800MW super critical boilers. This is positive and could expedite allocation of 800MW power projects on a nomination basis to BHEL, as preferred by the government. Thus we could see the coal based power projects for NTPC picking up as well.

### **Valuation and recommendation**

At the CMP of Rs94/sh, NTPC quotes at a PER of 14.8x FY06E and 12.9x FY07E; 11.9x FY06 and 11.2x FY07E adjusted profit (adjusted for excess depreciation in accounts as compared to Tariff Order and rebate on OTSS bonds). We maintain our **Neutral** rating on the stock.

## National Thermal Power Corporation: an investment profile

### Company description

NTPC is the largest power generator in India with installed capacity of 23,749 MW, generating 27.1% of the electricity in the country. Its cost of power at Rs1.47 per unit is amongst the lowest. The company has outlined a massive capacity addition programme to set up 26,493 MW of new capacity during FY03-12. 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 result in core business RoE of 21% v/s 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

- ✍ News flow on diversification efforts like distribution, transmission, coal mining, international foray, merchant sales, etc continue to be positive.
- ✍ Recovered past arrears of Rs8.6b in FY05.

### Valuation and view

- ✍ Earnings CAGR (pre exceptionals) of 12% during FY05-FY08; highest in Indian power sector.
- ✍ 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	NTPC (ADJ)*	REL
P/E (x)	FY06E	14.8	12.0	15.0
	FY07E	13.0	11.2	13.4
P/BV (x)	FY06E	1.7	1.7	1.6
	FY07E	1.6	1.6	1.4
RoE (%)	FY06E	12.1	12.8	9.8
	FY07E	12.8	13.4	10.4

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

#### SHAREHOLDING PATTERN (%)

	SEP.05	JUN.05	SEP.04
Promoters	89.5	89.5	N.A.
Domestic Institutions	1.0	1.1	N.A.
FII's/FDI's	6.9	6.0	N.A.
Others	2.6	3.4	N.A.

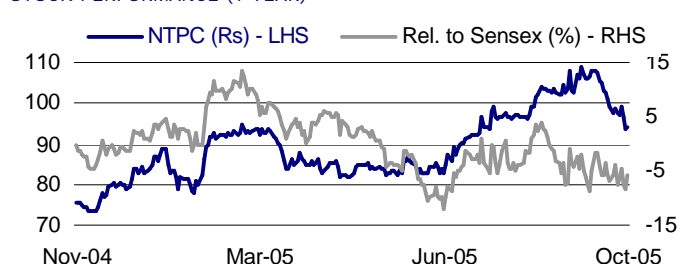
#### EPS: INQUIRE FORECAST VS CONSENSUS (RS)

	INQUIRE FORECAST	CONSENSUS FORECAST	VIATION (%)
FY06	6.4	6.4	-
FY07	7.3	7.3	-0.1

#### TARGET PRICE AND RECOMMENDATION

CURRENT PRICE (RS)	TARGET PRICE (RS)	UPSIDE (%)	RECO.
94	107	13.8	Neutral

#### STOCK PERFORMANCE (1 YEAR)



INCOME STATEMENT (Rs Million)					
Y/E MARCH	2003	2004	2005E	2006E	2007E
<b>Net Sales</b>	<b>190,475</b>	<b>188,712</b>	<b>225,650</b>	<b>266,847</b>	<b>307,915</b>
Change (%)	6.9	-0.9	19.6	18.3	15.4
<b>EBITDA</b>	<b>52,093</b>	<b>42,079</b>	<b>67,511</b>	<b>73,901</b>	<b>84,402</b>
Margin (%)	27.3	22.3	29.9	27.7	27.4
Depreciation	15,291	20,232	19,584	24,484	27,602
<b>EBIT</b>	<b>36,802</b>	<b>21,847</b>	<b>47,927</b>	<b>49,417</b>	<b>56,800</b>
Int. and Finance Charges	9,916	33,697	16,955	19,299	19,763
Other Income - Rec.	7,221	58,008	19,692	25,901	27,595
<b>Profit before Tax</b>	<b>34,107</b>	<b>46,158</b>	<b>50,664</b>	<b>56,019</b>	<b>64,631</b>
Current Tax	1,465	6,289	2,712	3,585	4,733
Deferred Tax	0	0	0	0	0
Tax Rate (%)	4.3	13.6	5.4	6.4	7.3
<b>Adjusted PAT</b>	<b>32,642</b>	<b>39,869</b>	<b>47,952</b>	<b>52,433</b>	<b>59,898</b>
Extra Ordinary Expense/(In	-3,433	-12,739	-10,118	0	0
<b>Reported PAT</b>	<b>36,075</b>	<b>52,608</b>	<b>58,070</b>	<b>52,433</b>	<b>59,898</b>
Change (%)	1.9	45.8	10.4	-9.7	14.2
Margin (%)	18.9	27.9	25.7	19.6	19.5
Less: Minority Interest	0	0	0	0	0
<b>Net Profit</b>	<b>36,075</b>	<b>52,608</b>	<b>58,070</b>	<b>52,433</b>	<b>59,898</b>

BALANCE SHEET (Rs Million)					
Y/E MARCH	2003	2004	2005E	2006E	2007E
Equity Share Capital	78,125	78,125	82,455	82,455	82,455
Total Reserves	249,665	277,376	335,537	365,549	403,026
<b>Net Worth</b>	<b>327,790</b>	<b>355,501</b>	<b>417,991</b>	<b>448,003</b>	<b>485,480</b>
Deferred liabilities	1	1	1	1	1
Total Loans	134,920	159,903	182,046	222,007	310,507
<b>Capital Employed</b>	<b>462,711</b>	<b>515,405</b>	<b>600,038</b>	<b>670,012</b>	<b>795,988</b>
Gross Block	366,189	400,281	489,675	519,913	641,599
Less: Accum. Deprn.	167,728	187,736	207,863	232,347	259,949
<b>Net Fixed Assets</b>	<b>198,461</b>	<b>212,545</b>	<b>281,812</b>	<b>287,567</b>	<b>381,650</b>
Capital WIP	63,863	74,953	41,557	96,797	122,955
Investments	170,266	173,380	179,455	196,027	220,827
<b>Curr. Assets</b>	<b>104,398</b>	<b>135,468</b>	<b>197,668</b>	<b>206,000</b>	<b>217,159</b>
Inventory	17,712	17,380	21,638	25,588	29,526
Account Receivables	8,360	4,699	6,182	7,311	8,436
Cash and Bank Balance	5,447	6,091	18,830	21,227	26,219
Others	72,879	107,298	151,017	151,875	152,978
<b>Curr. Liability &amp; Prov.</b>	<b>74,277</b>	<b>80,941</b>	<b>100,997</b>	<b>116,923</b>	<b>147,146</b>
Account Payables	0	0	75,223	90,981	121,029
Provisions	0	0	25,774	25,941	26,117
<b>Net Current Assets</b>	<b>30,121</b>	<b>54,527</b>	<b>96,671</b>	<b>89,078</b>	<b>70,012</b>
<b>Appl. of Funds</b>	<b>462,711</b>	<b>515,405</b>	<b>599,495</b>	<b>669,469</b>	<b>795,445</b>

E: MOST Estimates

RATIOS					
Y/E MARCH	2003	2004	2005E	2006E	2007E
<b>Basic (Rs)</b>					
<b>EPS (Pre Excep)</b>	<b>4.2</b>	<b>5.1</b>	<b>5.8</b>	<b>6.4</b>	<b>7.3</b>
Cash EPS	6.6	9.3	9.4	9.3	10.6
BV/Share	42.0	45.5	50.7	54.3	58.9
DPS	0.9	1.4	2.4	2.4	2.4
Payout (%)	22.9	30.6	46.8	42.8	37.4
<b>Valuation (x)</b>					
P/E		18.4	16.2	14.8	13.0
Cash P/E		10.1	10.0	10.1	8.9
P/BV		2.1	1.9	1.7	1.6
EV/Sales		3.7	2.9	2.5	2.4
EV/EBITDA		10.5	8.1	7.6	7.1
Dividend Yield (%)		15	2.5	2.5	2.5
<b>Return Ratios (%)</b>					
EBITDA Margins (%)	27.3	22.3	29.9	27.7	27.4
Net Profit Margins (%)	18.9	27.9	25.7	19.6	19.5
RoE	10.4	11.7	12.4	12.1	12.8
RoCE	15.2	16.4	17.0	14.9	15.8
<b>Working Capital Ratios</b>					
Fixed Asset Turnover (x)	0.5	0.5	0.5	0.5	0.5
Asset Turnover (x)	0.4	0.4	0.4	0.4	0.4
Debtor (Days)	16	9	10	10	10
Inventory (Days)	34	34	35	35	35
Working Capital Turnover (x)	47	94	126	93	52
<b>Leverage Ratio (x)</b>					
Current Ratio	1.4	1.7	2.0	1.8	1.5
Interest Cover Ratio	3.7	0.6	2.8	2.6	2.9
Debt/Equity	0.4	0.4	0.4	0.5	0.6

CASH FLOW STATEMENT (Rs Million)					
Y/E MARCH	2003	2004	2005E	2006E	2007E
Oper. Profit/(Loss) before	52,831	79,129	80,366	80,503	92,233
Direct Taxes Paid	-1,464	-6,289	-2,712	-3,585	-4,733
(Inc)/Dec in WC	-35,230	94,399	-29,404	9,989	24,058
<b>CF from Operations</b>	<b>16,137</b>	<b>167,239</b>	<b>48,250</b>	<b>86,907</b>	<b>111,557</b>
EO Expense	0	0	0	0	0
<b>CF from Operating inc</b>	<b>16,137</b>	<b>167,239</b>	<b>48,250</b>	<b>86,907</b>	<b>111,557</b>
(inc)/dec in FA	-35,507	-45,265	-55,998	-85,479	-147,843
(Pur)/Sale of Investments	3,607	-136,706	-6,075	-16,572	-24,800
<b>CF from Investments</b>	<b>-31,900</b>	<b>-181,971</b>	<b>-62,073</b>	<b>-102,051</b>	<b>-172,643</b>
Issue of Shares	0	0	26,841	0	0
(Inc)/Dec in Debt	16,637	27,586	22,143	39,962	88,499
Dividend Paid	-7,475	-12,210	-22,421	-22,421	-22,421
<b>CF from Fin. Activity</b>	<b>9,162</b>	<b>15,376</b>	<b>26,563</b>	<b>17,541</b>	<b>66,078</b>
<b>Inc/Dec of Cash</b>	<b>-6,601</b>	<b>644</b>	<b>12,739</b>	<b>2,396</b>	<b>4,992</b>
Add: Beginning Balance	12,048	5,447	6,091	18,830	21,227
<b>Closing Balance</b>	<b>5,447</b>	<b>6,091</b>	<b>18,830</b>	<b>21,227</b>	<b>26,219</b>

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Disclosure of Interest Statement	NTPC
1. Analyst ownership of the stock	No
2. Group/Directors ownership of the stock	No
3. Broking relationship with company covered	No
MOST is not engaged in providing investment-banking services.	



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