Equities

16 November 2010 | 17 pages

NTPC (NTPC.BO)

Buy: Don't Panic – Most of the Concerns Are in the Price Now

- Company Update
- Target Price Change
- Estimate Change

- **Why has NTPC underperformed the BSE Sensex by 89% over last 2 years?** — NTPC's capacity additions have been far below targets, with the company averaging 1.43GW/year in the first 3 years (FY08, FY09 and FY10) of the XIth Five Year Plan vs promised 2-3GW/year of additions. Parent additions at 0.83GW/year are even lower, leading to average MoM generation growth of 4% post 2QFY08 from 9% prior levels. This has led to poor EPS growth of 4% CAGR over FY07-10.

- **This should change going forward on** — (1) Advance ordering of equipment in bulk tenders and (2) NTPC diversifying the base of BTG suppliers to other domestic equipment manufacturers. As a consequence, we expect NTPC to add 2.8GW/year and 3.8GW/year in the parent and overall respectively in the last years (FY11E and FY12E) of the XIth Five Year Plan. Further, this will move up to 3.9GW/year and 5.1GW/year in the parent and overall respectively in the XIIth Five Year Plan.

- **Competitive bidding post Jan11 - Not a medium-term concern** — But it is a longer-term negative. NTPC has already tied up 62GW and plans to tie up 75GW of capacity under assured RoE model by Jan11. Our model factors in that NTPC becomes a 65GW entity only by FY17E. It makes sense for NTPC to focus on the current pipeline and not bother about competitively-bid projects. Over the next 3-5 years NTPC should work on bringing down execution cycle/ capital costs.

- **Maintain Buy (1L) - Target price Rs210** — Other issues like MAT gross up in tariffs vs full tax gross up earlier and lower UI volumes/ weaker UI rates are also in the price. Hence we maintain our Buy (1L) rating on the stock. We cut our target price to Rs210 from Rs229 earlier to factor in (1) 18-26% EPS cut and (2) roll forward of DCF value to Mar11E from Sep10E earlier. At our target price, the stock would trade at a P/BV multiple of 2.4x FY12E vis-à-vis 2.7x earlier (to factor in the structural de-rating in the stock).

Buy/Low Risk	**1L**
Price (16 Nov 10)	Rs186.00
Target price	Rs210.00
from Rs229.00	
Expected share price return	12.9%
Expected dividend yield	2.2%
Expected total return	**15.1%**
Market Cap	Rs1,533,656M
	US$33,923M

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

Statistical Abstract

Year to 31 Mar	Net Profit (RsM)	Diluted EPS (Rs)	EPS growth (%)	P/E (x)	P/B (x)	ROE (%)	Yield (%)
2009A	76,568	9.29	-4.9	20.0	2.7	13.9	1.9
2010A	81,276	9.86	6.1	18.9	2.5	13.6	2.0
2011E	77,790	9.43	-4.3	19.7	2.3	12.1	2.2
2012E	96,452	11.70	24.0	15.9	2.1	13.9	2.3
2013E	109,656	13.30	13.7	14.0	1.9	14.5	2.4

Source: Powered by dataCentral

Venkatesh Balasubramaniam
+91-22-6631-9864
venkatesh.balasubramaniam@citi.com

Atul Tiwari, CFA
+91-22-6631-9866
atul.tiwari@citi.com

Deepal Delivala
+91-22-6631-9857
deepal.delivala@citi.com

See Appendix A-1 for Analyst Certification, Important Disclosures and non-US research analyst disclosures.

Fiscal year end 31-Mar	2009	2010	2011E	2012E	2013E
Valuation Ratios					
P/E adjusted (x)	20.0	18.9	19.7	15.9	14.0
EV/EBITDA adjusted (x)	15.8	13.9	13.2	11.0	9.8
P/BV (x)	2.7	2.5	2.3	2.1	1.9
Dividend yield (%)	1.9	2.0	2.2	2.3	2.4
Per Share Data (Rs)					
EPS adjusted	9.29	9.86	9.43	11.70	13.30
EPS reported	9.95	10.59	9.59	11.70	13.30
BVPS	69.58	75.72	80.64	87.43	95.59
DPS	3.60	3.80	4.00	4.20	4.40
Profit & Loss (RsM)					
Net sales	419,922	463,905	532,351	613,680	704,600
Operating expenses	-344,521	-373,239	-429,423	-485,193	-555,040
EBIT	**75,401**	**90,666**	**102,928**	**128,487**	**149,560**
Net interest expense	-13,529	-11,152	-18,221	-21,205	-25,094
Non-operating/exceptionals	32,806	28,562	21,675	23,982	25,706
Pre-tax profit	**94,678**	**108,076**	**106,382**	**131,264**	**150,172**
Tax	-18,110	-26,800	-28,592	-34,812	-40,516
Extraord./Min.Int./Pref.div.	5,445	6,006	1,315	0	0
Reported net income	**82,013**	**87,282**	**79,105**	**96,452**	**109,656**
Adjusted earnings	76,568	81,276	77,790	96,452	109,656
Adjusted EBITDA	99,046	117,167	126,081	155,500	182,137
Growth Rates (%)					
Sales	13.2	10.5	14.8	15.3	14.8
EBIT adjusted	-13.2	20.2	13.5	24.8	16.4
EBITDA adjusted	-8.5	18.3	7.6	23.3	17.1
EPS adjusted	-4.9	6.1	-4.3	24.0	13.7
Cash Flow (RsM)					
Operating cash flow	**90,855**	**97,519**	**121,136**	**139,909**	**143,141**
Depreciation/amortization	23,645	26,501	23,153	27,013	32,577
Net working capital	-12,794	-16,330	18,879	16,444	908
Investing cash flow	**-116,545**	**-111,324**	**-104,942**	**-156,735**	**-194,779**
Capital expenditure	-131,351	-101,731	-119,832	-159,861	-188,803
Acquisitions/disposals	0	0	0	0	0
Financing cash flow	**39,074**	**-4,316**	**15,364**	**38,263**	**51,712**
Borrowings	73,772	32,292	53,898	78,724	94,101
Dividends paid	-34,700	-36,608	-38,535	-40,462	-42,388
Change in cash	**13,384**	**-18,121**	**31,557**	**21,436**	**74**
Balance Sheet (RsM)					
Total assets	**1,052,248**	**1,128,536**	**1,241,456**	**1,389,539**	**1,567,356**
Cash & cash equivalent	162,716	144,595	176,152	197,589	197,662
Accounts receivable	35,842	66,514	60,191	50,505	58,052
Net fixed assets	593,426	668,656	765,335	898,183	1,054,409
Total liabilities	**478,547**	**504,161**	**576,511**	**668,604**	**779,154**
Accounts payable	64,469	68,844	85,321	96,570	110,687
Total Debt	345,678	377,970	431,868	510,593	604,693
Shareholders' funds	**573,701**	**624,375**	**664,945**	**720,935**	**788,203**
Profitability/Solvency Ratios (%)					
EBITDA margin adjusted	23.6	25.3	23.7	25.3	25.8
ROE adjusted	13.9	13.6	12.1	13.9	14.5
ROIC adjusted	9.5	9.0	9.4	10.5	10.6
Net debt to equity	31.9	37.4	38.5	43.4	51.6
Total debt to capital	37.6	37.7	39.4	41.5	43.4

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Powered by: dataCentral

Maintain Buy – Target Price Cut to Rs210

- At the heart of NTPC's 89% underperformance vs the BSE Sensex is the tepid capacity addition growth. NTPC's capacity addition has been much below targets with the company averaging 1.43GW/year in the first three years (FY08, FY09 and FY10) of the XIth Five Year Plan v/s promised 2-3GW/year of additions. If one looks at just the parent capacity additions it is 0.83GW/year which has led to average month-on-month (MoM) generation growth coming off to 4% post 2QFY08 ownwards from the 9% prior levels. This has led to poor EPS growth of 4% CAGR over FY07-10.

- Structural issues notwithstanding, we believe this is set to change because of (1) advance ordering of equipment in bulk tenders and (2) NTPC diversifying the base of BTG suppliers to other domestic equipment manufacturers. As a consequence we expect NTPC to add 2.8GW/year and 3.8GW/year in the parent and overall respectively in the last years (FY11E and FY12E) of the XIth Five Year Plan. Further, this will move up to 3.9GW/year and 5.1GW/year in the parent and overall respectively in the XIIth Five Year Plan.

- Competitive bidding post January 2011 is a structural longer-term negative, but the company has already tied up 62GW and plans to tie up 75GW of capacity under the assured RoE model by January 2011. Most importantly, our model factors in that NTPC becomes a 65GW entity only by FY17E.

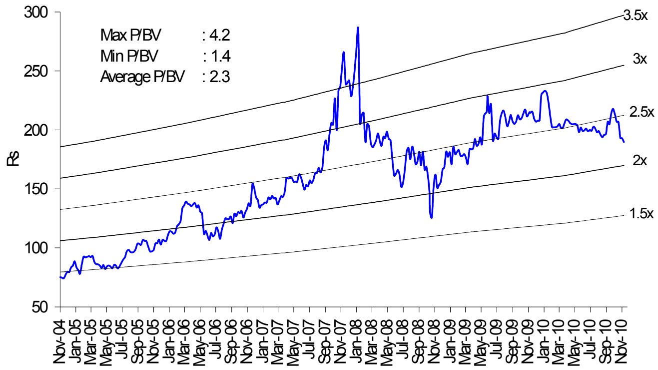
- Other issues like MAT gross up in tariffs vs full tax gross up earlier and lower UI volumes/ weaker UI rates are also in the price. Hence we maintain our Buy (1L) rating on the stock. We cut our target price to Rs210 from Rs229 earlier to factor in (1) 18-26% EPS cut and (2) Roll forward of DCF value to Mar11E from Sep10E earlier. At our target price the stock would trade at a P/BV multiple of 2.4x FY12E vis-à-vis 2.7x earlier (to factor in the structural de-rating in the stock)

Figure 1. NTPC v/s BSE Price Performance

	1 Week	1 Month	2 Months	1 Yr	2 Yr	3 Yr	Since Listing
NTPC	-1.7%	-6.7%	-8.0%	-11.7%	27.1%	-29.6%	151.2%
BSE Sensex	-2.6%	0.9%	4.6%	20.5%	116.4%	2.7%	244.7%
Relative	0.9%	-7.7%	-12.6%	-32.3%	-89.3%	-32.2%	-93.6%

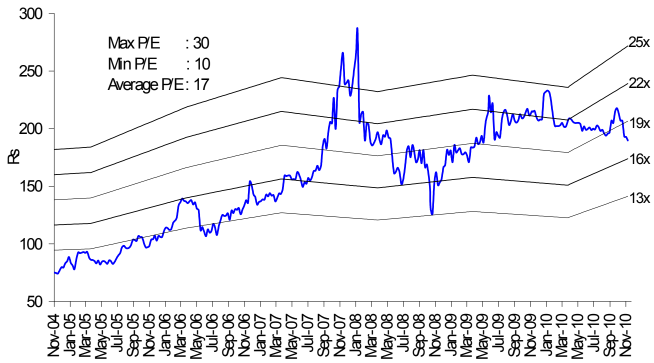
Source: DataCentral and Citi Investment Research and Analysis

Figure 2. 1 Year Forward Rolling P/BV Bands



Source: Citi Investment Research and Analysis

Figure 3. 1 Year Forward Rolling P/E Bands



Source: Citi Investment Research and Analysis

Figure 4. NTPC – Sum Of The Parts

Part	FY10 End Capacity	FY17E End Capacity	Rationale	New
Core Operations (EV - Less Net Debt)	28,840	54,120	DCF as of Mar11	188
Power Plants in Subsidiaries	2,864	10,554	1.5x FY12E P/BV	8
Other Investments			1x FY12E P/BV	3
Power Bonds			1.2x P/BV	12
Value/Share				**210**

Source: Citi Investment Research and Analysis estimates

Earnings revised downwards

We revise down our FY11E-13E EPS estimates by 18-26% to factor in: (1) disappointing 1HFY11 Recurring PAT of Rs38bn down 9% YoY (2) structurally lower profitably on account of MAT gross up v/s full tax gross up in the tariffs and (3) structurally lower sales and tariffs in the UI market.

Figure 5. NTPC Earnings Revision Table

	FY11E	FY12E	FY13E
Sales			
Old	554,773	622,767	708,560
New	532,351	613,680	704,600
Change	-4.0%	-1.5%	-0.6%
Recurring PAT			
Old	105,522	116,544	133,951
New	77,790	96,452	109,656
Change	-26.3%	-17.2%	-18.1%
EPS			
Old	12.80	14.13	16.25
New	9.43	11.70	13.30
Change	-26.3%	-17.2%	-18.1%
RoE			
Old	16.0%	16.0%	16.5%
New	12.1%	13.9%	14.5%
bps	-394	-203	-192
BV			
Old	84.0	93.2	104.3
New	80.6	87.4	95.6
Change	-4.0%	-6.2%	-8.4%

Source: CIRA estimates

Figure 6. NTPC EPS and BV – CIRA v/s Consensus

	FY11E	FY12E	FY13E
EPS			
CIRA	9.43	11.70	13.30
Consensus	11.23	12.70	14.30
Difference	-16.0%	-7.9%	-7.0%
BV			
CIRA	84.0	93.2	104.3
Consensus	82.7	90.1	98.3
Difference	1.6%	3.4%	6.1%

Source: Citi Investment Research and Analysis estimates

Figure 7. NTPC 1QFY11 and 2QFY11 Results

Year End March 31 (Rs million)	1QFY10	1QFY11	% Chg	2QFY10	2QFY11	% Chg
Gross Generation (NTPC) - bn kWh	55.476	55.709	0.4%	50.381	52.221	3.7%
Net Sales	**120,027**	**129,445**	**7.8%**	**107,828**	**129,893**	**20.5%**
EBITDA	**31,757**	**29,867**	**-5.9%**	**31,308**	**30,101**	**-3.9%**
% Margin	**26.5%**	**23.1%**		**29.0%**	**23.2%**	
Depreciation	(6,700)	(6,827)		(6,438)	(5,063)	
EBIT	25,057	23,040	-8.0%	24,871	25,038	0.7%
Interest	(6,128)	(5,358)		(5,407)	(5,902)	
Other Income	9,000	5,849		7,410	6,147	
PBT	**27929**	**23532**	**-15.7%**	**26874**	**25283**	**-5.9%**
Provision for tax	(7,009)	(5,113)		(5,998)	(5,525)	
Tax Rate	25.1%	21.7%		22.3%	21.9%	
Recurring PAT	**20,920**	**18,419**	**-12.0%**	**20,875**	**19,758**	**-5.3%**
Exceptional Items	-			829	2,406	
Tax				(185)	(1,091)	
Reported PAT	**20,920**	**18,419**	**-12.0%**	**21,520**	**21,074**	**-2.1%**

Source: Company and Citi Investment Research and Analysis

NTPC - Concerns and Our Views

Problem 1. Tariff factors in tax at MAT vs full tax earlier

- Until the end of FY10 CERC was factoring in tax at the full tax rate of 34% in the tariffs for the regulated power plants while NTPC was paying only MAT. However, starting FY11E CERC is allowing only MAT in the tariffs, similar to what NTPC is paying. This has a cash flow and P&L impact of Rs9-10bn in FY11E and would reduce profitability and RoEs structurally going forward.

CIRA view on Problem 1

- A negative, but one needs to remember that this loophole was bound to get plugged sometime in the future. Once, this gets factored into the numbers in FY11E and it will not have any YoY impact on numbers from FY12E onwards.

Problem 2. Delays in capacity addition

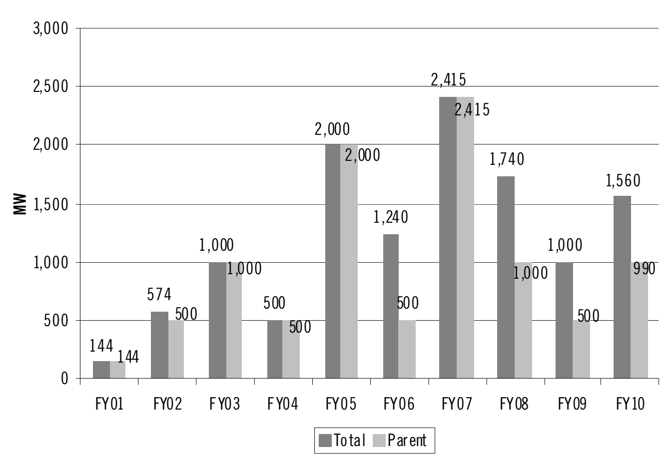
- NTPC's capacity addition has been far below targets, with the company averaging 1.43GW/year in the first three years (FY08, FY09 and FY10) of the XIth Five Year Plan vs normally promised 2-3GW/year of additions. If one looks at just the parent capacity additions it is 0.83GW/year, leading to EPS CAGR of 4% over FY07-10.

CIRA view on Problem 2

- The structural problems that NTPC faces because it is a public sector enterprise (PSE) when it comes to selecting contractors and taking decisions will continue. However, improvements in the pace of capacity additions are possible because of advance ordering of equipment in bulk tenders and diversifying the base of BTG suppliers to other domestic equipment manufacturers other than just BHEL.

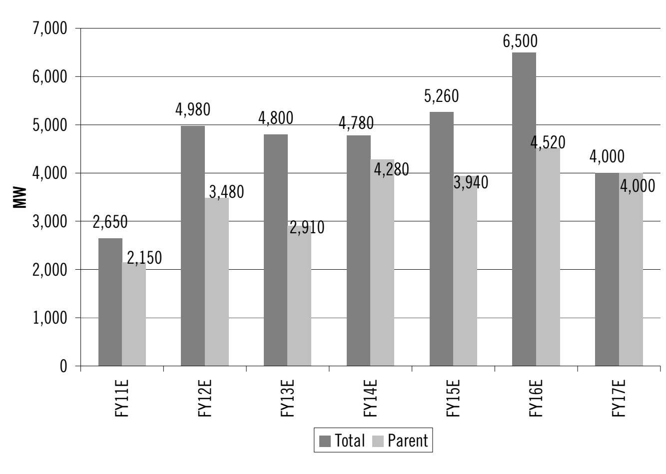
- As a consequence we expect NTPC to add 2.8GW/year and 3.8GW/year in the parent and overall respectively in the last 2 year (FY11E and FY12E) of the XIth Five Year Plan. Further, this will move up to 3.9GW/year and 5.1GW/year in the parent and overall respectively in the XIIth Five Year Plan.

Figure 8. NTPC Capacity Additions FY01 – FY10



Source: Citi Investment Research and Analysis

Figure 9. NTPC Capacity Additions FY11E – FY17E



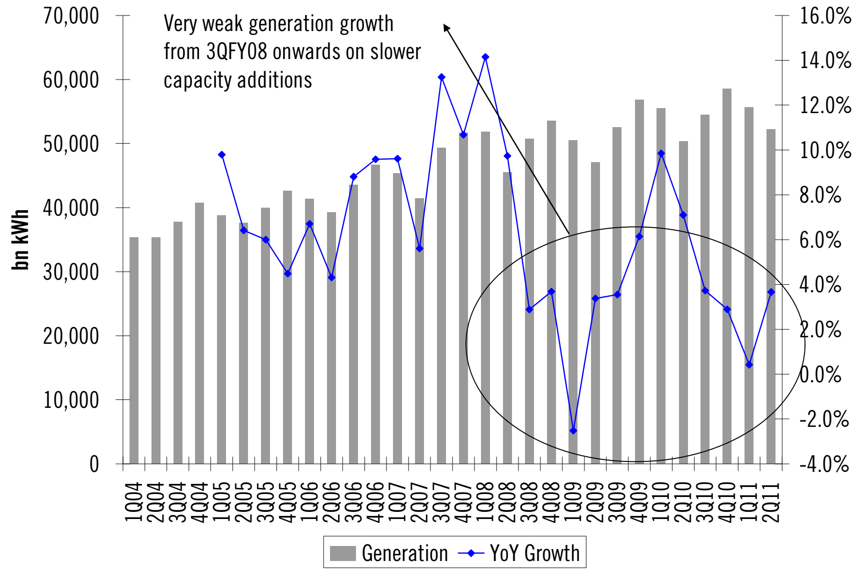
Source: Citi Investment Research and Analysis

Figure 10. NTPC – Project Delays

Projects	MW	Original CoD	New CoD	Delay (months)
Sipat II				
- Unit 1	500	Sep-07	Jun-08	9
- Unit 2	500	Mar-08	Jan-09	10
Bhilai Expansion				
- Unit 1	250	Apr-08	Apr-09	12
- Unit 2	250	Nov-08	Oct-09	11
Kahalgaon - II				
- Unit 5	500	Apr-08	Aug-08	4
- Unit 6	500	Jul-08	Dec-08	5
- Unit 7	500	Jun-07	Mar-10	33
Sipat I				
- Unit 1	660	Oct-08	Jan-11	27
- Unit 2	660	Aug-09	Jul-11	23
- Unit 3	660	Jun-10	Jan-12	19
Simhadri II				
- Unit 3	500	Mar-11	Apr-11	1
- Unit 4	500	Sep-11	May-11	-4
Vallur				
- Unit 1	500	Mar-11	Jan-12	10
- Unit 2	500	Sep-11	Feb-12	5
- Unit 3	500	Dec-12	Jan-13	1
Korba III				
- Unit 7	500	Jun-10	Oct-10	4
Dadri				
- Unit 5	490	Sep-10	Jan-10	-8
- Unit 6	490	Feb-11	Jul-10	-7
Bongaigon				
- Unit 1	250	Feb-11	Aug-11	6
- Unit 2	250	Jun-11	Feb-12	8
- Unit 3	250	Oct-11	Apr-12	6
Jhajjar				
- Unit 1	500	Oct-10	Nov-10	1
- Unit 2	500	Jan-11	Apr-11	3
- Unit 3	500	Apr-11	Sep-11	5
Farakka III				
- Unit 6	500	Jan-11	Mar-11	2
Barh I				
- Unit 1	660	Aug-09	Jul-13	48
- Unit 2	660	Jun-10	Jan-14	44
- Unit 3	660	Apr-11	Jul-14	40
Barh II				
- Unit 1	660	Nov-12	Jan-13	2
- Unit 2	660	Sep-13	Nov-13	2
Nabinagar				
- Unit 1	250	Apr-11	Oct-12	18
- Unit 2	250	Aug-11	Feb-13	18
- Unit 3	250	Dec-11	Jun-13	18
- Unit 4	250	Apr-12	Oct-13	18

Source: CEA and Citi Investment Research and Analysis

Figure 11. NTPC Quarterly Generation and YoY Growth



Source: Company and Citi Investment Research and Analysis

Problem 3. Competitive bidding post January 2011

- CERC has conveyed to the Central Government that the deadline of January 2011 for completing the transition to procurement of power through tariff-based competitive bidding, even from State/Central Government-owned entities should not be extended any further, except in case of large-sized multipurpose hydro projects/ peaking stations.

- Based on a study of 14 case 1/ case 2 projects, CERC has concluded that 12 of 14 tariffs under the cost plus assured RoE > competitive bidding. Tariffs calculated in cost-plus assured RoE are on the conservative side as: 1) no allowance has been made for additional capital costs. NTPC's experience shows that additional capital needs to be employed for almost every plant during the useful life of the plant; and 2) it has also been assumed that coal transportation costs would be near to the minimum value in the cost-plus assured RoE method.

- Consumers will pay higher than levellized tariffs as under both methodologies the actual price depends on actual escalation rates of coal cost, transportation costs and O&M costs. In competitive bidding the actual price paid depends on how the bid is structured in terms of escalable and non-escalable components.

- Under cost-plus assured RoE method, while most variations in cost of inputs are passed onto consumers, the same is not true for competitive bidding. Here the bidder is under competitive pressure to quote a large part of his tariff as a non-escalable component to get selected as the least-cost supplier, which in turn reduces the amount by which tariffs can go up in the future, even though actual escalations turn out to be of very high order.

- While the consumer carries almost the entire risk of future increase in costs under the cost-plus assured RoE method, in competitive bidding the risk is shared between the developer and consumer. From the view point of competition, any policy that transfers risk from the consumer to suppliers has to be the preferred policy.

CIRA view on Problem 3

- This is a structural negative for NTPC over the longer term given that, to date, the company has never won a competitive bid project. However, it is also a fact that the company has already tied up 62GW and plans to tie up 75GW of capacity under the assured RoE model by January 2011. Most importantly, our model factors in that NTPC becomes a 65GW entity only by FY17E.
- So it makes sense for NTPC to focus on the current project pipeline and not bother about the competitively bid out projects. Over the next 3-5 years the company should consciously work on bringing down the execution cycle to lower IDC costs (NTPC anyway finances its projects at one of the lowest interest rates in the country on account of balance sheet financing) and capital costs of equipment.

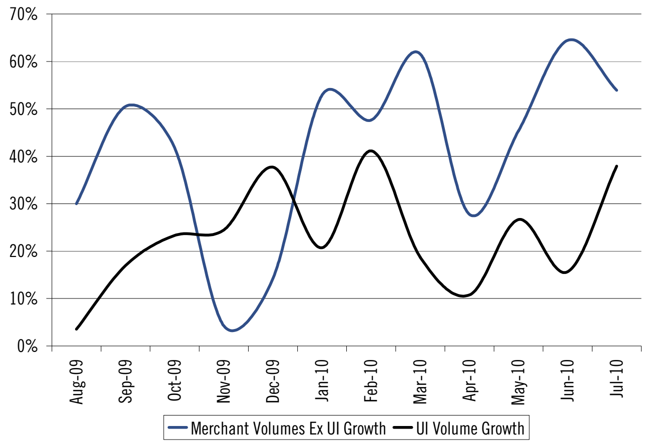
Problem 4: Can UI volumes and rates sustain?

- According to Lanco Infratech UI prices have dipped over past 5-6 months as SEBs now prefer to buy power on exchanges to meet day/ week ahead requirement. CERC had imposed stiff penalties for over drawl from grid and as a result buyers now find it cheaper to meet short-term requirements through exchanges than UI.
- This is apparent from the fact that merchant volume growth in the ex-UI market has grown at a faster pace since the beginning of CY10 vis-à-vis the UI market. Secondly, since May 2010 UI prices have also collapsed in conjunction with the broader market because of strong monsoons.

CIRA view on Problem 4

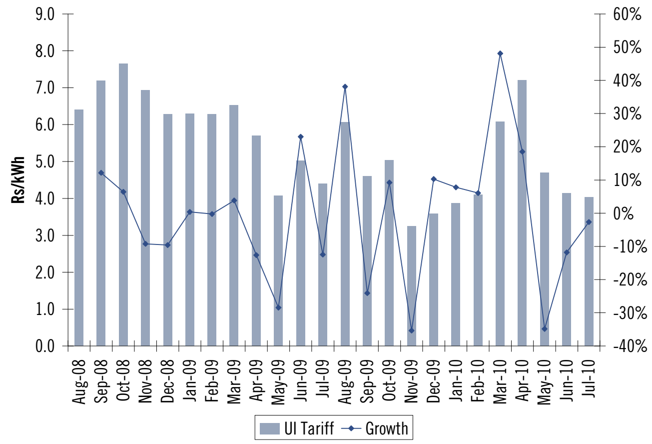
- It is a fallacy that NTPC has no exposure to the merchant markets. Historically UI has contributed almost 9-10% of NTPC's PBT and we expect that given the lower expected volume growth and weaker merchant prices the contribution is likely to come down to 7-8% of PBT and also impact company's RoEs on the power assets.

Figure 12. Merchant Volume Ex UI Growth v/s UI Volumes Growth



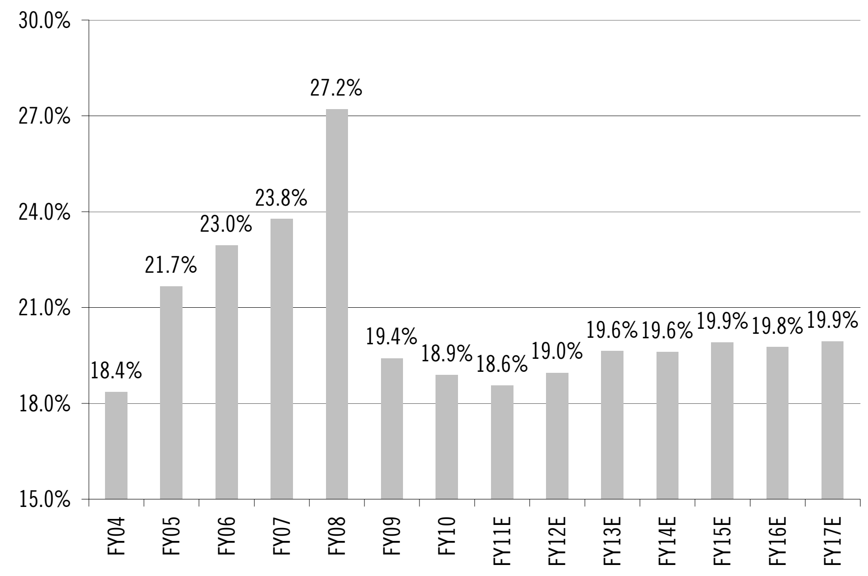
Source: CERC and Citi Investment Research and Analysis

Figure 13. UI Prices



Source: CERC and Citi Investment Research and Analysis

Figure 14. NTPC – Returns on Equity On Power Assets



Source: Citi Investment Research and Analysis estimates

Problem 5: FPO overhang and free float increase

- The Government of India (GoI) sold down 5% stake to raise to Rs82.9bn (US$1.8bn) at Rs201 and the GoI stake has come down to 84.5% post this issue. The issue itself was a major overhang on the stock and further post issue though the free float is only 15.5% one needs to keep in mind that the free float has increased by almost 50%.

CIRA view on Problem 5

- The increase in free float becomes that much more relevant in the scenario of multiple generation companies to choose from and hence we believe it might also imply that NTPC could have structurally de-rated on account of (1) more of the available stock and (2) multiple generation options.

Problem 6: Mounting SPU losses could increase further

- State power utilities (SPUs) losses increased from Rs46bn in FY93 to Rs319bn in FY08 and are expected to be ~Rs400bn in FY10. At FY08 tariff levels the 13th Finance Commission believes this could be as high as Rs686bn in FY11E and move up to Rs1,161bn by FY15E. Top 12 SPUs contribute almost all of the losses and 30 out of 90 SPU entities had negative net worth at the end of FY08.

- State Government annual subsidies to the SPUs have increased from Rs19bn in FY93 to Rs181bn in FY09 and could increase as losses mount. State Governments have an exposure of Rs2,303bn to SPUs at the end of Mar08 comprising of Rs713bn of equity investments, Rs707bn of loans and Rs884bn of guarantees.

- The Indian power market structure might be flawed as the issue lies in where the wholesale price is market-determined and the retail price is regulated. The DISCOMs will go bankrupt if compelled to supply and not resort to load-shedding. Fortunately in India, presently the wholesale short-term market is only ~ 5% and DISCOMs have the choice to shed load. This problem will accentuate when the share of short-term contracts in the portfolio of DISCOMS increase

CIRA view on Problem 6

- We believe this problem is here to stay unless some drastic steps are taken to improve the financials of the SPUs. So this will continue to be an overhang for the entire power sector. However, this is not a problem specific to NTPC, which has successfully collected 100% of its billing since the one-time settlement of outstanding dues 7-8 years back.

Figure 15. NTPC – Capacity Ramp Up Schedule

PROJECT	Stake	MW	UNITS	FY08	FY09	FY10	FY11E	FY12E	FY13E	FY14E	FY15E	FY16E	FY17E
PARENT													
COAL													
Kahalgaon 6 & 7	100%	1000	2X500	500		500							
Sipat - I	100%	1,980	3X660				660	1320					
Sipat - II	100%	1,000	2X500	500	500								
Simhadri U3 and U4	100%	1,000	2X500					1000					
Korba III (MPP)	100%	500	2X500				500						
Dadri U5 and U6	100%	980	2X490			490	490						
Farakka III U6 (MPP)	100%	500	500				500						
Bongaigon	100%	750	3X250					500	250				
Barh I	100%	1980	3X660							1320	660		
Barh - II	100%	1,320	2X660							660	660		
Mauda	100%	1,000	2X500						1000				
Vindhyachal 11 & 12	100%	1,000	2X500						500	500			
Rihand III	100%	1,000	2x500						500	500			
Tanda Expansion	100%	1,320	2x660								660	660	
Solapur	100%	1,320	2x660								660	660	
Lara, Chattisgarh	100%	1,600	2x800									800	800
Darlipalli, Orissa	100%	1,600	2x800									800	800
Kudgi	100%	2,400	3x800									800	1600
Gajmara	100%	1,600	2x800									800	800
TOTAL		**23,850**		**1,000**	**500**	**990**	**2,150**	**2,820**	**2,250**	**2,980**	**2,640**	**4,520**	**4,000**
HYDEL													
Koldam	100%	800	4x200					400	400				
Loharinagpala (MPP)	100%	-	4x150										
Tapovan Vishnugarh	100%	520	4x130					260	260				
TOTAL		**1,320**		**0**	**0**	**0**	**0**	**660**	**660**	**0**	**0**	**0**	**0**
GAS													
Kawas	100%	1,300								650	650		
Gandhar	100%	1,300								650	650		
TOTAL		**2,600**		**0**	**0**	**0**	**0**	**0**	**0**	**1,300**	**1,300**	**0**	**0**
JVs & SUBSIDIARIES													
GAS													
Ratnagiri CCPP - I		740	2x240+260	740		640							
Ratnagiri De-rating		-180				-180							
TOTAL		**1200**		**740**	**0**	**460**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
COAL													
MTPS - I Unit # 2		500				110			390				
Aravalli (Jhajjar)	50%	1,500	3x500				500	1000					
Bhilai JV	50%	500	2X250		500								
Vallur – 1, 2 & 3	50%	1,000	2x500					500	1000				
Nabinagar 1,2,3 & 4	74%	750	3X250						500	500			
New Nabinagar	50%	1,980	3X660								660	1320	
Meja	50%	1,320	2X660								660	660	
TOTAL		**8,300**		**0**	**500**	**110**	**500**	**1,500**	**1,890**	**500**	**1,320**	**1,980**	**0**
PARENT ADDITIONS				**1,000**	**500**	**990**	**2,150**	**3,480**	**2,910**	**4,280**	**3,940**	**4,520**	**4,000**
OVERALL ADDITIONS		**37,270**		**1,740**	**1,000**	**1,560**	**2,650**	**4,980**	**4,800**	**4,780**	**5,260**	**6,500**	**4,000**
PARENT CAPACITY				**27,350**	**27,850**	**28,840**	**30,990**	**34,470**	**37,380**	**41,660**	**45,600**	**50,120**	**54,120**
JV CAPACITY				**1,794**	**2,294**	**2,864**	**3,364**	**4,864**	**6,754**	**7,254**	**8,574**	**10,554**	**10,554**
OVERALL CAPACITY				**29,144**	**30,144**	**31,704**	**34,354**	**39,334**	**44,134**	**48,914**	**54,174**	**60,674**	**64,674**

Source: CEA and Citi Investment Research and Analysis estimates

NTPC

Valuation

Our target price for NTPC of Rs210 is based on a DCF model that uses a WACC of 9.7% and a terminal growth rate of 2.5%. Our assumptions are a risk-free rate of 8.5%, a market risk premium of 6% and beta of 0.9. We believe DCF is the best way to capture the value inherent in NTPC's unprecedented capacity addition plan against a backdrop of persistent peak and base load deficits. Further, at our Rs210 target price NTPC would trade at a P/BV of 2.4x FY12E. We see this as reasonable given the Indian regulatory system of cost pass-throughs works well and provides a defensive characteristic to NTPC's financials, unlike other Asian generators.

Risks

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

Key downside risks to our target price are: 1) NTPC's operations depend on timely availability of fuel. NTPC's gas-based plants were hampered by poor fuel supply, resulting in sub-optimal capacity utilization. 2) NTPC is implementing larger modules and newer technologies such as 660MW and 800MW super critical technology and alternative fuels such as gas and hydro more aggressively, which could place demands on its project management and technology absorption skills. 3) UI rates are very high compared with normal tariff rates, creating pressure from the SEBs to reduce this spot market premium. 4) Future payment risk due to resurfacing of free power supply to agricultural customers as a populist measure by a few states. 5) NTPC has entered a JV with GasPatrol - France and Canoro Resources - Canada and has bid for an oil & gas exploration block in northeast India. This raises the risk of non-discovery, as with any exploration & production (E&P) venture.

Appendix A-1

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NTPC (NTPC.BO)

Ratings and Target Price History
Fundamental Research

Analyst: Venkatesh Balasubramaniam

	Date	Rating	Target Price	Closing Price
1	21-Nov-07	*3L	*231.00	239.50
2	19-Feb-08	*1L	*235.00	204.60
3	27-Oct-08	1L	*152.00	125.95
4	4-Dec-08	*3L	*149.00	164.55
5	21-Jan-09	*2L	*195.00	179.65
6	27-Jul-09	2L	*224.00	214.45
7	14-Oct-09	2L	*220.00	214.20
8	23-Feb-10	*1L	*229.00	201.60

* Indicates change

Rating/target price changes above reflect Eastern Standard Time

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