

#### Company

10 March 2010 | 15 pages

## Power Grid Corporation of India (PGRD.BO)

#### **Upgrade to Hold – Steady Transmission**

- Upgrade to Hold (2L) We move from Sell (3L) as we believe PGCIL should trade in line with NTPC given: (1) the scarcity value (the only listed play on Indian power transmission) vis-à-vis plenty of generators to chose from; (2) the differential between PGCIL's and NTPC's RoEs has narrowed; (3) defensive appeal of the business; and (4) stock has underperformed the BSE Sensex by 90% over the past year. This is despite NTPC's ability to make superior ~22% regulated RoE on its core business compared to PGCIL's ~17% and its stronger balance sheet.
- Target price increased to Rs116 We increase PGCIL's target P/BV multiple to 2.7x FY11E (2.3x earlier), bringing it in line with that of NTPC's implied target P/BV multiple (from 10% discount earlier). This, along with the roll forward to Mar11 (from Mar10 earlier) and EPS revision, increases our target price to Rs116.
- Leverage and shorter execution cycles maximize company RoEs Under the regulated regime, utilities should ideally leverage to the maximum (interest costs are a pass through) and have high dividend payouts to maximize company RoEs. A shorter execution period reduces the quantum of unproductive CWIP vis-à-vis productive commissioned assets. Intrinsically, transmission line projects can be executed ~50% faster than a generation project which leads to PGCIL's CWIP being a percentage of net fixed assets than NTPC's.
- Likely achievement of 93% of XIth Plan capex targets In the first two years of the XIth Plan, PGCIL's capex of Rs148bn was 27% of the XIth Plan target of Rs545bn. We expect the company's capex to be Rs360bn in the remaining three years of the plan and to achieve 93% of XIth Plan capex targets.
- Our top picks —In order of preference, we continue to recommend Tata Power (TTPW.BO; Rs1,348.35; 1L), NTPC (NTPC.BO; Rs201.30; 1L), Lanco Infratech (LAIN.BO; Rs51.75; 1M) and CESC (CESC.BO; Rs398.00; 1M).

Statistica	Statistical Abstract										
Year to	Net Profit	Diluted EPS	EPS growth	P/E	P/B	ROE	Yield				
31 Mar	(RsM)	(Rs)	(%)	(x)	(x)	(%)	(%)				
2008A	16,305	3.87	21.2	28.0	3.4	13.5	1.1				
2009A	19,213	4.56	17.8	23.7	3.1	13.7	1.1				
2010E	21,590	5.13	12.4	21.1	2.8	14.0	1.2				
2011E	25,574	6.08	18.4	17.8	2.5	15.0	1.3				
2012E	30,211	7.18	18.1	15.1	2.2	15.8	1.4				
Source: Power	ed by dataCentral										

See Appendix A-1 for Analyst Certification and important disclosures.

Equity Rating change 🗹 Target price change 

✓ 

Hold/Low Risk	2L
from Sell/Low Risk	
Price (10 Mar 10)	Rs108.40
Target price	Rs116.00
from Rs89.00	
Expected share price return	7.0%
Expected dividend yield	1.2%
Expected total return	8.2%
Market Cap	Rs456,238M
	US\$10,007M

# Price Performance (RIC: PGRD.BO. BB: PWGR

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31 Mar	30 Jun	30 Sep	31 Dec	•
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Fiscal year end 31-Mar	2008	2009	2010E	2011E	2012E
Valuation Ratios					
P/E adjusted (x)	28.0	23.7	21.1	17.8	15.1
EV/EBITDA adjusted (x)	17.1	12.5	12.6	11.4	10.3
P/BV (x)	3.4	3.1	2.8	2.5	2.2
Dividend yield (%)	1.1	1.1	1.2	1.3	1.4
Per Share Data (Rs)					
EPS adjusted	3.87	4.56	5.13	6.08	7.18
EPS reported	3.44	4.02	5.13	6.08	7.18
BVPS	32.08	34.73	38.34	42.78	48.20
DPS	1.20	1.20	1.30	1.40	1.50
Profit & Loss (RsM)					
Net sales	46,148	65,798	72,398	87,540	103,115
Operating expenses	-18,201	-21,513	-33,408	-38,635	-44,517
EBIT	27,947	44,285	38,990	48,906	58,598
Net interest expense	-13,396	-25,321	-16,414	-20,134	-23,692
Non-operating/exceptionals	4,575	4,025	4,754	4,556	4,350
Pre-tax profit	19,126	22,989	27,330	33,328	39,256
Tax	-2,821	-3,776	-5,740	-7,754	-9,044
Extraord./Min.Int./Pref.div.	-1,821	-2,307	0	0	0
Reported net income	14,485	16,906	21,590	25,574	30,211
Adjusted earnings	16,305	19,213	21,590	25,574	30,211
Adjusted EBITDA	37,543	55,225	60,238	73,912	87,968
Growth Rates (%)	,	,	,	,	,
Sales	28.6	42.6	10.0	20.9	17.8
EBIT adjusted	31.1	58.5	-12.0	25.4	19.8
EBITDA adjusted	26.9	47.1	9.1	22.7	19.0
EPS adjusted	21.2	17.8	12.4	18.4	18.1
Cash Flow (RsM)					
Operating cash flow	19,700	42,072	42,868	55,693	65,142
Depreciation/amortization	9,597	10,940	21,248	25,006	29,370
Net working capital	-10,085	9,154	-1,119	3,562	3,752
Investing cash flow	-55,857	-92,517	-115,312	-124,646	-119,667
Capital expenditure	-58,165	-93,951	-115,100	-125,000	-120,000
Acquisitions/disposals	2,308	1,434	-212	354	333
Financing cash flow	42,845	56,078	63,953	67,572	56,618
Borrowings	29,380	62,020	70,455	74,567	64,105
Dividends paid	-5,909	-5,909	-6,402	-6,894	-7,386
Change in cash	6,688	5,633	-8,491	-1,380	2,093
Balance Sheet (RsM)					
Total assets	432,263	543,202	632,451	736,556	834,902
Cash & cash equivalent	18,656	24,289	15,797	14,417	16,511
Accounts receivable	11,005	13,736	15,113	18,274	21,526
Net fixed assets	361,133	444,144	537,996	637,990	728,619
Total liabilities	297,261	397,021	471,081	556,506	632,027
Accounts payable	9,852	10,729	11,805	14,274	16,814
Total Debt	222,635	284,654	355,109	429,676	493,780
Shareholders' funds	135,002	146,181	161,370	180,049	202,875
Profitability/Solvency Ratios (%)					
EBITDA margin adjusted	81.4	83.9	83.2	84.4	85.3
ROE adjusted	13.5	13.7	14.0	15.0	15.8
ROIC adjusted	7.7	10.1	6.8	7.0	7.3
Net debt to equity	151.1	178.1	210.3	230.6	235.3
Total debt to capital	62.3	66.1	68.8	70.5	70.9
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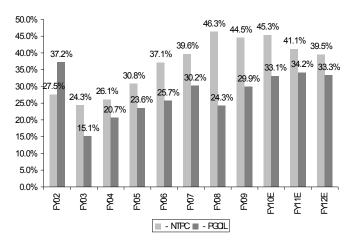
## **Upgrade to Hold/Low Risk (2L)**

We have long argued that PGCIL should trade at a discount to NTPC on: (1) NTPC's ability to make superior ~22% returns on regulated equity compared to PGCIL's ~17% on the core business, and (2) NTPC's stronger balance sheet structure, with its more comfortable debt:equity ratios.

When we play devil's advocate, we can find reasons why PGCIL should not trade at a discount to NTPC: (1) scarcity value, as it is the only listed play on the regulated transmission business in India vis-à-vis plenty of generation companies to chose from and (2) over the years, the differential between PGCIL's and NTPC's RoEs have narrowed.

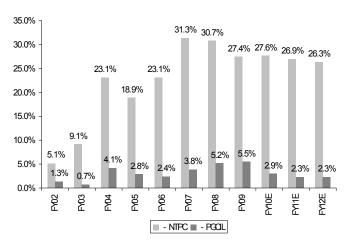
- In a regulated-returns environment, it makes sense for utilities to leverage the balance sheet to the maximum (as interest costs are a pass through in the tariffs) and to have high dividend payouts to maximize average company RoEs. It also helps if the execution period of projects is shorter, as this reduces the quantum of unproductive capital work in progress (CWIP) vis-à-vis productive commissioned assets.
- PGCIL's higher leverage vis-à-vis NTPC is not out of choice but more out of necessity, given that PGCIL is a relatively new company compared to NTPC. Given that the big expansions in the India Power Sector started post FY02, NTPC already had a very reasonable cash-rich balance sheet when it embarked on an unprecedented capex drive, unlike PGCIL.
- Intrinsically, transmission line projects can be executed ~50% faster than a generation project, which leads to PGCIL having a lower CWIP as percentage of net fixed assets.
- When we compare PGCIL's EPS CAGR over FY09-12E at 16% v/s NTPC's 15% and PGCIL's average RoE of 14.6% v/s NTPC's 15.2%, we appreciate there is hardly much of a difference between the two companies. As a consequence, we increase PGCIL's target P/BV multiple to 2.7x FY11E (from 2.3x earlier), bringing it in line with NTPC's implied target P/BV multiple (from 10% discount earlier). This, along with the roll forward to Mar11 (from Mar10 earlier) and EPS revisions, makes us revise our target price to Rs116 and upgrade the stock to Hold (2L) low risk from Sell (3L).

Figure 1. PGCIL v/s NTPC - CWIP As % of Net Fixed Assets



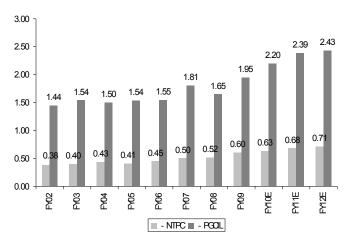
Source: Citi Investment Research and Analysis estimates

Figure 3. PGCIL v/s NTPC - Cash As % of Net Fixed Assets



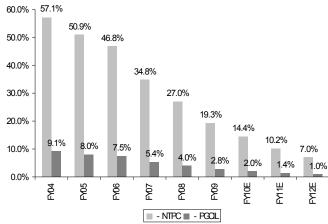
Source: Citi Investment Research and Analysis estimates

Figure 5. PGCIL v/s NTPC - Debt To Equity



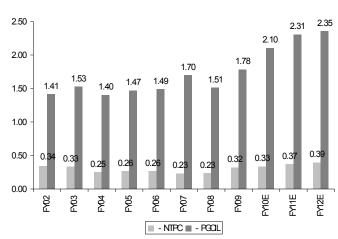
Source: Citi Investment Research and Analysis estimates

Figure 2. PGCIL v/s NTPC - SEB Bonds As % of Net Fixed Assets



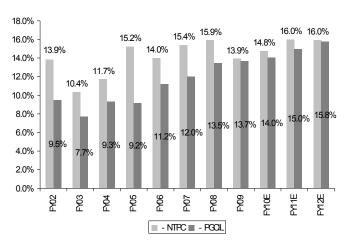
Source: Citi Investment Research and Analysis estimates

Figure 4. PGCIL v/s NTPC - Net Debt To Equity



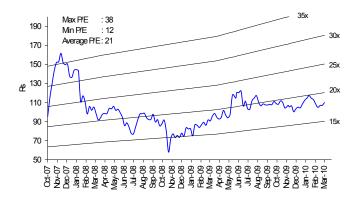
Source: Citi Investment Research and Analysis estimates

Figure 6. PGCIL v/s NTPC - Average RoEs



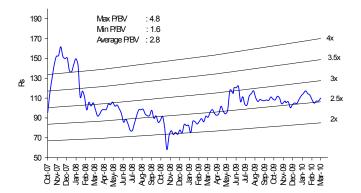
Source: Citi Investment Research and Analysis estimates

Figure 7. PGCIL - 1 Year Forward Rolling P/E Bands



Source: DataCentral and Citi Investment Research estimates

Figure 9. PGCIL – 1 Year Forward Rolling P/BV Bands



Source: DataCentral and Citi Investment Research estimates

Figure 8. NTPC – 1 Year Forward Rolling P/E Bands



Source: DataCentral and Citi Investment Research estimates

Figure 10. NTPC – 1 Year Forward Rolling P/BV Bands



Source: DataCentral and Citi Investment Research estimates

Figure 11. PGCIL v/s BSE Sensex Price Performance

	1 Month	3 Month	6 Months	1 Year	2 Years	Since IPO Listing Price
Power Grid	2.0%	4.0%	2.1%	20.5%	10.9%	8.5%
Sensex	7.9%	-0.1%	5.9%	110.4%	7.8%	-3.4%
Relative	-5.9%	4.1%	-3.8%	-90.0%	3.0%	11.9%

Source: Citi Investment Research and Analysis

Figure 12. India Electric Utilities Comparables

Companies	RIC Code	Rating	Price	EPS CAGR		P/E			P/BV			RoE	
			(Rs)	09-12	FY10E	FY11E	FY12E	FY10E	FY11E	FY12E	FY10E	FY11E	FY12E
PGCIL	PGRD.BO	2L	108	16.3%	21.1	17.8	15.1	2.8	2.5	2.2	14.4%	15.5%	16.1%
NTPC	NTPC.B0	1L	201	15.0%	18.8	15.7	14.3	2.7	2.4	2.2	14.8%	16.0%	16.0%
Tata Power Con	TTPW.B0	1L	1361	17.2%	22.4	18.3	13.2	2.6	2.3	2.0	14.9%	15.0%	18.0%
CESC - Cons	CESC.BO	1M	400	77.8%	19.0	13.6	11.5	na	na	na	na	na	na
Adani Power	ADAN.BO	3M	108	na	50.9	22.7	7.7	4.1	3.5	2.4	11.5%	16.4%	36.8%
Lanco Infratech	LAIN.BO	1M	53	66.7%	26.6	12.8	9.1	3.8	3.0	2.2	17.7%	26.2%	28.0%
Neyveli Lignite	NELG.BO	NR	160	5.7%	24.6	20.3	20.1	2.6	2.5	2.3	11.1%	13.2%	12.0%
GIPCL	GJIP.BO	NR	108	23.8%	14.7	10.4	na	1.3	1.2	na	10.9%	13.2%	10.1%
JPVL	JAPR.B0	NR	72	6.3%	49.2	67.7	20.4	4.0	4.9	4.4	8.1%	7.1%	17.5%
Average				29%	27.5	22.2	13.9	3.0	2.8	2.5	12.9%	15.3%	19.3%

Source: Citi Investment Research and Analysis estimates

#### Earnings revisions

We revise our EPS estimates down by 3-5% over FY10E-12E to factor in (1) new CERC regulations for FY10E-14E and (2) some delays in project execution.

	FY10E	FY11E	FY12E
Sales			
Old	75,477	92,526	108,378
New	72,398	87,540	103,115
Change	-4.1%	-5.4%	-4.9%
Recurring PAT			
Old	22,308	26,834	31,276
New	21,590	25,574	30,211
Change	-3.2%	-4.7%	-3.4%
EPS			
Old	5.30	6.38	7.43
New	5.13	6.08	7.18
Change	-3.2%	-4.7%	-3.4%
RoE			
Old	14.4%	15.5%	16.1%
New	14.0%	15.0%	15.8%
bps	-33	-56	-34
BV			
Old	38.71	43.33	48.89
New	38.34	42.78	48.20
bps	-1.0%	-1.3%	-1.4%

10 March 2010

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#### **Radar Screen Quadrant Definitions**

Glamor	Attractive
Poor relative value but superior relative momentum	Superior relative value and superior relative momentum
Unattractive	Contrarian
Poor relative value and poor relative momentum	Superior relative value but poor relative momentum

## **Quants View - Unattractive**

PGCIL currently lies in the Unattractive quadrant of our Value-Momentum map with weak momentum and weak value scores. It has been a resident there for the past two months. Compared to its peers in the Utilities sector, Power Grid Corp Of India fares worse on the valuation metric and on the momentum metric. Similarly, compared to its peers in its home market of India, Power Grid Corp Of India fares worse on the valuation metric and on the momentum metric.

From a macro perspective, PGCIL is likely to benefit from falling EM yields, and a weaker US dollar.

Figure 14. Radar Quadrant Chart History

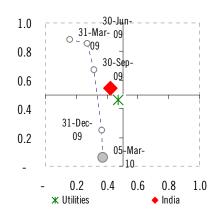
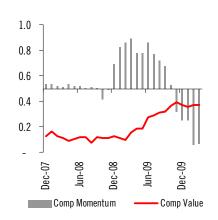


Figure 15. Radar Valuation Momentum Ranks



Source: CIRA Source: CIRA

#### Figure 16. Radar Model Inputs

#### IBES EPS (Actual and Estimates)

FY(-2)	2.60	Implied Trend Growth (%)	16.46
FY(-1)	3.60	Trailing PE (x)	21.54
FY0	4.02	Implied Cost of Debt (%)	6.37
FY1	4.76	Standardised MCap	(0.02)
FY2	5.37	•	

Note: Standardised MCap calculated as a Z score — (mkt cap - mean)/std dev — capped at 3

Source: Citi Investment Research and Analysis, Worldscope, I/B/E/S

#### Figure 17. Stock Performance Sensitivity to Key Macro Factors

Region	1.04	Commodity ex Oil	(0.14)
Local Market	0.59	Rising Oil Prices	(0.14)
Sector	0.64	Rising Asian IR's	0.14
Growth Outperforms Value	(0.05)	Rising EM Yields	(0.69)
Small Caps Outperform Large Caps	0.67	Weaker US\$ (vs Asia)	1.05
Widening US Credit Spreads	(0.24)	Weaker ¥ (vs US\$)	(0.31)

Source: Citi Investment Research and Analysis

Despite 32% YoY growth in 9mFY10 PAT, we expect FY10E PAT growth of only 12% as we expect 4QFY10 PAT growth to be muted due to high base effect (4QFY09 PAT was up 88% YoY)

#### 9mFY10 Recurring PAT up 32% YoY - In line with expectations

PGCIL's 9mFY10 Recurring PAT at Rs14.9bn was up 32% YoY, more or less inline with expectations. This is despite sedate sales growth of 11% YoY leading to EBITDA growth of 9% YoY. In line with CERC regulations, the AAD has been done away with and the depreciation rate has moved up 5.28% in FY10 from 2.67% in FY09, which has led to a 95% YoY increase in depreciation. The impact of foreign exchange fluctuations has been benign on the interest costs and has actually benefited the company in other income.

<b>Figure</b>	18.	<b>PGCIL</b>	_ 9mFY10
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Rsmn	9mFY09	9mFY10	Growth
- Tx Income	34,352	47,459	38.2%
- Tx Income — FERV	6,605	-2,662	
Total Transmission Income	40,957	44,797	9.4%
- Consultancy Income	1,374	1,633	18.9%
- Short Term Open Access	440	1,036	135.7%
- Telecom	1,109	1,117	0.7%
- Lease Income ULDC	380	387	1.8%
Sales	44,260	48,970	10.6%
Staff Cost	4,251	5,165	
% of sales	9.6%	10.5%	
Others O&M Expenditure	2,873	3,316	
% of sales	6.5%	6.8%	
EBITDA	37,135	40,489	9.0%
Margins %	83.9%	82.7%	0.070
Depreciation	8,129	15,848	
EBIT	29,007	24,641	-15.1%
- Interest & Other Charges	10,928	11,355	
- Rebate to Customers	662	609	
- FERV as adjustment in borrowing cost	3,141	150	
Interest & Finance Charges	14,731	12,114	
- FERV above domestic borrowing cost	3,936	, 0	
Total Interest and Finance Charges	18,667	12,114	
- Interest on bonds and long term advances	1,008	885	
- Interest from banks	941	298	
- Dividend	196	244	
- Provision written back	0	0	
- FERV gain	0	2,817	
- Others	537	746	
Total Other Income	2,682	4,990	
РВТ	13,022	17,517	34.5%
Total Tax	1,743	2,583	
Effective Tax Rate %	13.4%	14.7%	
Recurring PAT	11,279	14,934	32.4%
Prior Period — FERV	(510)	0	
Prior Period — Others	(24)	10	
Reported PAT	10,745	14,944	39.1%

#### Likely achievement of 93% of XIth Plan capex targets

In the first two years of the XIth Plan, PGCIL's capex of Rs148bn was 27% of the XIth Plan target of Rs545bn. We expect the company's capex to be Rs360bn in the remaining three years of the plan

Figure 19. PGCIL Capex - Achievements v/s Targets

	FY03	FY04	FY05	FY06	FY07	Xth Plan	FY08	FY09	FY10E	FY11E	FY12E	XIth Plan
MOU Target	33,520	51,170	48,660	41,390	38,960	213,700	64,650	110,140	130,840	130,090	109,790	545,510
Actual/Anticipated	27,649	24,212	32,224	41,336	56,446	181,867	66,560	80,950	115,100	125,000	120,000	507,610
Achievement	82.5%	47.3%	66.2%	99.9%	144.9%	85.1%	103.0%	73.5%	88.0%	96.1%	109.3%	93.1%

Source: Company and Citi Investment Research and Analysis estimates

Figure 20. PGCIL - System Availability

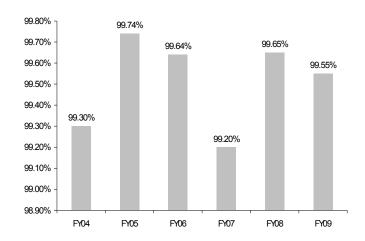
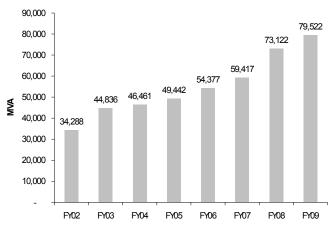
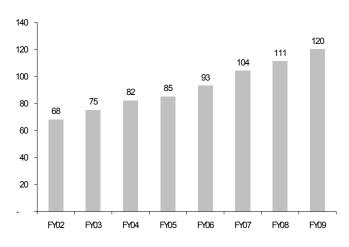


Figure 21. PGCIL - Transformation Capacity



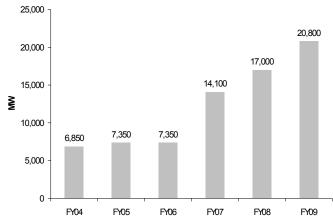
Source: Company and Citi Investment Research and Analysis

Figure 22. PGCIL - Substations



Source: Company and Citi Investment Research and Analysis

Figure 23. India – Inter Region Transmission Capacity



Source: Company and Citi Investment Research and Analysis

Figure 24. PGCIL – Inter Region Energy Exchanged

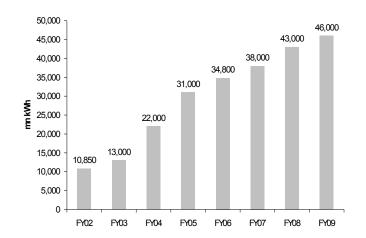
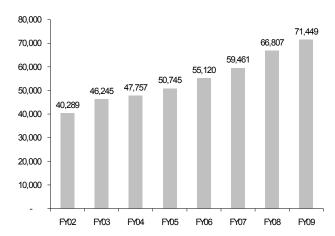


Figure 25. PGCIL – Circuit kms of Lines



Source: Company and Citi Investment Research and Analysis

Source: Company and Citi Investment Research and Analysis

### **Power Grid Corporation of India**

#### Company description

PGCIL (86.36%% owned by the Government of India) is India's Central Transmission Utility (CTU), mandated to establish and operate regional and national grids to facilitate transfer of power within and across regions. It commenced operations in April 1992 and carries about 45% of India's generated electricity. As on 31 March 2008, it had a transmission network of about 66,807 circuit kms with 111 substations, and system availability of above 99.65%. PGCIL also plays an active role in distribution sector reforms initiated by government. Recently, PGCIL diversified to provide broadband telecom services and consultancy for T&D projects in India and abroad.

#### Investment strategy

We rate PGCIL Hold/Low (2L) risk given limited upside to our target price. PGCIL is executing the build-out of the National Grid to 38GW by FY12E. It plans Rs545bn of capex during the XIth Five Year Plan (FY08-12). Management suggested that capex during the next plan could be as high as Rs700-800bn. Under the regulatory regime, PGCIL's sales and earnings growth is largely driven by capex and capex that it capitalizes and brings into its gross block. The capex is incrementally funded through a 70:30 debt: equity mix. Capitalization again depends on commissioning transmission lines. We expect PGCIL's gross block to grow at a CAGR of 17% over FY09-12E, driving a 16% sales CAGR and 16% recurring PAT CAGR.

#### **Valuation**

Amongst Indian Electric Utilities the closest listed comparables to PGCIL are NTPC. NHPC and NLC, even though PGCIL is a transmission company whereas NTPC and NLC are generators. This is because these utilities share a similar regulatory tariff regime. Despite NTPC's ability to make superior ~22% returns on regulated equity compared to PGCIL's ~17% on the core business, and stronger balance sheet, PGCIL's EPS CAGR and RoEs at 16% and 14.6%

compare favourably with those of NTPC at 15% and 15.2%. Furthermore, there is a scarcity value to PGCIL, as it is the only listed play on the regulated transmission business in India vis-à-vis plenty of generation companies to chose from. As a consequence we peg PGCIL's target P/BV multiple to 2.7x FY11E, which is in line with that of NTPC's implied target P/BV multiple.

We value NTPC using a DCF method with a WACC of 9.7% and a terminal growth rate of 3%. 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. Furthermore, at our Rs229 target price, NTPC would trade at a P/BV of 2.7x FY11E.

#### Risks

We rate PGCIL Low Risk, as opposed to the Speculative Risk rating assigned by our quantitative risk-rating system, which tracks 260-day historical share price volatility.

Key upside risks are: 1) Faster-than-expected project execution leading to earlier-than-expected capitalization of capex; 2) Higher-than-expected short-term open access revenues due to a spurt in power trading, and 3) Higher-than-expected revenues and profitability in consulting and telecom businesses.

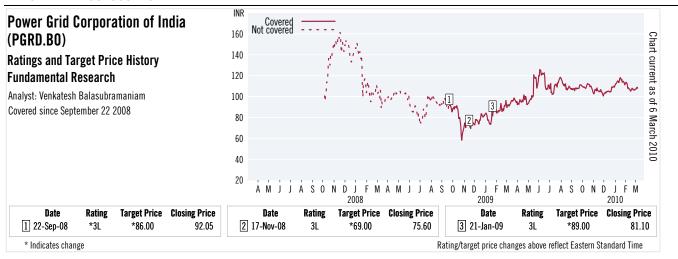
Key downside risks include: 1) Creditworthiness of the State Power Utilities 2) Changes in the regulatory environment 3) Increased competition and 4) Project-related risks

## Appendix A-1

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