22 April 2010 | 19 pages

Adani Power (ADAN.BO)

Equity ☑
Target price change ☑
Estimate change ☑

Sell: Too Expensive To Get Constructive

- **Positive developments** — 1) CEA data suggests that APL's Chinese power plants can deliver 90%+ PLF on a consistent basis; 2) Under development projects have increased to 9,240MW (from 6,600MW earlier) and pipeline projects remain at 3,300MW; 3) APL has got domestic coal linkages for 30% (1,386MW) of the Mundra 4620MW capacity; and (4) APL has been awarded a tapering coal linkage for ~50% of Tiroda I & II (1,980MW) for ~1,000MW till it gets a captive block.

- **Negative developments** — Data from CEA, WRPC and company suggests that till date: 1) Auxiliary consumption and fuel cost per unit generated has been higher than expected; 2) ASPs have been lower than expected; 3) Mundra Phase I & II have been delayed by 2 - 3 months; 4) tax status on Mundra in terms of MAT and custom duty is still not very clear; and 5) Press reports suggest environmental issues in terms of coal for Tiroda and water for Chhindwara.

- **Dichotomy between DCF and multiples** — Given pre PPA merchant sales lead to peaking of PAT/ cash flows over FY12E-14E, multiple based valuations (P/E, P/BV and EV/EBITDA) leads to over-estimation of fair value vis-à-vis that derived using DCF. Though we are tempted to use a blend of the two approaches we stick to DCF as: 1) we give APL the benefit of doubt on numerous parameters; and 2) we value 9,240MW in APL vis-à-vis 6,600MW that we would use if we are consistent with our approach for other utilities in our coverage universe.

- **Target price increased to Rs106; Maintain Sell (3M)** — Raising our target price to Rs106 (Rs88) as we: 1) remove the execution discount of 5%; 2) roll forward our DCF value to Sep10 (from Mar10 earlier); 3) value Tiroda Phase III/ Kawai; and 4) factor in our EPS revision of -69% to 60% over FY10E-20E.

- **Upside risks** — These include faster execution, higher merchant rates, better than expected operating parameters, and more project wins.

Sell/Medium Risk	3M
Price (22 Apr 10)	Rs120.80
Target price	Rs106.00
from Rs88.00	
Expected share price return	-12.3%
Expected dividend yield	0.0%
Expected total return	**-12.3%**
Market Cap	Rs263,348M
	US$5,911M

Price Performance (RIC: ADAN.BO, BB: ADANI IN)

Statistical Abstract

Year to 31 Mar	Net Profit (RsM)	Diluted EPS (Rs)	EPS growth (%)	P/E (x)	P/B (x)	ROE (%)	Yield (%)
2008A	-72	-0.13	na	nm	5.2	na	0.0
2009A	-26	-0.01	89.3	nm	9.8	-0.1	0.0
2010E	1,454	0.67	na	181.1	4.8	3.8	0.0
2011E	9,139	4.19	528.3	28.8	4.1	15.5	0.0
2012E	46,768	21.45	411.8	5.6	2.4	53.8	0.0

Source: Powered by dataCentral

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

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Fiscal year end 31-Mar	2008	2009	2010E	2011E	2012E
Valuation Ratios					
P/E adjusted (x)	nm	nm	181.1	28.8	5.6
EV/EBITDA adjusted (x)	na	nm	131.3	23.2	6.0
P/BV (x)	5.2	9.8	4.8	4.1	2.4
Dividend yield (%)	0.0	0.0	0.0	0.0	0.0
Per Share Data (Rs)					
EPS adjusted	-0.13	-0.01	0.67	4.19	21.45
EPS reported	-0.13	-0.01	0.67	4.19	21.45
BVPS	23.26	12.35	24.98	29.17	50.63
DPS	0.00	0.00	0.00	0.00	0.00
Profit & Loss (RsM)					
Net sales	0	0	4,664	32,483	119,226
Operating expenses	-72	-28	-2,476	-16,842	-45,289
EBIT	**-72**	**-28**	**2,189**	**15,641**	**73,937**
Net interest expense	0	0	-347	-4,631	-14,305
Non-operating/exceptionals	0	0	0	0	0
Pre-tax profit	**-72**	**-28**	**1,842**	**11,010**	**59,632**
Tax	0	0	-388	-1,872	-10,135
Extraord./Min.Int./Pref.div.	0	2	0	0	-2,729
Reported net income	**-72**	**-26**	**1,454**	**9,139**	**46,768**
Adjusted earnings	-72	-26	1,454	9,139	46,768
Adjusted EBITDA	-72	-28	2,565	17,559	80,048
Growth Rates (%)					
Sales	na	na	na	596.4	267.0
EBIT adjusted	na	61.3	nm	614.7	372.7
EBITDA adjusted	na	61.3	nm	584.6	355.9
EPS adjusted	na	89.3	nm	528.3	411.8
Cash Flow (RsM)					
Operating cash flow	**-72**	**-1,170**	**140**	**11,921**	**59,603**
Depreciation/amortization	0	0	376	1,918	6,110
Net working capital	0	-1,142	-1,964	-2,979	-7,878
Investing cash flow	**-1**	**-44,085**	**-86,850**	**-94,168**	**-101,150**
Capital expenditure	-1	-44,618	-86,850	-94,168	-101,150
Acquisitions/disposals	0	0	0	0	0
Financing cash flow	**0**	**48,215**	**83,314**	**81,032**	**59,407**
Borrowings	0	39,785	53,322	84,875	71,281
Dividends paid	0	0	0	0	0
Change in cash	**-73**	**2,960**	**-3,396**	**-1,216**	**17,860**
Balance Sheet (RsM)					
Total assets	**28,811**	**78,962**	**158,629**	**253,123**	**374,626**
Cash & cash equivalent	1,921	5,585	2,189	973	18,834
Accounts receivable	0	0	301	1,531	5,201
Net fixed assets	24,595	69,213	155,687	247,937	342,977
Total liabilities	**14,472**	**55,516**	**103,464**	**188,820**	**260,825**
Accounts payable	4,361	5,620	245	725	1,449
Total Debt	10,112	49,897	103,219	188,094	259,375
Shareholders' funds	**14,339**	**23,446**	**55,165**	**64,304**	**113,801**
Profitability/Solvency Ratios (%)					
EBITDA margin adjusted	na	na	55.0	54.1	67.1
ROE adjusted	na	-0.1	3.8	15.5	53.8
ROIC adjusted	na	-0.1	1.6	6.8	21.1
Net debt to equity	57.1	189.0	183.1	291.0	211.4
Total debt to capital	41.4	68.0	65.2	74.5	69.5

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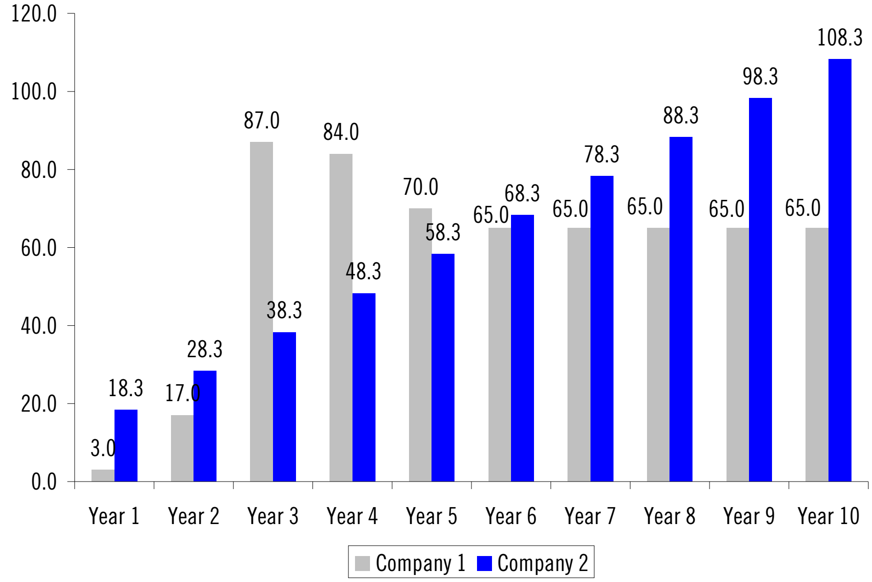
Contents

Dichotomy Between DCF And Multiples

- Let us consider two hypothetical companies with cash flow streams as shown in the figure below. Cash flows of company 1 peak in year 3 and then start falling to a level of ~ 65. Meanwhile cash flow from company 2 keeps growing at a steady pace.

Figure 1. Illustration – DCF v/s P/CF multiples



Source: Citi Investment Research and Analysis estimates

- Net present values (NPV) of both cash flow streams using a discount rate of ~ 13% is = 290 and theoretically both companies should trade on par.

- Let us now assume company 2 is actually trading at 290 which is bang in line with the NPV. This implies the company trades at price /cash flow (P/CF) multiples of 7.6x on Year 3. Investors who use P/CF multiples and not DCF as a valuation tool could say that company 1 should also trade at P/CF multiples of 7.6x on Year 3 cash flows which would give company 1 a value of 658 which is 2.3x the DCF value of cash flows.

- Theoretically this is not right as company 1 cash flows peak and then decline and so the company should trade at a P/CF of 290/87 = 3.3x

- Investors and analysts face this dichotomy when analyzing APL if they decide to value just 6,600MW of capacity - 4620MW of Mundra and 1980MW of Tiroda (what we considered when we initiated coverage on APL).

- However, investors can argue that the peak in year 3 followed by the dramatic fall would not happen in year 4 as by then other incremental project cash flows would have started kicking in. This is a logical argument and fairly evident in the profits APL as shown in the table.

Figure 2. APL Consolidated – Projectwise Profits

	FY10E	FY11E	FY12E	FY13E	FY14E	FY15E	FY16E	FY17E	FY18E	FY19E
Mundra Phase I & II	1,454	6,252	8,003	7,465	7,650	5,754	5,999	6,174	6,407	6,639
Mundra Phase III	-	2,887	18,170	4,500	4,765	2,996	3,287	3,509	3,756	3,997
Mundra Phase IV	-	-	11,260	19,935	13,953	11,185	11,400	11,488	11,613	10,025
Mundra 4620	1,454	9,139	37,432	31,900	26,368	19,936	20,686	21,170	21,777	20,661
Tiroda Phase I & II			9,336	13,238	8,336	5,634	5,954	6,194	6,606	6,969
PAT From 6600MW	**1,454**	**9,139**	**46,768**	**45,138**	**34,704**	**25,570**	**26,640**	**27,364**	**28,383**	**27,630**
Tiroda Phase III					12,218	3,733	4,334	4,388	4,467	4,550
Kawai					6,976	4,928	5,034	5,106	5,211	5,323
Grand Total	**1,454**	**9,139**	**46,768**	**45,138**	**53,898**	**34,230**	**36,008**	**36,858**	**38,061**	**37,503**

Source: Citi Investment Research and Analysis estimates

- However, are investors giving the benefit of doubt to APL that is not being given to a number of other utilities. Investors could counter this with the argument that one needs to give the benefit of doubt to APL given the Adani Group's superior execution capabilities.

- We agree that the Adani Group's execution capabilities are one of the best in class when it comes to executing large scale mega projects. However, whether one should attribute a premium to the DCF value or what should be the quantum of the premium becomes entirely a subjective call.

- Going back to our earlier illustration of cash flow streams an investor could argue that maybe one should not attribute a P/C multiple of 7.6x similar to company 2 but one can always apply say a ~ 40% discount and use a multiple of 4.5x and value company 1 at 4.5 X 87 = 391 which is still 1.4x the DCF value. This is the dichotomy between the DCF and multiples.

- Prior to FY06 though investors/ analysts were using DCF as a valuations tool in India P/E, P/BV, EV/EBITDA multiples were being used to do the sanity check as DCF values were usually higher than multiple based values. But FY07 onwards investors/ analysts started using DCF as the main tool to value infrastructure companies whose initial year cash flows and earnings could not justify the valuations they commanded. APL to some extent might force investors to resort to a mix of the above tools.

Raising target price to Rs106 – Maintain Sell

Target price increased to Rs106 – Maintain Sell (3M)

Though we are tempted to use a blend of DCF and P/BV approaches we stick to the DCF method on account of the following reasons:

- 2-3 month delays in Mundra Phase I & II makes us wonder isn't it possible that similar delays might occur in other projects given Chinese visa restrictions continue to be an issue. Given pre PPA start commissioning of plants and consequent sale of 100% merchant sales initially is critical to justify APL's lofty valuations, delays affect valuations significantly. Anyway in our DCF approach we do not assume delays in power plants beyond Mundra Phase I & II

- In unit 1 330MW of Mundra Phase I despite pre-PPA start commissioning it is apparent that APL is selling power to GUVNL at less than merchant rates which is evident from realizations of Rs3.86/kWh in 3QFY10. This makes us wonder why this might not be repeated in other plants. We have given APL the benefit of doubt on this account already in our DCF.

- Auxiliary consumption and fuel cost per unit generated have been higher than expected initially. However, we have given APL the benefit of doubt that these operating parameters would fall going forward in our DCF

- If we extrapolate our approach to valuing utilities in our coverage we would ideally not be valuing power plants beyond Mundra 4,620MW and Tiroda 1,980MW totaling to 6,600MW. In the case of APL we have already made an exception and valued an additional 2,640MW.

Last but not the least in the interest of consistency of approach in valuing utilities with huge growth plans we stick to a pure DCF approach to value APL. As APL's new target price implies a downside to current stock price we maintain our Sell / Medium (3M) risk rating.

Approach 1: DCF Value Rs106 v/s 88 before

(1) We remove the execution discount of 5%

(2) Roll forward our DCF value to Sep10 from Mar10 earlier

(3) Value Tiroda Phase III and Kawai now

(4) Factor in our earnings revision

Figure 3. APL – DCF Value

	New	Old
Mundra	62	54
Tiroda	25	25
Kawai	5	0
Equity Issue	14	14
Total	**106**	**93**
Discount	0%	5%
Post Discount	**106**	**88**

Source: CIRA estimates

Figure 4. APL – DCF Valuations

							DCF As Of Mar-10			DCF As Of Mar-11			DCF As Of Sep-10		
Company	(MW)	Stake %	CoE	Project IRR	Equity IRR	Stake %	Equity/ MW	P/Equity	Per Share	Equity/ MW	P/Equity	Per Share	Equity/ MW	P/Equity	Per Share
Mundra	**4620**	**100.0%**				**100.0%**	**27.0**	**3.2**	**57**	**31.1**	**3.7**	**66**	**29.0**	**3.4**	**62**
- Phase I - Phase II	660 660	100.0%	13.0%	19.6%	42.8%	100.0%	30.5	5.2	18	34.3	5.8	21	32.4	5.5	20
- Phase III	1320	100.0%	13.0%	14.5%	26.3%	100.0%	21.8	2.1	13	24.6	2.4	15	23.2	2.3	14
- Phase IV	1980	100.0%	13.0%	20.5%	39.1%	100.0%	28.1	3.1	26	33.3	3.7	30	30.7	3.4	28
Tiroda	**3300**	**77.38%**				**77.4%**	**19.9**	**2.1**	**23**	**23.5**	**2.4**	**28**	**21.7**	**2.3**	**25**
- Phase I & II	1980	77.38%	13.0%	17.6%	32.1%	77.4%	24.8	2.6	17	28.5	3.0	20	26.6	2.8	19
- Phase III	1320	77.38%	13.0%	16.6%	34.6%	77.4%	12.5	1.2	6	16.1	1.6	8	14.3	1.4	7
Kawai	**1320**	**100.0%**	**13.0%**	**14.0%**	**22.2%**	**100.0%**	**7.3**	**0.7**	**4**	**10.4**	**1.0**	**6**	**8.9**	**0.8**	**5**
Development	**9240**						**21.6**	**2.4**	**85**	**25.4**	**2.8**	**100**	**23.5**	**2.6**	**92**
Dahej	1980	100.0%													
Chhindwara	1320	100.0%													
Pipeline	**3300**								**-**			**-**			**-**
Equity Issue									14			14			14
Grand Total	**12540**								**99**			**113**			**106**
Fair Value									**99**			**113**			**106**

Source: Citi Investment Research and Analysis estimates

Approach 2: P/BV multiples

- To address the dichotomy between DCF and multiples we also evaluate the P/BV multiple approach. We prefer pick P/BV over P/E, EV/EBITDA or P/CF to avoid the massive yearly fluctuations in EPS, EBITDA and cash flows.
- To arrive at the target P/BV multiple we use NTPC as a comparable.

Figure 5. NTPC – Valuations

	FY10E	FY11E	FY12E	FY13E	FY14E
EPS	10.74	12.80	14.13	16.25	18.33
BV	75.87	83.99	93.21	104.30	117.25
@ CMP	**207**	**207**	**207**	**207**	**207**
P/E	19.3	16.2	14.6	12.7	11.3
P/BV	2.7	2.5	2.2	2.0	1.8
@ CIRA TP	**229**	**229**	**229**	**229**	**229**
P/E	21.3	17.9	16.2	14.1	12.5
P/BV	3.0	2.7	2.5	2.2	2.0

Source: Citi Investment Research and Analysis estimates

Figure 6. APL – P/BV Multiple Approach

	Multiple (x)	APL BV (Rs)	Value per share (Rs)
On NTPC's current FY12E P/BV Multiple	2.2	50.6	112
On NTPC's current FY13E P/BV Multiple	2.0	71.3	142
On NTPC's target FY12E P/BV Multiple	2.5	50.6	124
On NTPC's target FY13E P/BV Multiple	2.2	71.3	157

Source: Citi Investment Research and Analysis estimates

Earnings revision

We revise our estimates by -69% to 60% over FY10E-20E as factor in –

- 9,240MW of capacity vis-à-vis 6,600MW earlier
- We account for delays in Mundra Phase – I & II
- We assume higher fuel cost per unit generated
- We assume 30% blending of domestic coal for Mundra project.

Figure 7. APL Consolidated – Earnings Revision Table

	FY10E	FY11E	FY12E	FY13E	FY14E	FY15E	FY16E	FY17E	FY18E	FY19E	FY20E
Sales											
Old	12,229	31,641	95,309	154,203	134,925	129,890	130,235	129,763	129,980	128,163	127,471
New	4,664	32,483	119,226	163,224	213,346	193,527	194,748	193,874	193,965	191,973	192,129
Change	-61.9%	2.7%	25.1%	5.8%	58.1%	49.0%	49.5%	49.4%	49.2%	49.8%	50.7%
EBITDA											
Old	7,560	19,090	63,109	99,241	78,627	71,378	70,140	68,371	67,081	63,711	60,313
New	2,565	17,559	80,048	96,438	123,358	95,257	94,080	91,280	89,107	84,779	79,506
Change	-66.1%	-8.0%	26.8%	-2.8%	56.9%	33.5%	34.1%	33.5%	32.8%	33.1%	31.8%
PAT											
Old	4,629	10,363	30,772	47,391	33,735	30,047	30,952	31,530	32,410	31,593	29,289
New	1,454	9,139	46,768	45,138	53,898	34,230	36,008	36,858	38,061	37,503	35,006
Change	-68.6%	-11.8%	52.0%	-4.8%	59.8%	13.9%	16.3%	16.9%	17.4%	18.7%	19.5%
EPS											
Old	2.12	4.75	14.12	21.74	15.47	13.78	14.20	14.46	14.87	14.49	13.44
New	0.67	4.19	21.45	20.71	24.72	15.70	16.52	16.91	17.46	17.20	16.06
Change	-68.6%	-11.8%	52.0%	-4.8%	59.8%	13.9%	16.3%	16.9%	17.4%	18.7%	19.5%

Source: Citi Investment Research and Analysis estimates

Figure 8. APL Consolidated – CIRA v/s Consensus

	FY10E	FY11E	FY12E	FY13E	FY14E
EPS					
Consensus	1.24	4.07	12.60	16.14	17.92
CIRA	0.67	4.19	21.45	20.71	24.72
Difference	-46.2%	3.0%	70.3%	28.3%	38.0%
BV					
Consensus	26.3	30.1	41.0	58.4	68.5
CIRA	25.0	29.2	50.6	71.3	96.1
Difference	-5.1%	-3.1%	23.4%	22.2%	40.3%

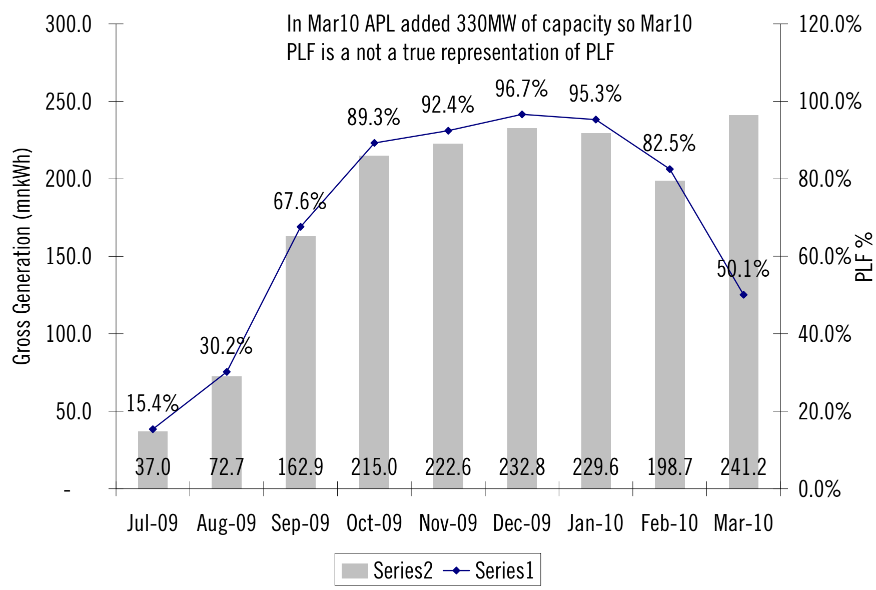
Source: Bloomberg and Citi Investment Research and Analysis estimates

Business Update

Chinese equipment actually delivering 90%+ PLF

- At the time of our initiation we had doubts if APL's power plants sourced from Chinese equipment suppliers could deliver plant load factors (PLF) of 90%+ on a consistent basis.
- Data available from CEA has now convinced us to increase our long term steady state PLF assumptions to 90% from 85% earlier.

Figure 9. APL –Gross Generation

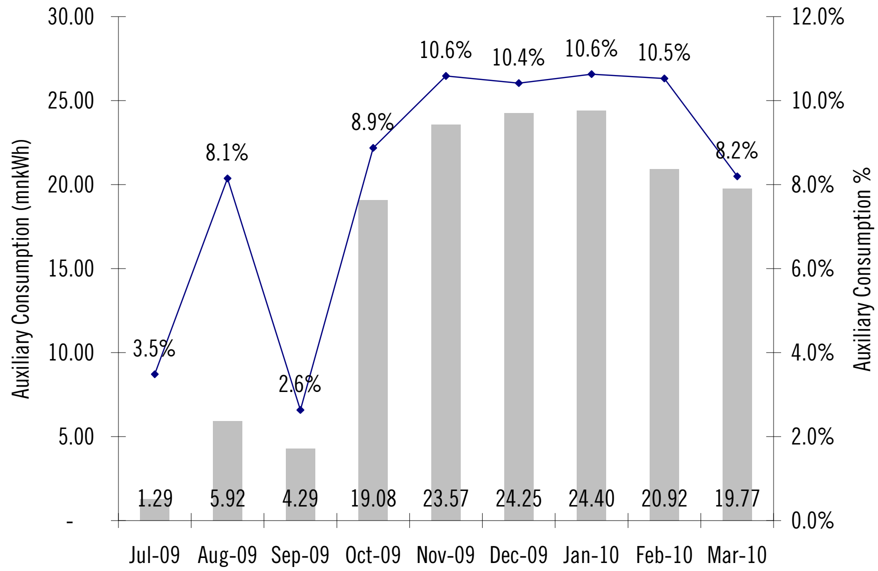


Source: CEA and Citi Investment Research and Analysis

But auxiliary consumption has been higher than expected

- Management interaction at the time of our coverage initiation suggested that auxiliary consumption would be 6% for both subcritical and supercritical plants. At that point in time we had assumed 8% and 7% for subcritical and supercritical plants respectively
- Data from CEA and WRPC suggests that auxiliary consumption has been higher at almost ~ 10% levels. We expect the same to fall as more units get commissioned and hence maintain our earlier assumptions.

Figure 10. APL – Auxiliary Consumption



Source: CEA, WRPC and Citi Investment Research and Analysis

Fuel cost per unit of power sold higher than expected

- According to management expectations the subcritical and supercritical plants will operate at heat rates of 2250 and 2050 kcal/kWh respectively and the Bunyu coal would cost US$37.8/ton with calorific value of 5200 kcal/kg.
- However 3QFY10 fuel cost per unit generated at Rs1.45/kWh suggests one or more of the following possibilities: (1) the heat rate of the plant is higher than expected (2) calorific value of the Bunyu coal is lower than expected or (3) expensive South African coal has been blended with Bunyu coal to increase the effective calorific value of the coal.

Developmental pipeline increased to 12.5GW from 9.9GW earlier

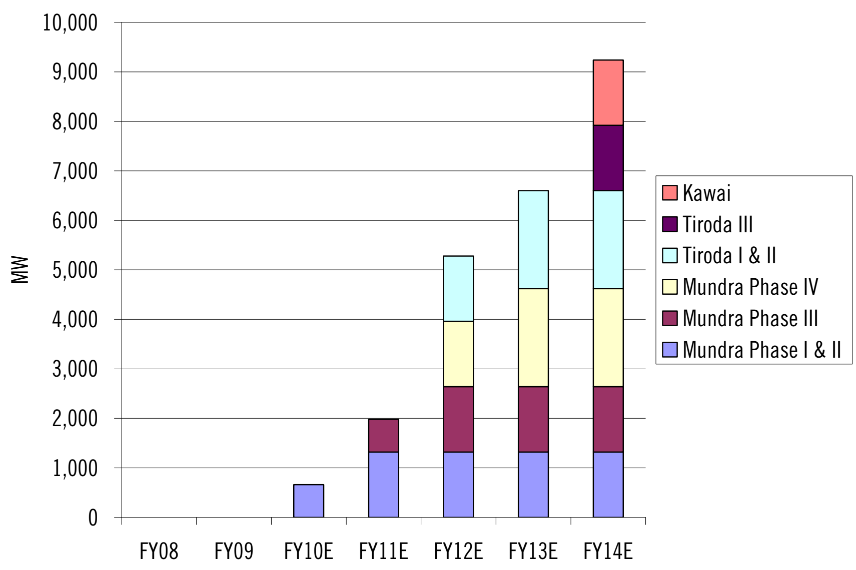
- The company initially had projects under development of 6,600MW and pipeline projects of 3,300MW. The under development projects have been increased to 9,240MW and pipeline projects remain at 3,300MW.
- The additional new projects are Tiroda Phase III totaling to 2X660MW and Chhindwara project totalling to 2X660MW.
- We also believe the company might expand the scope of the Dahej project to 4X660MW from the current 3X660MW taking the overall developmental pipeline to 13.2GW in the future. The Chairman of the Adani Group Mr. Gautam Adani has vision of having 20GW of installed capacity by 2020

Figure 11. APL – Under Development and Pipeline Projects

Company	Stake	Project	(MW)	Units	D/C	Cost (Rsmn)	Rsmn/MW	Debt (Rsmn)	Equity (Rsmn)
Adani Power Standalone	100.00%	Mundra PP	4620		79.5%	191,060	41.35	151,960	39,100
- Phase I			660	2X330	82.2%	21,750	32.95	17,870	3,880
- Phase II			660	2X330	82.2%	21,750	32.95	17,870	3,880
- Phase III			1320	2X660	76.8%	57,960	43.91	44,540	13,420
- Phase IV			1980	3X660	80.0%	89,600	45.25	71,680	17,920
Adani Power Maharashtra	77.38%	Tiroda PP	3300		80.0%	158,730	48.10	126,984	31,746
- Phase I & II			1980	3X660	80.0%	92,630	46.78	74,104	18,526
- Phase III			1320	2X660	80.0%	66,100	50.08	52,880	13,220
Adani Power Rajasthan	100.00%	Kawai PP	1320		80.0%	69,300	52.50	55,440	13,860
Under Development			**9240**		**79.8%**	**419,090**	**45.36**	**334,384**	**84,706**
Adani Power Dahej Limited	100.00%	Dahej PP	1980	3X660					
Chhindwara Power Project	100.00%	Chhindwara PP	1320	2X660					
Pipeline Projects			**3300**			-		-	-
Grand Total			**12540**						

Source: Company and Citi Investment Research and Analysis estimates

Figure 12. APL – Under Development Projects Capacity Ramp Up



Source: Company and Citi Investment Research and Analysis estimates

Chhindwara project update

- APL has been awarded a letter of intent (LoI) by MP Government for the development of 1320MW Chhindwara project. As per the LoI, 300 hectares of land, presently in possession of MPSEB along with infrastructure facilities will be transferred to APL and the first unit will be commissioned 42 months from the date of LoI. Besides the Energy Department – MP Government will support and make recommendations to Government of India (GoI) for obtaining coal linkage/ captive coal block for the project. The MP Government will also give recommendations for obtaining all the clearances from the concerned departments. MP Government has reserved water for this project from the Pench river.

- As per the LoI 10% of net energy will be given to the State Government at variable cost and the State has first right of refusal to purchase 40% of aggregate capacity for 20 years at a rate determined by MPERC. The balance 50% can be sold through long term/ medium arrangement.
- However, according to the Hindu, the Chhindwara project might have run into rough weather with the Environment Ministry giving indications that it would not approve the proposal of the company to draw water from the Pench Tiger Reserve.

Mundra Phase I & II have been delayed by 2-3 months

- Alarmed at the profuse influx of Chinese personnel at sites of Indian power projects awarded to Chinese EPC contractors, the Union Government had brought out new regulations, stipulating that the number of foreign workers at projects in India to be limited to 1% of the entire workforce, subject to a limit of 20 per project.
- We believe this could have caused problems in APL's execution plans and a resulted in delays of 2-3 months in all units of Mundra Phase I & II. Normally delays of 2-3 months in projects of this scale and size is not something one should be bothering about, but we highlight the same as investors/ analysts expect huge profits on merchant sales by commissioning power plants ahead of commencement of PPAs across projects.
- Further, management has maintained earlier communicated commissioning schedules for Mundra Phase III & IV and Tiroda Phase I & II so far.

Figure 13. Mundra Phase I & II

	MW	Target	Likely/ Actual
Unit 1	330	Jul-09	Oct-09
Unit 2	330	Oct-09	Mar-10
Unit 3	330	Jan-10	Apr-10
Unit 4	330	Feb-10	Jun-10

Source: Company and Citi Investment Research and Analysis

Mundra 4620MW set to get domestic coal linkages for 30% of capacity

- As a matter of policy, CEA now recommends that all imported coal based power plants are blended with domestic coal to the extent of 30%.
- As a consequence in the SLC(LT) meeting held on November 11, 2008 LoA was recommended for Mundra Phase IV (3X660MW) to the extent of 30% of 1980MW = 594MW of planned capacity
- Further, in the SLC(LT) meeting held on January 21, 2010 LoA was recommended for Mundra Phase I, II and III (4X330MW + 2X660MW) to the extent of 30% of 2640MW = 792MW of planned capacity.

Has to make alternate coal supply arrangements for Tiroda

- APL has a 77.38% stake in the 1980MW Tiroda project where 3X660MW is to be commissioned over Jul11-Apr12. The company had received LoAs from South Eastern Coalfields/ Western Coalfields on Jun6, 09/ Jun 1, 09, for supply of ~ 2.5 MTPA of Grade 'F' coal/ ~ 2.2 MTPA of Grade 'E' coal. The company had also been allotted the Lohara mines with 170mn tons of coal at a distance of 260km from plant.

- The Lohara mines are 15 km off the Tadoba Andheri Tiger Reserve (TATR) in Maharashatra. Hence the Expert Appraisal Committee (EAC) (Thermal & Coal Mining) has decided to withdraw the Terms of Reference (TORs) granted. The committee has also directed that the company should meet the deficit by (1) importing coal or (2) be allotted other coal blocks or (3) be given a linkage by the Ministry of Coal.

- According to APL, since the power plant is centrally located, imported coal cannot be a long term solution. As a consequence the company had already applied for an alternative linkage of 4.5mn tons in addition to the existing 4.7mn tonnes. Recently APL was been awarded a tapering coal linkage for ~50% of Tiroda I & II capacity of 1,980MW for ~1,000MW till a new captive block is awarded.

Figure 14. APL – Coal Supply Sources and Agreements

Company	(MW)	Agreement Date	- Remarks
- Phase I & II	1,320	8-Dec-06	- With AEL for 4.6mn tonnes with average GCV of 5200 kcal/kg for 15 years. - In addition AEL will try to get 0.2mn +0.2mn tonnes.
- Phase III	1,320	24-Mar-08	- With AEL for 4.04mn tonnes with average GCV of 5200 kcal/kg for 15 years. - In addition AEL will try to get 0.2mn + 0.2mn tonnes
- Phase IV	1,980	15-Apr-08	- With AEL for 6.5mn tonnes with average GCV of 5200 kcal/kg for 15 years. - In addition AEL will try to get 0.33mn + 0.33mn tonnes - 6.4 mn tonnes per annum from Mahanadi Coal Fields
Tiroda PP	1,980	6-Jun-09 1-Jun-09	- 2.5 MMTPA grade F coal linkage from South Eastern Coalfields - 2.2 MMTPA grade E coal linkage Western Coalfields - 170mn tonnes of coal reserves with (GCV of 4,290 - 5,590 Kcal/kg) in Lohara West/ Extension
Total	**6,600**		

Source: Company and Citi Investment Research and Analysis

77.3% of under development capacity to be sold through case-I PPAs

- Out of the under development projects of 9240MW it is expected that 77.3% would be sold through long term PPAs through a case-I basis

Figure 15. Adani Power – PPAs Signed Under Case 1 Bidding

Company	(MW)	PPA (MW)	Merchant (MW)	PPA Start Date	Counterparty	Years	Offtake
Mundra PP	**4620**	**3,424**	**1,196**				
- Phase I	660	500	160	6-Feb-10	GUVNL	25	Tariff band of Rs2.76/kwh to Rs3.42/kwh
- Phase II	660	500	160	6-Jun-10	GUVNL	25	Tariff band of Rs2.76/kwh to Rs3.42/kwh
- Phase III	1320	1,000	320	2-Feb-12	GUVNL	25	Rs2.35/kWh
- Phase IV	1980	475	556	7-Aug-12	UHBVNL and DHBVNL	25	Tariff band of Rs2.35/kwh to Rs3.26/kwh
		949		7-Feb-13	UHBVNL and DHBVNL	25	Tariff band of Rs2.35/kwh to Rs3.26/kwh
Tiroda PP	**3300**	**2,520**	**780**				
- Phase I & II	1980	1,320	660	14-Aug-12	MSEDCL	25	Tariff band of Rs2.51/kwh to Rs3.55/kwh
- Phase III	1320	1,200	120	1-Apr-14	MSEDCL		Tariff band of Rs2.79/kwh to Rs4.00/kwh
Kawai	**1320**	**1,200**	**120**	**31-Aug-13**	**RRVPNL**	**25**	**Tariff band of Rs2.76/kwh to Rs3.80/kwh**
Total	**9240**	**7144**	**2096**				

Source: APL and Citi Investment Research and Analysis

PTI reports that APL might want to exit Mundra Phase III PPA

- According to Press Trust of India (PTI), APL has given a notice to the Gujarat Government terminating a long term power purchase agreement (PPA) inked in 2007 for supply of 1,000 MW to supply power for 25 years at a flat rate of 2.35/kWh. Further PTI reports that APL has approached Gujarat Electricity Regulatory Commission (GERC) with a petition in this regard.

- PTI also reports that when the PPA was inked, APL was expecting to get coal from Gujarat Mineral Development Corporation's (GMDC) coal block in Chhattisgarh. However, the same did not materialize, forcing the group to back out from the deal. APL has also agreed to surrender Rs1bn security deposit to back out from the agreement.

- We believe that if APL manages to exit the PPA it would be positive given merchant tariffs are expected to be in a band of Rs4.50 – 5.50 /kWh over the next few years which would more than make up for the Rs1bn deposit.

Tax status of Mundra 4,620MW – Not clear yet

- At the time of the IPO, management maintained that the company would be claiming SEZ benefits for the 4,620MW of capacity and not pay any taxes (not even MAT) for 10 years. However, despite this we had assumed payment of MAT of 17% for the first 10 years followed by full tax in our numbers.

- However, Union Budget FY11 had made the following changes - At present, electrical energy is fully exempt from customs duty. Electrical energy supplied from a SEZ to the domestic tariff area and non - processing areas of SEZ would now attract duty of 16% ad valorem + nil special CVD. This change is being made retrospectively w.e.f. 26th June, 2009.

- We believe that APL can do one following in the face of the above development – (1) agree to pay duty of 16% on the merchant sales and get 16% duty on case-I bid passed through in the tariff or pay or (2) get the Mundra 4620MW de-notified as a co-developer of the SEZ and pay MAT for 10 years and full taxes in the remaining years. We are not sure yet which path the company would chose for the same yet.

Adani Power

Company description

Adani Power Limited (APL) has five thermal power projects in various stages of development, with combined capacity of 12,540 MW, namely: (i) Mundra Power Project with 4,620MW (ii) Tiroda Power Project with 3,300MW (iii) Kawai Power Project with 1,320MW (iv) Dahej Power Project with a capacity of 1,980MW and (v) Chhindwara Power Project with a capacity of 1320MW.

Investment strategy

Adani Power is an interesting case of private sector entrepreneurship at its best, capitalizing on persistent power deficits and exploiting high medium term merchant tariffs before the start of long term PPAs to reduce project payback, using faster-than-BHEL execution time cycles of Chinese equipment suppliers. Impressive progress on 4620MW of capacity at Mundra and the Adani Group's experience in executing mega projects like the Mundra Ports and SEZ project bolsters the investment case. However, we see a few loose ends that need tying: 1) insufficient coal for 25 years, 2) coal mining license risk, 3) fuel pricing for Indonesian coal from AEL, and 4) dependence on reasonable merchant rates to extract higher than regulated peer value. We believe some will be tied up in time. We give APL the benefit of the doubt and model in flawless execution of 9240MW and arrive at a fair value of Rs106/share. Despite this the current stock price does not leave much on the table for investors who are prepared to back the Adani Group's entrepreneurial ability. We rate APL Sell/ Medium (3M) risk.

Valuation

Traditional valuation methodologies like P/E and EV/EBITDA multiples can be misleading if used to value pure infrastructure asset holders, as profitability of the projects can be lumpy, primarily on the basis of year of commissioning and the life of the asset. In some years, when projects are commissioned, the company may look attractive on a PE multiple basis, while in another year, when the asset life ends, the stock may appear relatively expensive. Infrastructure assets and more specifically Electric Utilities generate regular and largely predictable cash flow streams for a fixed time period. Therefore, discounted cash flow (DCF) is best-suited to value BOT projects. While applying DCF one can choose free cash flow to the firm (FCF) or free cash flow to equity (FCFE). We prefer FCFE as individual projects are highly geared and gearing changes as debt is rapidly paid off. If we assume APL executes all its projects flawlessly in line with our assumptions we would arrive at a value of Rs106 for the stock.

Risks

Our quantitative risk-rating system, which tracks 260-day historical share price volatility, assigns a Speculative Risk rating to Adani Power given the relatively short trading history of the stock. However, we believe a Medium Risk rating is more appropriate based on a number of factors, namely industry-specific risks, financial risk and management risks. Downside risks include: 1) Insufficient quantity of coal in Bunyu to fire the Mundra project; 2) The total reserves of 150mn tonnes have three licenses. While the counterparties of 2 of the 3 mines have procured long-term exploitation licenses the third license has not yet been granted to the counterparty; 3) Regulatory risk in Indonesia; 4) Fuel supply to Mundra Phase IV and Tiroda is contingent on AEL achieving certain milestones and finalizing the coal supply agreements and timely mining; 5) Fuel pricing risk for the Indonesian coal; 6) Merchant tariff risks; 7) Execution risks; 8) Chinese equipment quality risks; and 8) Interest rate risk. Upside risks include: 1) Better than expected operating parameters; 2) Faster than expected execution; 3) Higher than expected merchant tariffs; and 4) Significant progress on 3300MW of projects now in planning stages.

Appendix A-1

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Adani Power (ADAN.BO)

Ratings and Target Price History
Fundamental Research

Analyst: Venkatesh Balasubramaniam
Covered since October 20 2009

	Date	Rating	Target Price	Closing Price
1	20-Oct-09	*3M	*88.00	100.15

* Indicates change

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