Reliance Energy

A strong play on India's robust infrastructure and power demand

Initiation of coverage

STOCK RATING: 1-OVERWEIGHT

SECTOR VIEW: 1-POSITIVE

Ticker:	RELE IN
Price (28 Aug):	Rs 767
ADR (US$):	N/A
Price Target:	Rs 880
Exchange:	MUMBAI
SENSEX	14919

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Analyst Certification

We, Ivan Lee and Karthik Chellappa, hereby certify (1) that the views expressed in this research report accurately reflect our personal views about any or all of the subject securities or issuers referred to in this report and (2) that no part of our compensation was, is or will be directly or indirectly related to the specific recommendations or views contained in this report

September 3, 2007

http://www.lehman.com

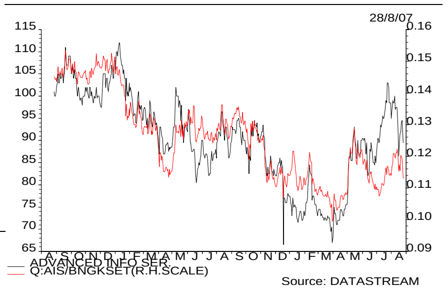
We believe Reliance Energy (REL) offers a good vehicle for investors wishing to capture growth from the rapid expansion of the Indian power sector (through REL's generation and EPC projects) and gain exposure to India's infrastructure space (through toll roads, MRTS, etc.). We initiate coverage with a 1-Overweight rating and a 12-month target price of Rs 880.

- With Reliance looking to expand its generation capacity 15-fold to 15,000 MW in five years (we have factored in 3,000 MW), we believe its core business is likely to achieve strong earnings growth as generation projects have a government-guaranteed 14% post-tax ROE. However, delays in some key projects continue to be an overhang.
- Reliance aims to secure two Ultra Mega Projects; with the Sasan project (4,000 MW) secured, its focus would now be on bidding for the Krishnapatnam project (4,000 MW). We estimate Sasan to add Rs 60/share, assuming 11-12% ROE.
- With cash and inter-corporate deposits (US$ 2.7 bn) representing nearly 64% of total assets and 70% of market cap, we believe the stock could see a significant re-rating once it deploys this cash, thereby resulting in ROE expansion.
- Apart from pure generation projects, Reliance Energy is also undertaking other infrastructure projects, such as toll roads and MRTS, which provide alternate earnings streams. At 16x '09E EPS, we think the stock offers good value.
- Risks include the slow pace of reform, regulatory uncertainty (the likelihood of moving from a post-tax ROE regime to one based on competitive bidding, although we think it is still some years away) and competition in the EPC space.

Market Data	
52-Week Range	436-817
Market Cap. (US$ mn)	3,953 bn
Shares Outstanding	228.5 mn
Float (%)	47
Dividend Yield (%)	0.97
Convertible	N/A

Financial	
Revenue FY07 (Rs mn)	65,753
5-Year EPS CAGR (%)	17
ROE (%)	10
Current BVPS (%)	409
Debt to Capital (%)	35
EV/Revenues	1.5
EV/EBITDA	17

EPS (FY Mar)	**2007A**	**2008E**	**2009E**
Net Earnings (Rs mn)	8,015	9,126	10,839
EPS (Rs)	37.20	39.94	47.43
P/E	20.62	19.20	16.15
DPS (Rs)	7.44	7.99	9.49
Yield (%)	0.97	1.04	1.24
P/BV	1.88	1.69	1.48



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Investment Summary

We initiate coverage of Reliance Energy with a 1-Overweight rating and a target price of Rs 880, offering 15% upside potential. We believe Reliance Energy offers a unique vehicle to capture growth, not only in the Indian power sector (through generation projects and EPC-Engineering, Procurement and Construction contracts) but also from potential forays into other areas of infrastructure, like toll roads, MRTS, etc. Delays in key generation projects and deployment of its large cash balance (cash and inter-corporate deposits constitute nearly 64% of the balance sheet and 70% of its market cap) continue to be an overhang on the stock. As potential opportunities emerge, like Ultra Mega Power Projects (UMPPs), and as the hurdles to existing projects are removed, we believe the excess cash will be deployed, resulting in an improvement in ROE. We think current level of 16x 09E P/E offers a good entry point.

Power Sector Outlook Remains Positive

Against the backdrop of a power deficit situation (with peak deficit rising to around 14%), we believe the outlook for the power sector remains positive. With nearly 9,000 MW worth of generation projects in the pipeline, plus new opportunities emerging in the form of UMPPs, Reliance Energy (REL) expects to expand its generation capacity from 1,000 MW to 15,000 MW in four-to-five years. Given that generation projects generate around 14% post-tax ROE, earnings visibility remains strong. However, some of these projects have hit hurdles, like fuel availability, etc., which is hurting the momentum in the short run, in our view. Therefore, we have conservatively factored-in attributable capacity of 3,000 MW of new capacity (including Sasan UMPP, excluding renewables) over FY08-12.

EPC Business – A Growing Share of the Revenue Pie

Apart from the pure generation business, REL is also engaged into EPC (Engineering, Procurement and Construction).The EPC business has experienced strong growth over the last couple of years. We believe Reliance, through its partnership with SEPCO (Shanghai Electric, 2727.HK, NR) for equipment supply, has a strong competitive advantage in this space as SEPCO's component costs are at least 10-15% cheaper than Indian domestic players, and as Reliance's project management capabilities will also enable it to deliver projects faster than its peers. We expect EPC earnings to achieve a CAGR of 29% over 2007-10E.

Further Fillip from Potential UMPP (Ultra Mega Power Projects)

Our discussions with REL reveal that the company is keen on securing two UMPPs. Given that the company has already secured Sasan (following Lanco's disqualification as REL's bid was the second highest and following Lanco's disqualification, REL agreed to match Lanco's bid), we believe that REL will be very keen on securing one of the two ensuing UMPPs- Krishnapatnam and Jharkand. However, if the Tata Power acquisition of PT Bumi is any indication, fuel tie-up may be an issue given that Korea is also interested in picking up equity stakes in Indonesian coal players. While securing a project may be ideal as it would ensure the deployment of cash and expansion of ROE, the ROE for the project per se may be difficult to maintain, compared to 18-20% which their Mumbai Generation facilities yield, given the challenges of securing coal supplies and level tariffs for 25 years. We estimate Sasan to add around Rs 60/share (50% share of Rs 120/share as the project will be undertaken through Reliance Energy Generation Limited in which REL has a 50% stake). Given the stringent competition in bidding, we have conservatively estimated Sasan to yield a levelised ROE of 11% and debt: equity ratio of 80:20.

However, going forward, we have assumed the bidding to be more rational for the remaining UMPPs; and hence, assuming REL secures Krishnapatnam, we estimate potential upside to be Rs 65/share (50% of Rs 130/share assuming a levelised ROE of 14% and debt/equity ratio of 70/30).

Large Cash Balance and Delay in Deployment

REL has disappointed the market in the past owing to its lackluster expansion in generation capacity (over the last two-to-three years, REL has added under 1,000 MW of capacity only) and also failed to deploy its large cash balance. The large cash balance (incl inter corp deposits) of US$ 2.7 bn tends to depress ROE. REL's ROE, presently in the region of 9-10%, is low compared to pure-play generators like NTPC, which has ROE in the region of 13-15%. With a favourable regulatory regime, which guarantees a post-tax ROE of 14% plus incentives, investing in generation projects alone can bring REL to 14-15% ROE levels, in our view, which suggests significant upside potential. However, delays in the deployment of cash continues to pose the biggest risk and overhang on the company, in our view.

Forays into Infrastructure Projects, Like Toll Roads, Entails Risk

While REL's forays into infrastructure projects like toll roads, MRTS, etc., is commendable — the sector is attracting a lot of investment and as it opens up alternate revenue streams for REL — the risks involved are higher when compared to pure generation projects. We think the transition of REL from a pure utility company to a diversified infrastructure play has not yet been fully recognized by the market. Over the next three-to-five years, REL will have a diversified earnings stream and a presence in various segments of the infrastructure space. While this does entail risks, progressive execution of the projects should help bring back investor confidence and lower the risks, in our view.

Slow Pace of Sector Reforms

REL's core utility business also depends on the pace with which reforms in the power sector progress in India. Given that reforms have been slow, it poses a credible risk to REL's prospects. Although the government has lined up ambitious plans for the power sector, like Ultra Mega Power Projects, the fact that they have yet to be tested and that one of the projects, namely the Sasan pit-head 4,000 MW project, initially ran into difficulties (owing to certain anomalies in the bid submitted by Lanco) although it was subsequently awarded to Reliance Energy, does little to inspire investor confidence in these projects.

Diversion of Promoter Efforts

REL is owned and managed by Mr. Anil Ambani, the younger sibling of the Ambani family. Apart from the utility space, Mr.Ambani also has interests in the telecom, capital (financial services) and media spaces. Assuming the reforms in the power sector continue to be slow paced, there is every likelihood that promoters' efforts will be diverted towards other sectors, which may hurt the growth prospects of REL.

Valuation

We use a sum-of-the-parts valuation methodology to value REL. As per the valuation breakdown given below, we find cash and cash equivalents comprising the biggest component of the valuation pie (29%). Although we believe that the cash would be deployed given the significant opportunities in the sector, we have valued the same at 1x P/B as a measure of prudence. With increasing opportunities in the power sector, we believe the stock could re-rate assuming it successfully deploys this cash. Trading at 19x FY 08E P/E (compared to Asian average at 15x and China average at 17.7x) and 16x 09E P/E, we believe the stock offers value considering the strong capacity expansion in the power business and steady growth in EPC business. We believe the current price factors in unimpressive ROE and the risks from here are more on the upside.

Figure 1: Sum-of-the-parts Valuation of Reliance Energy

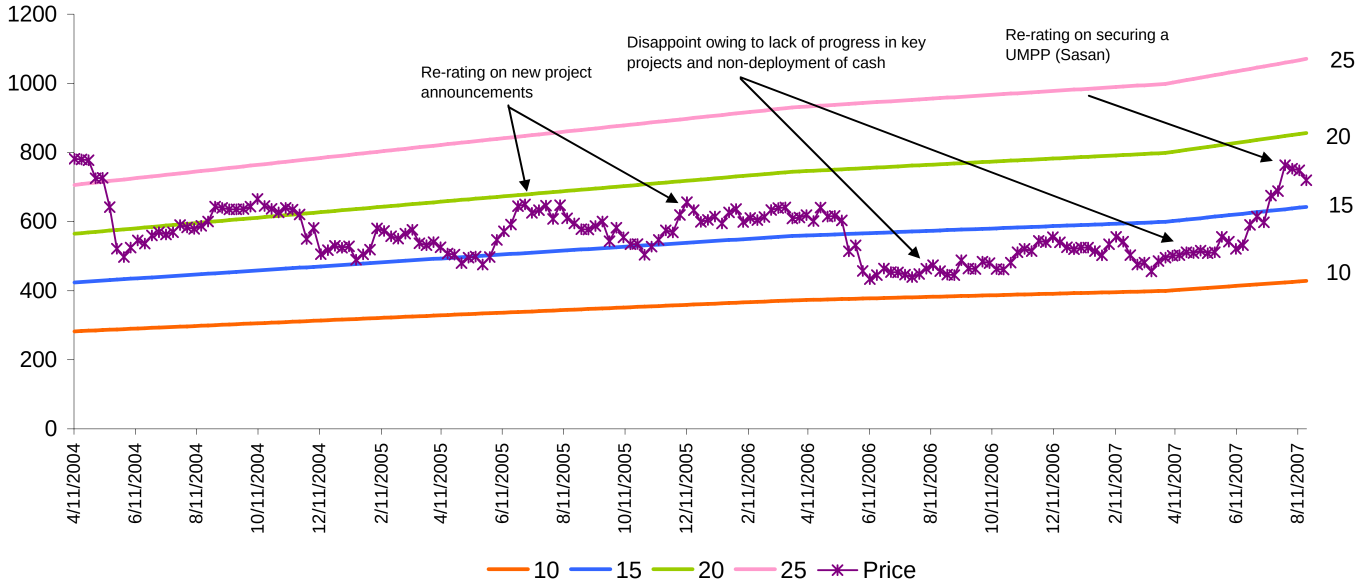
Sum of the parts valuation	NAV (Rs)	(% of total)
Mumbai Generation	54	6%
Mumbai Transmission	12	1%
Mumbai Distribution	105	12%
Delhi Distribution - BSES Yamuna Power	3	0%
Delhi Distribution - BSES Rajdhani Power	21	2%
EPC Business	278	32%
Sasan UMPP	59	7%
Other Assets	23	3%
Holding in Rosa Power	5	1%
Holding in Shahapur	17	2%
Holding in Toll road projects	25	3%
Holding in MRTS- Phase 1	21	2%
Valuation (Ex-cash)	**625**	**71%**
Cash Balance & Inter corporate dep/share	253	29%
Target Price	**878**	**100%**
Current Price	767	
Upside/(Downside)	14%	

Price targe rounded to Rs 880; Source: Lehman Brothers Research estimates

One-year Forward P/E Band

Based on one-year forward P/E chart, REL is trading at a 17-19x level (still below 19-20x 2 yr high). We attribute this to the prolonged delay in deploying its cash, resulting in depressed ROE. However, given that the power sector is seeing some activity in the form of UMPPs and with REL securing Sasan, and Krishnapatnam expected to be finalized by early Sep '07, and REL pushing for concluding some of its pending generation agreements, we believe the cash will get deployed over the next three-to-five years. The earliest signs of cash deployment should prompt a re-rating, in our view, and we recommend investors to accumulate at the current levels.

Figure 2: One year Forward P/E band



Source: Lehman Brothers Research

Regional Comparison

On a regional basis, REL trades at a premium to regional utilities at 19x 08E P/E compared to regional average of 15x .We believe the market, which has hitherto overly penalized REL for its inefficient capital deployment, is beginning to re-rate the stock as more visibility emerges on its future projects. While REL's ability to muster only 1,000 MW of generation capacity over the last four years since the sector was opened up is disappointing, that concepts such as UMPPs are taking off in a big way should provide ample scope for REL to deploy surplus cash and boost ROE. We expect REL to grow its capacity from 1,000MW currently to 4,000 MW by FY12, representing a CAGR of 32%.

We also attribute the premium which Indian utilities enjoy relative to its Asian peers to the following combination of factors (which are not to be found in any other market, in our view):

- India enjoys strongest demand growth for power at 8-9% pa (second only to China) among all ASEAN countries under our coverage.
- India enjoys a favourable regulatory environment (post tax ROE of 14% + incentives, second only to Hong Kong) which is the highest among ASEAN markets.
- Indian utilities enjoy fuel and interest pass throughs (similar to Thailand) which makes it one of the best defensive plays in the region.

Figure 3: Regional Comparison with Peers

Particulars	Recomm	Current price	P/E		P/B		EV/EBITDA		EPS Growth		ROE		Debt to Capital	
			2007	2008	2007	2008	2007	2008	2007	2008	2007	2008	2007	2008
INDIA														
NTPC	1-OW	167	20.0	18.2	2.8	2.6	12.2	10.9	18%	10%	15%	15%	36%	39%
Tata Power	2-EW	685	18.4	16.0	2.4	2.2	16.0	10.6	3%	15%	14%	14%	45%	46%
Reliance Energy	1-OW	767	20.6	19.2	1.9	1.7	23.8	19.8	14%	7%	9%	9%	39%	36%
CHINA														
Huadian	1-OW	4.91	20.8	13.8	2.1	1.9	9.9	7.9	18%	51%	10%	14%	69%	65%
Huaneng	1-OW	8.89	16.6	16.0	2.3	2.1	9.1	8.4	7%	4%	14%	14%	49%	45%
Datang	2-EW	8.94	30.9	30.5	4.0	3.6	12.0	10.7	8%	1%	13%	13%	64%	61%
China Power Intl	1-OW	4.04	18.7	9.6	1.5	1.4	18.2	9.7	-2%	94%	8%	15%	8%	15%
China Resources Power	2-EW	21.75	25.3	18.6	4.3	3.7	19.1	14.1	39%	36%	19%	21%	19%	21%
KOREA														
Korea Electric Power	1-OW	41300	12.1	9.4	0.6	0.6	5.3	4.9	-2%	30%	5%	6%	35%	31%
MALAYSIA														
Tenaga	1-OW	10.30	11.3	12.3	1.8	1.5	6.2	6.1	73%	-8%	18%	14%	50%	44%
HONG KONG														
CLP	1-OW	53.40	11.4	10.6	2.1	2.0	6.9	6.6	14%	7%	19%	19%	32%	29%
HKE	1-OW	38.15	11.0	10.4	1.7	1.6	7.4	7.3	9%	5%	16%	16%	17%	10%
Average			**18.1**	**15.4**	**2.3**	**2.1**	**12.2**	**9.8**						

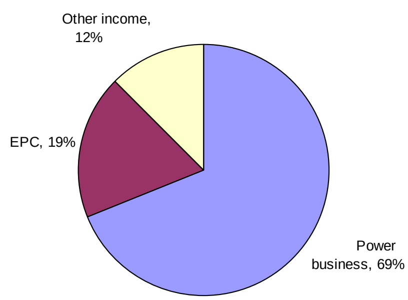
Current prices in local currency; Source: Lehman Brothers Research estimates, Bloomberg prices as on Aug 28'07

Financial Analysis

Earnings Growth

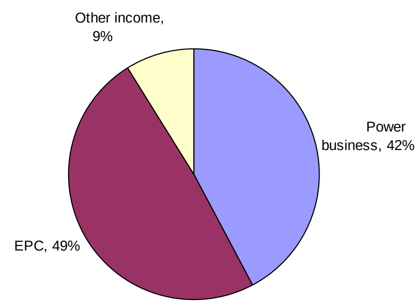
Earnings growth for Reliance Energy mainly is expected to come from two sources – capacity expansion of its power business and from its growing EPC order book. We believe share of EPC in the revenue pie will rise from 19% in 2006A to 49% in 2010E. This is on account of the rising order book of the EPC business on the one hand, and no immediate capacity ramp up with respect to its power business on the other.

Figure 4: Earnings Mix in 2006A



Source: Company data, Lehman Brothers Research

Figure 5: Earnings Mix in 2010E



Source: Company data, Lehman Brothers Research estimates

Balance Sheet

Cash & inter-corporate deposits account for nearly 64% of the assets that tend to depress ROE. However, going forward, with REL having secured Sasan and as hurdles to some of its proposed projects are removed, we believe the cash will be deployed, which should improve ROE significantly as it would mean the conversion of cash (which generates utmost 5-6% post tax as deposits) into a generation asset yielding an estimated 14% post-tax ROE. Given that the hurdles, as of now have not been removed, we have not factored the same into our model.

Figure 6: Cash & Inter-corporate Deposits as a % of Assets

Particulars	2007A	2008E	2009E	2010E
		(Amount in Rs mn)		
Cash & inter-corporate deposits	99,162	100,864	113,319	131,744
Total Assets	**154,535**	**164,939**	**179,062**	**197,749**
	64%	*61%*	*63%*	*67%*

Source: Company data, Lehman Brothers Research estimates

Sum-of-the-Parts

In this section, we give a breakdown of the valuation of the individual components of REL along with key assumptions.

Mumbai Business

- Generation – DCF with cost of equity of 12%, growth rate of 5% over 2011-17.
- Transmission – DCF with cost of equity of 12%, growth rate of 5% over 2011-17.
- Distribution – DCF with cost of cost of equity of 12%, growth rate of 5% over 2011-17.

For each of the above segments, we have assumed PAT (Profit after tax) = FCF (Free Cash Flow to equity shareholders). In other words, depreciation = maintenance capex + working capital and change in debt is negligible. Also, for all the segments, the long terminal growth rate has been assumed at 5%, given the strong outlook for power demand in India and the low base of Reliance Energy.

Figure 7: Valuation of Mumbai Generation Business

Valuation of Mumbai Generation	2008E	2009E	2010E	2011E	2012E	2013E	2014E	2015E	2016E	2017E
(Amount in Rs mn)										
Regulatory Equity at the beginning of the year	4,406	5,208	5,242							
Capitalisation	2,674	113	59							
Equity funding %	30%	30%	30%							
Equity portion of capitalization	802	34	18							
Regulatory equity at the end of the year	**5,208**	**5,242**	**5,260**							
Return Computation										
Rate of Return	16%	16%	16%							
Return on Regulatory Equity at the beginning of the year	705	833	839							
Return of equity portion of capital expenditure	64	3	1							
Total Return on Regulatory Equity	**769**	**836**	**840**	**882**	**926**	**973**	**1,021**	**1,072**	**1,126**	**1,182**
Increase		*9%*	*0%*	*5%*	*5%*	*5%*	*5%*	*5%*	*5%*	*5%*
Terminal value										**17,795**
Present Value Factor	1.0000	0.8931	0.7975	0.7123	0.6361	0.5681	0.5073	0.4531	0.4046	0.3613
Present Value of Cash Flows	**769**	**747**	**670**	**628**	**589**	**552**	**518**	**486**	**456**	**6,857**
Total Present Value	**12,272**									
Value / share	**54**									

Source: Maharashtra Electricity regulatory Commission (MERC), Lehman Brothers Research estimates

Figure 8: Valuation of Mumbai Transmission Business

Valuation of Mumbai Transmission	2008E	2009E	2010E	2011E	2012E	2013E	2014E	2015E	2016E	2017E
(Amount in Rs mn)										
Regulatory Equity at beginning of year	1,321	1,348	1,375							
Capitalisation	88	92	5							
Equity funding	30%	30%	30%							
Equity portion of capitalization	26	28	2							
Regulatory Equity at end of year	**1,348**	**1,375**	**1,377**							
Return Computation										
Rate of Return	14%	14%	14%							
Return on Regulatory Equity at beginning of the year	185	189	193							
Return on Equity portion of capital expenditure	2	2	0							
Total Return on Regulatory Equity	**187**	**191**	**193**	**202**	**212**	**223**	**234**	**246**	**258**	**271**
Increase		*2%*	*1%*	*5%*	*5%*	*5%*	*5%*	*5%*	*5%*	*5%*
Terminal Value										**4082**
Present Value Factor	1.0000	0.8931	0.7975	0.7123	0.6361	0.5681	0.5073	0.4531	0.4046	0.3613
Present Value of Cash Flows	**187**	**170**	**154**	**144**	**135**	**127**	**119**	**111**	**104**	**1573**
Total Present Value	**2,824**									
Value / share	**12**									

Source: MERC, Lehman Brothers Research estimates

Figure 9: Valuation of Mumbai Distribution

Valuation of Mumbai Distribution	2008E	2009E	2010E	2011E	2012E	2013E	2014E	2015E	2016E	2017E
(Amount in Rs mn)										
Regulatory Equity at beginning of the year	10,038	10,086	10,207							
Capitalisation	160	404	406							
Equity funding	30%	30%	30%							
Equity portion of capitalisation	48	121	122							
Regulatory Equity at end of the year	**10,086**	**10,207**	**10,329**							
Return Computation										
Rate of Return	16%	16%	16%							
Return on Regulatory Equity at the beginning of the year	1,606	1,614	1,633							
Return on Equity portion of capital expenditure	4	10	10							
Total Return on Regulatory Equity	**1,610**	**1,623**	**1,643**	**1,725**	**1,811**	**1,902**	**1,997**	**2,097**	**2,202**	**2,312**
Increase		*1%*	*1%*	*5%*	*5%*	*5%*	*5%*	*5%*	*5%*	*5%*
Terminal Value										**34,801**
Present Value Factor	1	0.8931	0.7975	0.7123	0.6361	0.5681	0.5073	0.4531	0.4046	0.3613
Present Value of Cash Flows	**1,610**	**1,450**	**1,310**	**1,229**	**1,152**	**1,080**	**1,013**	**950**	**891**	**13,410**
Total Present Value	**24,095**									
Value/share	**105**									

Source: Company data, Lehman Brothers Research estimates

Valuation of Delhi distribution

We use a DCF methodology with assumptions similar to the Mumbai business and with growth rate over 2011-17 of 5%.

Figure 10: Valuation of Delhi Distribution Business

Valuation of Delhi Distribution- BSES Yamuna Power	2008E	2009E	2010E	2011E	2012E	2013E	2014E	2015E	2016E	2017E
(Amount in Rs mn)										
Return on Equity										
Return	381	400	420	441	463	487	511	536	563	591
Increase	*5%*	*5%*	*5%*	*5%*	*5%*	*5%*	*5%*	*5%*	*5%*	*5%*
Terminal Value										8,904
Present Value Factor	1	0.8931	0.7975	0.7123	0.6361	0.5681	0.5073	0.4531	0.4046	0.3613
Present Value of Cash Flows	**381**	**358**	**335**	**314**	**295**	**276**	**259**	**243**	**228**	**214**
Total Present Value	**2,903**									
Value of REL's stake	**758**									
Value/share	**3**									

Valuation of Delhi Distribution- BSES Rajdhani Power Limited	2008E	2009E	2010E	2011E	2012E	2013E	2014E	2015E	2016E	2017E
(Amount in Rs mn)										
Return on Equity										
Return	1,144	1,201	1,261	1,325	1,391	1,460	1,533	1,610	1,691	1,775
Increase	*5%*	*5%*	*5%*	*5%*	*5%*	*5%*	*5%*	*5%*	*5%*	*5%*
Terminal Value										26,721
Present Value Factor	1.0000	0.8931	0.7975	0.7123	0.6361	0.5681	0.5073	0.4531	0.4046	0.3613
Present Value of Cash Flows	**1,144**	**1,073**	**1,006**	**943**	**885**	**830**	**778**	**729**	**684**	**10,297**
Total Present Value	**18,369**									
Value of REL's stake	**4,780**									
Value/share	**21**									

Source: Delhi Electricity Regulatory Commission (DERC), Lehman Brothers Research estimates

Valuation of EPC business

- With fairly visible Mumbai and Delhi businesses, we believe surprise could come from the EPC business where REL has made rapid strides. We also use DCF to value EPC business, and our key assumptions on EPC business include:
- 33% of the order book gets booked annually as sales;
- EBITDA margins around 9-11%, PAT/FCF margins around 8%;
- Terminal growth rate of 5% and cost of equity of 12%

Figure 11: Valuation of EPC Business (Rs m)

Valuation of EPC Business	2008E	2009E	2010E	2011E	2012E	2013E	2014E	2015E	2016E	2017E
Order Book at end of March'06	52,500	63,000	75,600	86,940	95,634	105,197	110,457	115,980	121,779	127,868
Sales (including WIP at close)	28,406	38,115	45,738	53,638	60,249	66,274	71,166	74,724	78,461	82,384
% of order book fulfilled	*33%*	*33%*	*33%*	*33%*	*33%*	*33%*	*33%*	*33%*	*33%*	*33%*
Increase in order book	*56%*	*20%*	*20%*	*15%*	*10%*	*10%*	*5%*	*5%*	*5%*	*5%*
PAT/FCF Margin	*8%*	*8%*	*8%*	*8%*	*8%*	*8%*	*8%*	*8%*	*8%*	*8%*
Terminal Growth										*5%*
PAT	2,273	3,049	3,659	4,291	4,820	5,302	5,693	5,978	6,277	6,591
Terminal Value										99,215
Discount Factor	1.0000	0.8931	0.7975	0.7123	0.6361	0.5681	0.5073	0.4531	0.4046	0.3613
Present Value of Cash Flows	**2,273**	**2,723**	**2,918**	**3,056**	**3,066**	**3,012**	**2,888**	**2,708**	**2,540**	**38,231**
Total Present Value	**63,415**									
Value/share	**278**									

Source: Company data, Lehman Brothers Research

Holding in Rosa Power

REL has a 50% stake in Rosa Power as the plant will be operated under REL's 50% subsidiary, Reliance Energy Generation limited. Rosa is a 600 MW coal-fired plant that will supply electricity to the Uttar Pradesh Power Corporation at Rs 2.69/unit. The plant is expected to be commissioned by 2010 at a cost of around Rs 27 bn. REL has tied up with SEPCO (Shanghai Electric) for equipment supply. We value Rosa assuming it will generate 14% post tax ROE.

Figure 12: Valuation of Rosa Power

Holding in Rosa Power	2008E	2009E	2010E	2011E	2012E	2013E	2014E	2015E	2016E	2017E
Capacity (MW)				600	600	600	600	600	600	600
Capex (Rs mn)				27,500	27,500	27,500	27,500	27,500	27,500	27,500
Equity portion				20%	20%	20%	20%	20%	20%	20%
Equity component (Rs mn)				5,500	5,500	5,500	5,500	5,500	5,500	5,500
ROE				14%	14%	14%	14%	14%	14%	14%
PAT				770	770	770	770	770	770	770
Terminal Value										11,591
Total				770	770	770	770	770	770	12,361
Equity capex (proportion)	15%	25%	50%	10%						
Equity capex	(825)	(1,375)	(2,750)	(550)						
Present Value Factor	1.0000	0.8931	0.7975	0.7123	0.6361	0.5681	0.5073	0.4531	0.4046	0.3613
Present Value	(825)	(1,228)	(2,193)	157	490	437	391	349	312	4,467
Total Present Value	**2,355**									
Value/share	**10**									
Reliance's stake	**50%**									
Value/share for Reliance	**5**									

Source: Company data, Lehman Brothers Research estimates

Holding in Sahapur Plant

The Shahapur plant is a 4,000 MW plant. Owing to pending land issues with Tata Power, we have not considered the same for our valuation purposes. However, based on our recent talks with management, around 1,200 MW has received environmental clearance. REL has secured around 2,500 acres for the whole plant. Given the reasonable degree of certainty associated with the 1,200 MW, we have factored that alone into our model.

Figure 13: Valuation of 1,200 MW Sahapur Plant

Holding in Shahapur Plant	2008E	2009E	2010E	2011E	2012E	2013E	2014E	2015E	2016E	2017E
Capacity (MW)				4,000	4,000	4,000	4,000	4,000	4,000	4,000
Capacity (MW) cleared for commencement of construction				1,200	1,200	1,200	1,200	1,200	1,200	1,200
Capex (Rs mn) (Assuming cost of US$ 1.2 mn/MW and Ex rate of Rs 42/US$)				60,480	60,480	60,480	60,480	60,480	60,480	60,480
Equity portion				30%	30%	30%	30%	30%	30%	30%
Equity component (Rs mn)				18,144	18,144	18,144	18,144	18,144	18,144	18,144
ROE				14%	14%	14%	14%	14%	14%	14%
PAT				2,540	2,540	2,540	2,540	2,540	2,540	2,540
Terminal value										38,239
Total				2,540	2,540	2,540	2,540	2,540	2,540	40,779
Present Value Factor	1.0000	0.8931	0.7975	0.7123	0.6361	0.5681	0.5073	0.4531	0.4046	0.3613
Equity capex (proportion)	15%	25%	50%	10%						
Equity capex	(2,722)	(4,536)	(9,072)	(1,814)						
Present Value	(2,722)	(4,051)	(7,235)	517	1,616	1,443	1,289	1,151	1,028	14,735
Total Present Value	**7,770**									
Value /share	**34**									
Reliance's stake	**50%**									
Value/share for Reliance Energy	**17**									

Source: Company data, Lehman Brothers Research estimates

Toll roads and MRTS- Phase 1

REL has holdings in five toll roads, all of which will be developed in Tamil Nadu, working out to a total stretch of 400 kms. While SPVs (Special Purpose Vehicles) for the first two have been formed, namely DS Toll Road and NK Toll Road, the other three are expected to be formed shortly. REL expects to generate a ROE of 18% on these toll roads and believes the demand to be fairly strong given that there are no alternate routes available in these vicinities, and hence, a commuter would have to invariably take the toll road to save time. The total investment on the five toll roads is expected to be Rs 31,000 mn.

With respect to MRTS-Phase 1, REL has won a contract to develop a 12 km stretch connecting Ghatkopar-Andheri-Versova. The project is on a BOOT (build, own, operate and transfer) basis. The concession period is 35 years (including the construction period). The SPV has also been formed, namely, Mumbai Metro One Pvt Ltd. REL expects around 600,000 commuters to use the service everyday. We have assumed a ROE of 18% for this project which entails an investment of Rs 31 bn. Construction is expected to begin by the end of 2007 for commercial operation in FY 11.

Figure 14: Valuation of Toll Roads and MRTS-Phase 1

Holding in Toll roads - DS Toll Road and NK Toll Road	2008E	2009E	2010E	2011E	2012E	2013E	2014E	2015E	2016E	2017E
DS/NK Toll Road & Road No 3-5- Investment (Rs mn)				31,000	31,000	31,000	31,000	31,000	31,000	31,000
Equity portion (50%)				50%	50%	50%	50%	50%	50%	50%
Equity portion of investment (Rs mn)				15,500	15,500	15,500	15,500	15,500	15,500	15,500
Target ROE				18%	18%	18%	18%	18%	18%	18%
PAT/ROE				2,790	2,790	2,790	2,790	2,790	2,790	2,790
Terminal Value										42,000
Total				2,790	2,790	2,790	2,790	2,790	2,790	44,790
Present Value Factor	1.0000	0.8931	0.7975	0.7123	0.6361	0.5681	0.5073	0.4531	0.4046	0.3613
Equity capex (proportion)	30%	30%	25%	15%						
Equity capex	(4,650)	(4,650)	(3,875)	(2,325)						
Present Value	(4,650)	(4,153)	(3,091)	331	1,775	1,585	1,415	1,264	1,129	16,184
Total Present Value	**11,790**									
Value/share	**52**									
Reliance's stake	**49%**									
Value/share for Reliance Energy	**25**									

Holding in MRTS-Phase 1	2008E	2009E	2010E	2011E	2012E	2013E	2014E	2015E	2016E	2017E
Phase 1- 12 kms - Investment (Rs mn, excl viability gap funding of Rs 6500 mn)				18,500	18,500	18,500	18,500	18,500	18,500	18,500
Equity portion (50%)				50%	50%	50%	50%	50%	50%	50%
Equity portion of investment (Rs mn)				9,250	9,250	9,250	9,250	9,250	9,250	9,250
Target ROE				18%	18%	18%	18%	18%	18%	18%
PAT/ROE				1,665	1,665	1,665	1,665	1,665	1,665	1,665
Terminal value										25,065
Total				1,665	1,665	1,665	1,665	1,665	1,665	26,730
Present Value Factor	1.0000	0.8931	0.7975	0.7123	0.6361	0.5681	0.5073	0.4531	0.4046	0.3613
Equity capex (proportion)	30%	30%	25%	15%						
Equity capex	(2,775)	(2,775)	(2,313)	(1,388)						
Present Value	(2,775)	(2,478)	(1,844)	198	1,059	946	845	754	674	9,658
Total Present Value	**7,036**									
Value/share	**31**									
Reliance's stake	**69%**									
Value/share for Reliance Energy	**21**									

Source: Company data, Lehman Brothers Research estimates

Other Assets

We value other assets of REL at replacement cost as follows:

Figure 15: Valuation of Other Assets

Valuation of Other Power Assets	
Samlakot (Combined Cycle) (MW)	**220**
Cost/MW (Rs mn)	40
Replacement Value	8800
Equity Portion	30%
Equity value	**2640**
Goa (Combined Cycle) (MW)	**48**
Cost/MW (Rs mn)	40
Replacement Value	1920
Equity portion	30%
Equity Value	**576**
Kochi (Naphta) (MW)	**165**
Cost/MW (Rs mn)	40
Replacement Value	6600
Equity portion	30%
Equity value	**1980**
Wind Farm Project (MW)	**8**
Cost/MW (Rs mn)	48
Replacement Value	384
Equity portion	30%
Equity value	**115**
Total Value of other Power Assets	**5311**
Value/share	**23**

Source: Lehman Brothers Research

Valuation summary – Value (ex-cash) and value (incl cash)

Assuming we value cash & cash equivalents at book, we arrive at a fair value of Rs 880. Further upsides would be contingent on how one values REL's cash balance. The sensitivity of the value ascribed to the cash balance can be seen from the below summary:

Figure 16: Sensitivity of Valuation of Cash and Cash balance to REL's Fair Value

Particulars	Valuation of cash at x P/B				
	0.8	0.9	1	1.2	1.5
Valuation (ex-cash)	625	625	625	625	625
Valuation of Cash	202	228	253	304	380
Target Price	**827**	**852**	**878**	**928**	**1,004**
Current Price	767	767	767	767	767
Upside/ (Downside)	*8%*	*11%*	*14%*	*21%*	*31%*

Source: Lehman Brothers Research

A Potential 15-fold Increase in Capacity

Against the backdrop of a power deficit situation (with peak deficit rising to around 14%), we believe the outlook for the power sector remains positive. With nearly 9,000 MW worth of generation projects in the pipeline plus new opportunities emerging in the form of UMPPs, Reliance Energy (REL) plans to expand its generation capacity from 1,000 MW to 15,000 MW in four-to-five years.

However, some of these projects have hit hurdles recently, which will potentially slow the expansion progress in the short run, in our view. Therefore, we have conservatively factored in 3,000 MW of new capacity for FY08-12, 20% of the management's expectation.

As a result, we forecast in our model, REL's attributable capacity to grow from 1,000 MW as of end-F07 to 4,000MW by FY12, representing a CAGR of 32%, mainly fuelled by the Sasan UMPP of 4,000 MW (attributable capacity to REL – 2,000 MW).

Figure 17: REL's Capacity Expansion over 2007-12E (projects already secured)

Particulars	Capacity	REL's stake	Capacity (MW)					
			Current	FY 08	FY 09	FY 10	FY 11	FY 12
Present Capacity			941					
Rosa Power	600 MW	50%					300	
Shahapur Plant	1,200 MW	50%					600	
Sasan UMPP	4,000 MW	50%						2,000
Total Capacity			**941**	**941**	**941**	**941**	**1841**	**3841**

Source: Company data, Lehman Brothers Research estimates

Strong Growth in Core Utility Business in Mumbai

A Lackluster FY07 Performance due to Surplus Adjustment

REL's Mumbai business' (where REL has an integrated model of generation, transmission and distribution) performance in FY 07 was lackluster, owing to Maharashtra Electricity regulatory Commission's (MERC) order adjusting Rs2.6bn of surplus for FY 05 and FY 06 in FY 07.

Our Outlook for the Next Three Years (2008-10) Remains Positive

We expect the Mumbai business to post a modest earnings CAGR of 2% over 08-10E by virtue of the recent order from MERC. MERC has now passed an order for the next three years over 2008-10. In the order, MERC notes that the surplus adjusted in FY 07 is recoverable from customers over the next three years, which would imply that around Rs 870 mn would be recovered over 08-10. The new order implies that the Mumbai business would make around Rs 2.47 bn in post-tax profits for FY 08 (Rs 0.67bn from generation at 14% ROE, Rs 0.19 bn from transmission and Rs 1.61bn) and would make around Rs 2.5 bn over FY 09-10, which lends sufficient visibility to REL's earnings from its core Mumbai business for the next three years, in our view.

Pending Charges Against Tata Power — A Continuing Overhang

The REL vs. Tata Power dispute on standby charges is almost reaching its final stages, with Tata Power filing an appeal with the Supreme Court against the order of ATE directing Tata Power to deposit Rs 2.27 bn (being 50% of the amount of the refund including interest up to Dec 31, 2006) and also asking Tata Power to furnish a bank guarantee for Rs 2.27 bn. REL was permitted to withdraw the amount on condition that in the event that the appeal goes against REL, REL will refund the amount to Tata Power.

Figure 18: Mumbai Business – Generation + Transmission + Distribution

Particulars	Mumbai Generation			Mumbai Transmission			Mumbai Distribution			TOTAL		
	FY 08E	FY 09E	FY 10E	FY 08E	FY 09E	FY 10E	FY 08E	FY 09E	FY 10E	FY 08E	FY 09E	FY 10E
	(Amount in Rs mn)			(Amount in Rs mn)			(Amount in Rs mn)			(Amount in Rs mn)		
Revenue Expenditure	7,245	7,481	7,519	263	276	286	37,320	37,796	38,402	44,829	45,553	46,207
Return on Equity capital	**673**	**732**	**735**	**187**	**191**	**193**	**1,610**	**1,623**	**1,643**	**2,470**	**2,546**	**2,571**
Less : Non-tariff income	(62)	(62)	(62)	(33)	(34)	(36)	(520)	(520)	(520)	(615)	(616)	(618)
Aggregate Revenue Requirement	**7,856**	**8,150**	**8,192**	**417**	**433**	**443**	**38,410**	**38,899**	**39,525**	**46,684**	**47,482**	**48,160**

Source: MERC, Lehman Brothers Research estimates

EPC Business – A Growing Share of the Revenue Pie

With sufficient visibility over its core Mumbai business, we believe upsides should come from its EPC (engineering, procurement and construction) business. The order book for the EPC business stands at Rs 55 bn presently. REL aims to do nearly Rs 10-20 bn worth of EPC business annually. Given that these projects can generate EBITDA margins of 9-11%, they should turn out to be good income generating venues for REL. Moreover, with REL focusing only on power sector projects in the EPC segment, like rural electrification, distribution etc., we believe that execution risks are minimal.

Figure 19: Profile of EPC Contracts (undertaken and being pursued) by REL

Project	Description	Order Value (Rs bn)
	Already secrued	
Generation		
Yamuna Nagar Thermal Power Station	2 x 300 MW	20.97
Hisar Thermal Power Project	2 x 600 MW	37.75
Parichha Thermal Power Station	2 x 250 MW	3.95
Transmission & Distribution		
UP rural electrification project	17 districts in UP	7.34
RGGVY scheme of PGCIL	Sitapur and Rae-Bareilly	1.48
AD Hydro Transmission works	65 km, 220 KV D/C Allain Duhangan-Panarasa transmission line	0.55
Switchyards at Hisar	400 KV switchyard	
TOTAL		**72.04**
	Bids currently being pursued	
Malwa Power project	2 x 600 MW	40
Substations from State Utilities	400/220 KV	5
Transmission line work from Powergrid		2
RGGVY rural electrification schemes		1

Source: Company data, Lehman Brothers Research

The EPC division undertakes Engineering, procurement and construction contracts on a turnkey basis for major projects, both in the public and private sector, both at home and abroad. In this regard, for equipment supply, it has partnered with SEPCO (Shanghai Electric) as it does not have a boiler/turbine manufacturing facility. The success reaped by REL in this space can be seen from the big order which they won – The Hisar Power order. It is a 1,200 MW coal-fired plant and the contract value is nearly Rs 38 bn. REL beat domestic players like BHEL to get the order, which suggests that the REL- SEPCO partnership was able to quote a competitive rate compared to BHEL. We believe REL will be able to replicate this success with future projects also. The following are examples of projects that REL has undertaken in the past:

- Thermal, hydro and gas-based power generating stations;
- Transmission lines and switch yards;
- Overhead and underground electrical networks;
- Renovation and modernization of Delhi distribution network.

We expect the EPC business to generate an earnings CAGR of 24% over 07-10 and expect it to constitute nearly 44% of total revenues by 2010 (up from 32% presently). REL is also engaged in various infrastructure projects as follows:

Figure 20: Infrastructure Projects Proposed by REL

Particulars	Stake	Size	Cost (Rs mn)	Status
Road Projects		**400 km**	**31,000**	**70:30 Debt-Equity**
DS Toll Road	49% stake			SPV formed, operational FY 09-10
NK Toll Road	49% stake			SPV formed, operational FY 09-10
Road Number 3	49% stake			SPV not formed
Road Number 4	49% stake			SPV not formed
Road Number 5	49% stake			SPV not formed
Power Transmission Projects				
Package B (Southern Maharashtra)	51% stake	1500 km	12,000	No activity
Package C (Gujarat)	51% stake		6,000	No activity
Parbati Koldam Project	26% stake		NA	No activity
Mass Rapid Transit System				
MRTS- Phase 1	69% stake	12 km	25,000	Operational by FY 11
CPP				
Thane Belapur	NM	165 MW		Stalled
Vidharbha	34% stake	300 MW		Land/customer finalization ongoing

Source: Company data, Lehman Brothers Research

A REL-led consortium has been pre-qualified to participate in the bidding process for the Delhi Airport Express Link and the Hyderabad Metro project.

In addition to the above, REL has also emerged as the successful bidder for the Rs 64 bn Business District project proposed in Hyderabad by the state-owned Andhra Pradesh Industrial Infrastructure Corporation (APIIC). The project will have three modules, including a 100-plus story tower with a minimum height of 450m, likely to be the tallest structure in the entire South East Asia region. The entire project is expected to be completed in five years. This is the first major infrastructure project being taken up by the Anil Dhirubhai Ambani group in Andhra Pradesh. Reliance Energy will hold a 66% equity stake in the project while its joint venture partner, Shobha Developers, will hold a 23% stake. The remaining 11% equity will be held by APIIC towards the land component of the project, which is to the extent of 80 acres.

Delhi Distribution – Steady, Stable business

REL and Tata Power garnered the three distribution circles (BRPL, BYPL and NDPL) which were privatized in 2002.While BRPL and BYPL started operating as REL's joint venture companies, NDPL became Tata Power's joint venture company. While REL's joint ventures have not performed as well, compared to Tata Power's joint venture; nevertheless, the improvement can be seen from the reduction in AT&C (aggregate, technical & commercial) losses. According to REL, the aggregate technical and commercial losses (AT & C losses) in the BRPL and BYPL were higher than that communicated at the time of privatization. However, were the Delhi Electricity Regulatory Commission (DERC) to interpret the situation as if no overachievements had been made in the reduction of losses; REL would not be entitled to any incentives.

The improvements brought about by REL's joint venture companies are given below:

Figure 21: Delhi Distribution – Reduction of Loss –Actual v/s Target Comparison

Particulars	Losses as per		FY 07 end losses	Target	Reduction as per	
	REL	Regulator			REL	Regulator
BRPL	51%	48%	30%	31%	21%	17%
BYPL	63%	57%	39%	40%	24%	17%

Source: Company data, Lehman Brothers Research

We believe the Delhi business will continue to remain stable in terms of earnings growth. We have not factored in any incentives from improvement in targets given REL's past record of not being able to meet the targets set by the regulator.

Ultra Mega Power Project — The Next Big Thing?

REL expects to secure at least one UMPP (Ultra Mega Power Project), of the five which they expect to be announced over the next three-to-five years. Each Ultra Mega Power Project will have a capacity of 4,000 MW and will have five units of 800 MW each. The facility will use super critical technology for its boilers, which is supposed to be more efficient compared to normal boilers.

Having secured Sasan (following the disqualification of Lanco), REL appears to be confident of securing Krishnapatnam also. Winning another UMPP could result in a significant re-rating of the stock, in our view, mainly on account of two factors:

- A UMPP will invariably come in at a higher ROE than what REL makes presently and hence on a consolidated basis, there would be an improvement in ROE.
- A UMPP would entail a typical investment of around Rs 160 bn and the equity component alone (assuming a 70/30 ratio) would entail an investment of Rs 50 bn, which REL can comfortably fund from its cash balance. Hence, idle cash will be converted into a double digit ROE generating asset which would also improve overall returns.

We estimate the Sasan UMPP to add around Rs 60/share, assuming 11% ROE and a debt/equity ratio of 80/20 (we have assumed a lower ROE compared to normal generation projects given the competitive intensity of the bid). Assuming REL secures Krishnapatnam, we believe it can potentially add another Rs 65/share (for Krishnapatnam, we have assumed more rational bidding and hence a levelised ROE of 14% and debt/equity ratio of 70/30).

It may be pertinent to note, with respect to the workings below, we believe that the figure (mainly PAT and FCF) for 2022 will remain more or less the same until 2036, which is the end of the project. We have assumed a terminal growth rate of 3% from year 26 onwards.

Figure 22: Potential Upside from Securing a UMPP (Eg. Krishnapatnam)

Valuation of Krishnapatnam	2004	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2035	2036
(Amount in Rs mn)																		
Capacity (MW)	4,000																	
Cost/MW (Rs mn/MW)	45																	
Total Cost (Rs mn)	180,000																	
Debt (70%)	126,000																	
Equity(30%)	54,000																	
Salvage Value (10% of asset)	18,000																	
Terminal growth rate	3%																	
Cost of equity	12%																	
Tariff Levelised (Rs/unit)	2.50																	
Depreciation (90% of cost of the asset over 25 years)	3.6%																	
Interest rate	8%																	
Tax rate	12%																	
Coal costs																		
Indonesia production costs (US$/ton)	55																	
Freight from Indonesia to India	40%																	
Freight costs	22																	
Total costs	**77**																	
Mark up (50%)	50%																	
Total coal cost (US$/ton)	116																	
Import duty	5%																	
Total landed cost (US$/ton)	**121**																	
Currency conversion (Rs/US$)	40																	
Total landed cost (Rs/ton)	**4,851**																	
Coal required per unit of electricity (kg/Kwh)	0.30																	

Projections	2004	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2035	TERMINAL YEAR 2036
		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14		28
Revenue																		
Capacity (MW)						4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000		4,000
PLF (%)						70%	74%	78%	82%	86%	90%	90%	90%	90%	90%	90%		90%
Units sold						24,528	25,930	27,331	28,733	30,134	31,536	31,536	31,536	31,536	31,536	31,536		31,536
Tariff (Rs/unit)						2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50		2.50
Revenue (Rs mn)						**61,320**	**64,824**	**68,328**	**71,832**	**75,336**	**78,840**	**78,840**	**78,840**	**78,840**	**78,840**	**78,840**		**78,840**
Expenditure																		
Coal costs						35,696	39,622	41,764	43,906	46,047	48,189	48,189	48,189	48,189	48,189	46,812		46,812
Annual increase							*5%*	*5%*	*5%*	*5%*	*5%*	*5%*	*5%*	*5%*	*5%*	*2%*		*2%*
Rebate (2% of Revenue)						1,226	1,296	1,367	1,437	1,507	1,577	1,577	1,577	1,577	1,577	1,577		1,577
O&M (5% of revenue)						3,066	3,241	3,416	3,592	3,767	3,942	3,942	3,942	3,942	3,942	3,942		3,942
EBITDA						**21,332**	**20,664**	**21,781**	**22,898**	**24,015**	**25,132**	**25,132**	**25,132**	**25,132**	**25,132**	**26,509**		**26,509**
Depreciation						6,480	6,480	6,480	6,480	6,480	6,480	6,480	6,480	6,480	6,480	6,480		6,480
Interest						10,080	10,080	10,080	10,080	10,080	10,080	10,080	10,080	10,080	10,080	10,080		10,080
PBT						**4,772**	**4,104**	**5,221**	**6,338**	**7,455**	**8,572**	**8,572**	**8,572**	**8,572**	**8,572**	**9,949**		**9,949**
Taxes						573	493	627	761	895	1,029	1,029	1,029	1,029	1,029	1,194		1,194
PAT						**4,199**	**3,612**	**4,595**	**5,578**	**6,561**	**7,543**	**7,543**	**7,543**	**7,543**	**7,543**	**8,755**		**8,755**
ROE						**8%**	**7%**	**9%**	**10%**	**12%**	**14%**	**14%**	**14%**	**14%**	**14%**	**16%**		**16%**
Levelised ROE						**14%**												

Cash Flow Projections	2004	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2035	2036
PAT						4,199	3,612	4,595	5,578	6,561	7,543	7,543	7,543	7,543	7,543	8,755		8,755
Add : Depreciation						6,480	6,480	6,480	6,480	6,480	6,480	6,480	6,480	6,480	6,480	6,480		6,480
Less : Changes in working capital (25% of profits)						(1,050)	(903)	(1,149)	(1,394)	(1,640)	(1,886)	(1,886)	(1,886)	(1,886)	(1,886)	(2,189)		(2,189)
Add : Salvage value of plant																		18,000
Terminal value																		236,581
Project Cash Flow						**9,630**	**9,189**	**9,926**	**10,663**	**11,400**	**12,138**	**12,138**	**12,138**	**12,138**	**12,138**	**13,046**		**267,627**
Present Value Factor		1.0000	0.8931	0.7975	0.7123	0.6361	0.5681	0.5073	0.4531	0.4046	0.3613	0.3227	0.2882	0.2574	0.2298	0.2053		0.0421
Present Value						**6,125**	**5,220**	**5,036**	**4,831**	**4,613**	**4,386**	**3,917**	**3,498**	**3,124**	**2,790**	**2,678**		**11,276**
Total Present Value						**74,714**												
Equity capex proportion		15%	25%	50%	10%													
Equity capex		**(8100)**	**(13500)**	**(27000)**	**(5400)**													
Less : Equity portion of capex						**(45,536)**												
Net Present Value/share						**29,178**												
Present Value/share						**128**												
REL's share		**50%**																
Value of Krishnapatnam to REL		**64**																

Source: Lehman Brothers Research

Why REL is Best Positioned to Win Another UMPP

Apart from REL, the only other pure utility companies that may bid for the next round of UMPPs are NTPC and Tata Power. Both NTPC and Tata Power already have their hands full (NTPC is set to expand its generation capacity from 28,000 MW to around 50,000 in five years time and Tata Power will be focusing on its Mundra UMPP (whose capacity of 4,000 MW is higher than its existing generation capacity itself). Hence we think significant management bandwidth of both NTPC and Tata Power will be spent on the projects above, which would imply that REL may face less intense competition. We believe the possibility of REL securing another UMPP looks bright, although we are not incorporating the potential upside into our model. Although REL recently secured Sasan, given the fact that Sasan wasn't awarded to REL initially (it was awarded to REL following the disqualification of Lanco) implies that REL may be aggressive in the first instance in preparing for Krishnapatnam; therefore, we think REL should be well positioned to win Krishnapatnam.

Scouting for Coal Reserves Abroad

REL has also been scouting for a stake in overseas coalmines to ensure coal linkage. We believe securing coal supplies would become important in case REL secures a coastal UMPP like Krishnapatnam. If Tata's acquisition of PT Bumi is anything to go by, coalmines abroad are not going to come cheap. Hence, REL will likely have a difficult assignment balancing the value at which the mine is procured and the quantity of supply that can be secured. While coal from international mines has higher calorific, it involves higher capital expenditure. Moreover, management's limited past experience on this front may lead to significant efforts being directed towards the same.

Investment Risks

Uncertainty Surrounding Capacity Additions Pose the Biggest Risks

Reliance Energy has around 1,000 MW of installed capacity out of which 500 MW in Dahanu (Maharashtra) is for the supply of power to the Mumbai license area. Other plans which REL has in the pipeline, but which have met with various hurdles, include:

- A 5,600 MW gas plant at Dadri (Uttar Pradesh), which has been held up due to a lack of fuel linkage. REL has indicated that it is contemplating converting part of the capacity into coal.

- A 4,000 MW gas plant in Shahapur (Maharashtra) – held up due to pending land issues with Tata Power. We have factored 1,200 MW as environmental clearance has been obtained and construction will likely commence shortly.

- A 1,700 MW hydro plant in Arunachal Pradesh – Detailed Project Report and financial closure process is on going.

- A 280 MW hydro plant in Uttranchal – Detailed Project Report and financial closure process is on going.

- A 300 MW captive plant in Nagpur – land acquisition and finalization of customer list is ongoing.

As a result of the uncertainty surrounding the above, we have not incorporated the above projects into our model. Positive news from any of the above could pose upside risk to our forecasts.

Changes in Regulations Could Impact Earnings

REL's Mumbai operations are regulated by the Maharashtra Electricity Regulatory Commission (MERC) while its Delhi operations are regulated by the Delhi Electricity Regulatory Commission (DERC). The respective commissions decide the returns that REL makes with respect to its generation, transmission and distribution businesses. Hence, any adverse changes in regulations promulgated by these Commissions can have an adverse impact on REL's earnings. The key regulatory provisions with respect to its Mumbai and Delhi business are:

Figure 23: Key Regulations of MERC and DERC

Segment	MERC	DERC
Generation	14% post tax ROE on regulatory equity at the beginning of the year	NA for REL
Transmission	14% post tax ROE on regulatory equity at the beginning of the year plus 50% of additions during the year	NA for REL
Distribution	16% post tax ROE on regulatory equity at the beginning of the year plus 50% of additions during the year	16% post tax ROE on regulatory equity at the beginning of the year plus 50% of additions during the year
Other incentives	Rs 0.25/unit if PLF> 80%	Benefits of AT&C loss reduction beyond the govt's stipulated targets would be shared equally by distribution companies and consumers

Note : MERC - Maharashtra Electricity Regulatory Commission
DERC - Delhi Electricity Regulatory Commission

Source: MERC, DERC

Potential Dilution to Earnings due to Conversion of FCCBs

The company has issued FCCBs (Foreign Currency Convertible Bonds) aggregating US$ 178 mn at a zero coupon rate convertible at Rs 1,010/share. Assuming all the bonds are converted into shares, potential dilution to EPS would be 3%.

What is an Ultra Mega Power Project?

The Government of India has envisaged capacity addition of 100,000 MW by 2012 to meet its mission of "Power to All". Achievement of this target would require development of large capacity projects at the national level to meet the requirements of a number of States. Section 63 of the Electricity Act 2003, provides that the Regulatory Commissions shall adopt the tariff if it is determined through a transparent process of bidding in accordance with the guidelines issued by the Central Government. This aims at moving away from cost-plus support for tariff determination and it is expected to further encourage private sector investment.

Recognizing the fact that economies of scale, leading to cheaper power can be secured through the development of large-size power projects, the Ministry of Power, CEA and Power Finance Corporation (which has been designated as the nodal agency) have been working together for the development of nine Ultra Mega Power Projects (UMPPs) under a tariff-based competitive bidding route. These projects will be awarded to developers on a build, own, and operate (BOO) basis.

These UMPPs will add 36,000 MW at nine locations within a span of seven-to-eight years and should help in the achievement faster capacity additions. In the first phase, around seven projects, namely, three projects at coal pit heads, based on indigenous coal and four projects at coastal locations, based on imported coal have been identified for development.

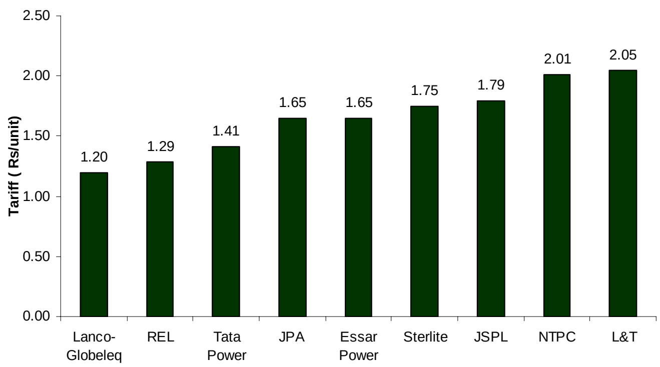
In order to enhance investors' confidence, reduce risk perception and get a good response to competitive bidding, seven shell companies have been initially set up as wholly owned subsidiaries of Power Finance Corporation Ltd. (which is a Govt of India undertaking) to facilitate tie-up of inputs, linkages and clearances for these projects. These companies will undertake preliminary studies and obtain necessary clearances and tie-ups including water, land and power selling arrangements etc., prior to the awarding of these projects to successful bidders by way of selection of developers through a tariff based ICB. The seven wholly owned subsidiaries formed so far are:

- Sasan Power Limited for pit-head project at Sasan (awarded to REL);
- Orissa Integrated Power Limited for pit-head project at Orissa;
- Akaltara Power Limited for pit-head project at Akaltara (Chhatisgarh);
- Coastal Gujarat Power Limited for imported coal-based project at Mundra (awarded to Tata Power);
- Coastal Andhra Power Limited for imported coal-based project at Krishnapatnam (Andhra Pradesh);

- Coastal Maharashtra Mega Power Limited for imported coal-based project at Girye (Maharashtra);
- Coastal Karnataka Power Limited for imported coal-based project at Tadri (Karnataka).

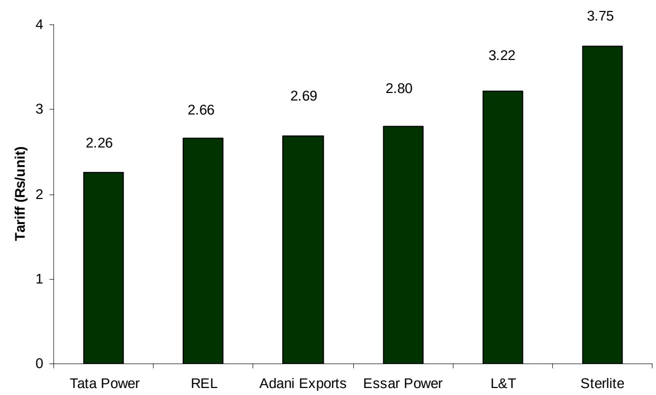
The bids submitted by various parties for the first two UMPPs, namely Sasan and Mundra are:

Figure 24: Sasan UMPP Bids



Source: Company data, Lehman brothers Research

Figure 25: Mundra UMPP Bids



Source: Company data, Lehman Brothers Research

Company Background

Reliance Energy is a fully integrated utility engaged in the generation, transmission and distribution of electricity. It was incorporated in 1929. A key constituent of the Reliance-Anil Dhirubhai Ambani Group, India's third largest business house, Reliance Energy is India's foremost private sector utility with aggregate group revenues of around Rs 130 bn and gross fixed assets of Rs 120 bn. Reliance Energy distributes more than 28 bn units of electricity to cover 25 mn customers across difference parts of the country including Mumbai and Delhi. It generates 941 MW of electricity through its power stations located in Maharashtra, Andhra Pradesh, Kerala, Karnataka and Goa. Reliance Energy has also emerged as one of the leading players in Engineering, Procurement and Construction (EPC) segment of the power sector and has also forayed as an equity investor into the infrastructure business. Some of the proposed projects include the Mumbai metro rail project and road projects of the National Highways Authority of India.

Management background

Mr. Anil D. Ambani is the Chairman and Managing Director of Reliance Energy. A Bachelor of Science from the University of Bombay and an MBA from the Wharton School, University of Pennsylvania, USA, Mr. Ambani is regarded as one of the foremost leaders of corporate India. Apart from Reliance Energy, Mr. Ambani is also the Chairman of Reliance Communications, Reliance Capital, Reliance Natural Resources Limited. He is also a member of Wharton Board of Overseers, the Wharton School, USA and the Board of Governors, Indian Institute of Management, Ahmedabad.

Mr.Satish Seth, the Executive Vice-Chairman, is a Fellow Chartered Accountant and a law graduate. He has had a wide exposure in developing, strategizing and overseeing businesses in petrochemicals, petroleum and financial sectors. Presently, he oversees and leads businesses in power, telecommunication and infrastructure sectors.

Mr. SC Gupta, the Director (Operations), is a graduate in electrical and mechanical engineering and also MSc (Engineering) in power systems. In the past, he has been actively involved in the design and implementation of captive power plants of Reliance Industries at Hazira, Patalganga and development of various Independent Power Projects at various locations.

Financial Statements

Figure 26: Profit and Loss Account for years ended 31 March 2006A-10E

Particulars		2006A	2007A	2008E	2009E	2010E
(Amount in Rs mn)						
INCOME						
Gross Earnings from sale of Electrical Energy		31,874	36,198	38,410	38,899	39,525
Less : Discount for prompt payment of bills		(84)	(89)			
		31,790	**36,110**	**38,410**	**38,899**	**39,525**
	Increase/(Decrease)	*10%*	*14%*	*6%*	*1%*	*2%*
Income of EPC,Contracts & Elastimold Divisions		8,545	20,990	28,406	38,115	45,738
	Increase/(Decrease)	*-31%*	*146%*	*35%*	*34%*	*20%*
Other income		5,744	8,653	8,197	8,553	8,375
TOTAL INCOME		**46,079**	**65,753**	**75,013**	**85,568**	**93,638**
Composition of Total Income						
Power earnings		*69%*	*55%*	*51%*	*45%*	*42%*
EPC Contracts		*19%*	*32%*	*38%*	*45%*	*49%*
Other income		*12%*	*13%*	*11%*	*10%*	*9%*
EXPENDITURE						
Cost of Electrical Energy purchased (Net)		(10,876)	(15,324)	(18,765)	(19,703)	(20,688)
Cost of Fuel		(8,121)	(9,213)	(9,897)	(9,899)	(9,901)
Tax on Electricity		(1,140)	(1,246)	(1,326)	(1,342)	(1,364)
Generation, Distribution, Administration & other expenses		(5,434)	(6,650)	(5,831)	(6,266)	(6,345)
Expenditure of EPC, Contracts and Elastimold Divisions		(7,288)	(19,692)	(24,275)	(31,417)	(36,786)
Interest & Finance charges		(1,919)	(2,503)	(1,812)	(1,891)	(1,891)
Depreciation		(4,178)	(3,001)	(3,198)	(3,420)	(3,641)
Less : Transferred from General Reserve		644	542			
Less : Transferred from Service Line Contribution		48	58			
		(38,264)	**(57,029)**	**(65,104)**	**(73,938)**	**(80,617)**
Profit before Taxation		**7,815**	**8,724**	**9,909**	**11,630**	**13,021**
Less : Taxation		(1,311)	(709)	(783)	(791)	(791)
Profit after Tax		**6,504**	**8,015**	**9,126**	**10,839**	**12,230**
EPS		32.70	37.20	39.94	47.43	53.52
DPS		5.26	7.44	7.99	9.49	10.70
Payout		16%	20%	20%	20%	20%

Source: Company data, Lehman Brothers Research estimates

Figure 27: Balance Sheet for years ended 31 March 2006A-10E

Particulars	2006A	2007A	2008E	2009E	2010E
(Amount in Rs mn)					
SOURCES OF FUNDS					
(I) Shareholders' funds					
(a) Share Capital	2,124	2,286	2,286	2,286	2,286
(b) Equity Warrants Issued and Subscribed	882				
(c) Reserves and Surplus	75,727	91,107	101,569	115,872	135,099
	78,733	**93,392**	**103,854**	**118,158**	**137,385**
(II) Loan Funds					
(a) Secured Loans	19,198	14,350	14,433	14,300	14,350
(b) Unsecured loans	23,471	44,233	44,233	44,233	44,233
	42,669	**58,583**	**58,666**	**58,533**	**58,583**
(III) Deferred Tax Liability (net)	2,041	2,313	2,177	2,245	2,211
(IV) Service Line Deposits from Consumers	235	246	241	244	242
TOTAL	**123,678**	**154,535**	**164,939**	**179,179**	**198,421**
APPLICATION OF FUNDS					
(I) Fixed Assets					
(a) Gross Block	54,706	58,984	63,539	67,895	72,192
(b) Less: Depreciation	(28,146)	(30,825)	(34,013)	(37,422)	(41,049)
© Net Block	26,561	28,159	29,526	30,473	31,143
(d) Capital Work-In-Progress	2,177	2,885	2,177	2,177	2,177
	28,737	**31,044**	**31,702**	**32,649**	**33,319**
(II) Investments	11,927	25,119	25,119	25,119	25,119
(III)Current Assets, Loans & Advances					
(a) Inventories	3,111	2,927	3,372	3,544	3,454
(b) Sundry Debtors	10,928	10,564	10,554	11,199	11,028
© Cash and bank balances	56,529	21,759	25,710	34,233	45,292
(d) Other Current Assets	3,129	3,465	3,465	3,465	3,465
(e) Loans & Advances	31,457	89,430	89,557	89,557	89,557
	105,153	**128,144**	**130,407**	**143,798**	**162,516**
Less : Current Liabilities and Provisions					
(a) Current Liabilities	(15,708)	(22,466)	(19,286)	(19,375)	(19,521)
(b) Provisions	(6,431)	(7,306)	(3,004)	(3,011)	(3,012)
	(22,140)	**(29,772)**	**(22,290)**	**(22,386)**	**(22,533)**
Net Current Assets	83,014	98,373	108,117	121,411	139,983
TOTAL	**123,678**	**154,535**	**164,939**	**179,179**	**198,421**

Source: Company data, Lehman Brothers Research estimates

Figure 28: Cash Flow Statement for years ended 31 March 2006A-10E

Particulars	2006A	2007A	2008E	2009E	2010E
(Amount in Rs mn)					
CASH FLOW FROM OPERATING ACTIVITIES					
Profit Before Taxation	7,815	8,724	9,909	11,630	13,021
Adjustments for :					
Depreciation (net of transfer from Gen Reserve)	3,486	2,401	3,198	3,420	3,641
Interest and finance charges	1,919	2,503	1,812	1,891	1,891
(Profit)/Loss on sale/disposal of fixed assets (Net)	(43)	(49)			
Diminution in value of investments/(Written back)	(10)	(227)			
Investment written off					
Provision for doubtful debts/Advances/Deposits		242			
Provision for disputed matters					
Provision for Leave encashment	54	210			
Preliminary expenses written off					
Investment income	(4,806)	(6,128)	(8,197)	(8,553)	(8,375)
Exchange fluctuation in respect of financing activities (Net)	242	(489)			
Swap income	(201)	(357)			
Profit on sale of investments	(50)	136			
Interest on income tax refund	(13)				
Lease rentals	(1)				
Operating Profit before Working Capital changes	**8,391**	**6,967**	**6,723**	**8,388**	**10,178**
Adjustments for :					
Trade and other receivables	(4,289)	8	10	(645)	171
Inventories	580	184	(445)	(172)	90
Trade payables	941	5,562	(3,179)	89	146
Income taxes paid (net of refund)	(1,815)	(1,535)	(783)	(791)	(791)
Net Cash from Operating Activities	**3,809**	**11,187**	**2,326**	**6,868**	**9,794**
CASH FLOW FROM INVESTING ACTIVITIES					
Purchase/acquisition of fixed assets	(3,828)	(5,330)	(4,556)	(4,356)	(4,297)
Sale of fixed assets	78	72			
Purchase of investments	(179,495)	(149,615)	(0)		
Acquisition of shares of amalgamated entities					
Advance against share application	(140)	(262)			
Sale/redemption of investments	174,590	136,514			
Loans and deposits (non-trade) net	(15,909)	(57,135)			
Investment income	3,669	7,257	8,197	8,553	8,375
Net Cash from / (used in) investing activities	**(21,036)**	**(68,500)**	**3,641**	**4,198**	**4,078**
CASH FLOW FROM FINANCING ACTIVITIES					
Proceeds of Share Capital including share premium	9,879	7,942			
Proceeds from borrowings (secured)	11,348	22,251	427	329	
Repayment of secured loans		(600)	(344)	(379)	
Proceeds from borrowings (unsecured)	750	(4,248)			
Repayment of unsecured loans	(6,500)	(1,000)			
Swap income	243	313			
Repayment of application money on debentures/deposits	(0)				
Deposits and contributions from consumers	131	256			
Interest and finance charges paid including FCCB Issue Expenses	(1,963)	(1,838)			
Dividends paid on equity shares including tax	(587)	(532)	(2,099)	(2,493)	(2,813)
Lease rentals	1				
Net cash from Financing Activities	**13,303**	**22,543**	**(2,016)**	**(2,543)**	**(2,813)**
Net (Decrease) / Increase in cash and cash equivalents	**(3,925)**	**(34,770)**	**3,951**	**8,523**	**11,059**
Cash and Cash equivalents at the commencement of the year	60,454	56,529	21,759	25,710	34,233
Cash and cash equivalents as at end of the year	56,529	21,759	25,710	34,233	45,292

Source: Company data, Lehman Brothers Research estimates

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Important Disclosures:

Reliance Energy (RLEN.BO) **INR 782.15 (29-Aug-2007)** **1-Overweight / 1 Positive**

Rating and Price Target Chart:

CHART IS NOT APPLICABLE

Lehman Brothers Inc. and/or an affiliate trade regularly in the shares of Reliance Energy.

Valuation Methodology: Sum of the parts valuation methodology. We value the Mumbai business using DCF with a cost of equity of 12% and terminal growth rate of 5%, Delhi business using DCF with a cost of equity of 12% and terminal growth rate of 5%, EPC business using DCF with a cost of equity of 12% and terminal growth rate of 5%, holdings in Rosa/Shahapur using DCF with a cost of equity of 12% and terminal growth rate of 5%, toll roads & MRTS using a cost of equity of 12%, ROE of 18% and terminal growth rate of 5% and cash at book value.

Risks Which May Impede the Achievement of the Price Target: Slow pace of reforms, regulatory uncertainty (probability of moving from a post tax ROE regime to one based on competitive bidding, although still some years away in our view) and competition in EPC space pose credible risks. Non-deployment of cash or Reliance not being able to remove hurdles on some of its future projects would also pose risks.

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In addition to the stock rating, we provide sector views which rate the outlook for the sector coverage universe as 1-Positive, 2-Neutral or 3-Negative (see definitions below). A rating system using terms such as buy, hold and sell is not the equivalent of our rating system. Investors should carefully read the entire research report including the definitions of all ratings and not infer its contents from ratings alone.

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1-Overweight – The stock is expected to outperform the unweighted expected total return of the relevant country index over a 12-month investment horizon.

2-Equal weight – The stock is expected to perform in line with the unweighted expected total return of the relevant country index over a 12-month investment horizon.

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Company Name	Ticker	Price (28-Aug-2007)	Stock / Sector Rating
Reliance Energy	RLEN.BO	INR 766.55	1-Overweight / 1-Positve

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