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#### Mukul Jain

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Key Figures (Rs m)						
Y/e March	'06	'07E	′08E	′09E		
Net Sales	136,509	174,403	222,366	285,779		
EBITDA	28,321	36,973	48,031	62,871		
PAT	16,792	24,693	31,519	40,317		
PAT Gr. (%)	76.1	47.1	27.6	27.9		
EPS (Rs)	68.6	100.9	128.6	164.6		

Key	Ratios
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Y/e March	'06	'07E	'08E	'09E
EBITDA Mar.	20.7	21.2	21.6	22.0
RoCE	23.9	30.6	31.2	32.1
RoE	23.0	28.1	29.1	30.4

(%)

(x)

#### **Valuations**

Y/e March	'06	'07E	'08E	'09E
PER	32.9	22.3	17.5	13.7
EV / Sales	3.8	2.9	2.3	1.7
EV / EBITDA	18.2	13.7	10.4	7.9
MCap / Sale	s 4.0	3.2	2.5	1.9

#### **Key Data**

Reuters Code	:	BHEL.BO	
Bloomberg Code	:	BHEL@IN	

#### Shareholding Pattern (%)

**Promoters** Foreign 21.7 Inst./non-Promoters: 9.2 Public & Others

#### Price Relative to Sensex (%)

1 month 2.7 6 months (9.7)12 months (15.5)

Shares Outstanding: Market Cap Rs 551,860m \$ 12,276m

Average Volume

0.7m (3 months)

(Price as on March 26, 2007)

# BHEL

Rs 2,255 BUY Sensex: 13,124

March 28, 2006

## Power Play...

We reiterate our BUY rating on BHEL, with a target price of Rs 2,633 (16x FY09E) implying a 18.9% upside from current levels. We expect BHEL to report earnings CAGR of 28% over FY07E-FY09E on the back of 27.8% revenue CAGR. At the CMP of Rs 2,255, the stock trades at 17.5x FY08E and 13.7x FY09E earnings of Rs 128.6 and Rs 164.6 respectively.

Current order backlog of Rs500bn represents nearly three years of sales based on our forecasts. As the market leader (market share of more than 60%) with significant cost advantages we believe BHEL will be a key beneficiary of increased investments in the sector. The reforms should result in more robust growth rates over the medium to long term for the company.

## **Highlights**

- We expect power orders to the tune of 35 40GW to be awarded over the next 24 – 36 months, totaling to Rs 150bn. We believe that BHEL would continue to garner an incremental 50% market share of these orders.
- We believe that Chinese competition would not be a major area of concern to BHEL considering that BHEL manufactured equipment has a much longer life cycle.
- Industry segment of the company has also shown substantial inflow of orders. The segment has depicted higher growth rates than the power segment with increasing margins
- The wage hike has taken effect from January 2007, however due to the incremental sales volumes and increasing turnover, BHEL would continue to show improvement in margins for the next few years.





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## **Investment Rationale**

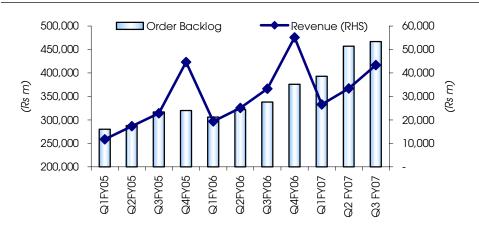
#### Order Inflow continues to be strong

Order Inflow to continue to be strong

India is set to add 23.2GW of capacity in the Xth Plan. Further 27GW of the planned 69GW of capacity addition from the XIth Plan has already been ordered. So, we expect potential orders of 42GW and additional orders from the UMPP's over the next 2 -3 yearsof which BHEL is expected to garner an incremental 50% market share. The FM has indicated that further seven UMPP's would be allotted with two of the m being allotted by July itself. BHEL currently has an order backlog of Rs 500bn, which provides significant visibility in terms of BHEL's revenues for the next few years.

# Strong Order Book provides visibility of revenues

Chart 1: Strong Order Book provides visibility



Source: Company Data, PL Research

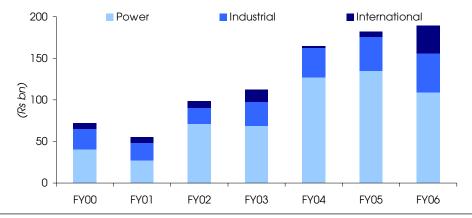
Table 1: Key Orders bagged during FY07	(Rs bn)
500MW Farakka	7.5
490MW Dadri, NTPC	7.5
500MW for Mahagenco	14
500MW for KCPL, Bellary	16
250MW Thermal plant for Tata Power	7.5
250MW Suratgarh & 190MW Kota	8.4
2X250MW Harduaganj Thermal Power Station	12.24
Gas based plant for IOCL	1.65
Renovation & Modernisation from PSEB	3.8
240MW Gas power plant at Bangladesh	5.05
1500 MW Thermal Station at Maharashtra	39
Parbati HEP Stage III, 520MW Hydro Electric Project in HP	4
Substation at Maharashtra	1.44
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Source: Company Data, PL Research

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Chart 2: Order inflow Breakup



Source: Company Data, PL Researh

NTPC has capacity expansion plans of 21.9GW spread over FY08 - 12. This offers substantial opportunity for BHEL being a preffered supplier

Table 2: NTPC Capacity addition plans

(MW)

	Addition for XIth Plan
Coal Based Projects	
Sipat I	1,980
Barh	1,980
Korba III	500
North Karanpura	1,980
Farakka III	500
Dadri III	980
Darlipalli	800
Bongaigaon	500
Mauda	1,000
Simhadri II	1,000
Barh II	660
Ultra Mega	800
Total Coal	12,680
Gas Based Projects	
Kawas II	1,300
Gandhar II	1,300
Rajiv Gandhi (kayamkulam)	1,950
Total Gas	4,550
Hydro Projects	
Koldam	800
Loharinag Pala	600
Tapoban Vishnugad	520
Lata Tapovan	171
Rammam III	120
Total Hydro	2,211
JV projects	
Bhilai, NTPC-SAIL	500
Nabhinagar, Railways	1,000
Ennore, TNEB	1,000
Total JV's	2,500
Total Planned	21,941
Source: NTPC, PL Research	



NTPC has plans to set up 21941MW of additional capacity during the XIth Plan (FY07-12). The list includes less of hydro and more of coal projects based on 500MW sets, thus favoring BHEL. BHEL is very competitive in 500MW units and most of these we feel are likely to be awarded to BHEL on a negotiated basis.

# Highest ever addition target in the XIIth Plan

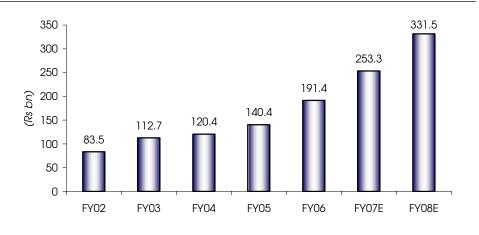
**Table 3: Generation Capacity Targets and Achievement** 

Plan	Target (MW)	Actual (MW)	% Achievement
V th (74-79)	12,000	10,000	83.3
VI th (80-85)	20,000	14,000	70.0
VII th (85-90)	22,000	21,000	95.5
VIII th (92-97)	31,000	16,000	51.6
IX th (97-02)	40,000	19,000	47.5
X th (02-07)	41,000	23,250	56.7
XI th (07-12E)	69,000	48,300	70.0

Source: Ministry of Power, PL Research

Spending on Power Sector has witnessed a significant jump in the past and we beleive would continue to do

Chart 3: Spending on Power on an uptrend...



Source: Company Data, PL Research

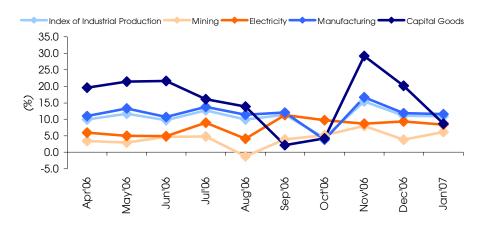
#### Industrial Segment picks up

With the strong pick in industrial activity across sectors, the order inflow on this front has picked up quite significantly. It is estimated that an investment of \$ 150bn would be required for infrastructure over the next few years of which 40% would be in the power sector and about 14% would need to be invested in roads and railways. The development of energy infrastructure in particular is extremely important to facilitate acceleration in GDP growth. The captive power segment of the industry has also been witnessing expansion of capacities and the trend is likely to continue in the coming years.

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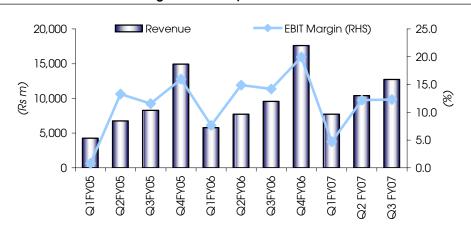






Source: Company Data, PL Research

Chart 5: BHEL's Industrial Segment Picks up



Source: Company Data, PL Research

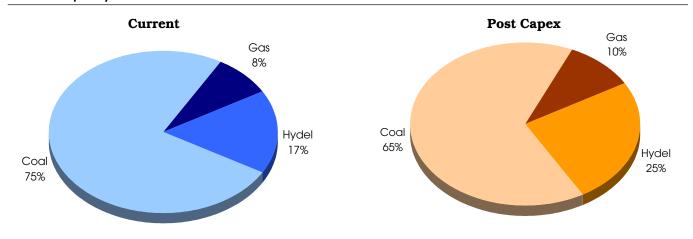
#### Capacity expansion to improve competitiveness

BHEL has tied up with for super critical technology with Alstom and is negotiating for other new technologies with various players

BHEL currently has a capacity of 6,000MW on a two - shift basis, which is being expanded to 10,000MW by December 2007 at a cost of Rs 16bn. The company is gearing up to cater to the significant demand being witnessed in the industry and is opened to expanding capacity further if need arises. The company is also introducing new technologies such as 800 MW thermal sets (in collaboration with Alstom), 765 kV sub-stations, 250 MW hydel sets and 256 MW advanced class gas turbines (technology agreement with GE). The company also believes some new growth drivers are emerging namely such as the Metro Projects (Mumbai, Bangalore, Gujarat, AP and MP), EPC for Captive Power Plants, Water Management, Steel Plants and Transmission & Distribution (T&D) projects.



#### **Chart 6: Capacity**



Source: Company Data, PL Research

#### Chinese competition not a major concern

BHEL's power generation equipment continues to be in use without requiring overhauling or maintenance over a period of 20 - 25 years. While Chinese equipment requires to be repaired after a period of every 7 - 10 years, which increases the maintenance cost of running the power plants. Our interaction with some of the power generation companies has suggested that they are more comfortable in using BHEL manufactured generators and turbines as they have a longer life.

Also the concerns on the allotment of the first two UMPP's and super critical technology have been over played a bit. We believe that with seven more UMPP's in the pipeline, BHEL would bag some orders for supply of super critical equipment.

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### **Investment Concerns**

#### **Delay in Capex Plans**

Any delay in capacity expansion plans of BHEL due to unforeseen circumstances might hinder operational performance. BHEL is expanding its capacity from 6,000MW currently to 10,000 MW by December 2007. Though the capex plans are going as per schedule, however any delays might hinder topline growth.

#### **Increasing Competition**

Increasing competition might reduce market share, though increasing size of opportunity to continue to contribute to topline growth Competition from international as well as domestic companies continues to be an area of concern. There have been various reports regarding international players setting up facilities in India. To handle this competition BHEL has entered new geographies and managed to bag significant orders from the international markets. BHEL has managed to get orders for oil & gas based steam power plants, gas based turbines, hydro power plants, sub-stations besides orders for equipment such as compressors, transformers, solar cells, etc. in diverse markets, thus expanding its exports reach.

The growth in net electricity consumption is expected to rise rapidly among the emerging economies of the world, with annual average growth of 4% from 2002 - 2025, as estimated by the International Energy Outlook. The world market for products and services in the power generation sector is expected to grow at an annual average rate of 3.2% for next five years. The highest demand would be in coal-fired power plants and the major trend is towards higher energy efficiencies and further cost reductions in design and engineering. Global demand for distribution and transmission is expected to rise at 4.5% per annum.

**Table 4: New Markets Entered** 

FY02	China, Kazakhstan, Thailand
FY03	Indonesia, Taiwan
FY04	Romania, Zambia
FY05	Sudan, Oman
FY06	Ethiopia, Surinam, Poland

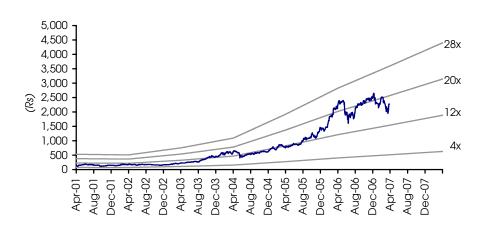
Source: Company Data, PL Research



## **Valuations**

At the CMP of Rs 2,255, the stock trades at 17.5x FY08E and 13.7x FY09E earnings of Rs 128.6 and Rs 164.6 respectively. It trades at an EV/EBIDTA of 10.4x and 7.9x FY08 and FY09 estimates. We believe that BHEL should trade at a premium to the current valuations given its strong visibility of earnings and reiterate our BUY rating on BHEL with a target price of Rs 2,633 (16x FY09E), implying a 18.9% upside potential from current levels.

Chart 7: 1 Year Forward PE Band Chart



Source: MetaStock, PL Research

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## **Financials**

### **Income Statement**

(Rs m)

					(1101
Y/e March	FY05	FY06	FY07E	FY08E	FY09E
Net Sales	99,472	136,509	174,403	222,366	285,779
Expenditure	81,419	108,188	137,430	174,335	222,908
Raw Mat	48,918	68,655	93,131	116,520	150,320
% of NS	43.8	50.3	53.4	52.4	52.6
Personnel	16,504	18,785	23,021	28,241	35,151
% of NS	16.6	13.8	13.2	12.7	12.3
Others	21,395	24,607	21,277	29,575	37,437
% of NS	21,393	18.0	12.2	13.3	13.1
EBITDA	18,053	28,321	36,973	48,031	62,871
Margin (%)	18.1	20.7	21.2	21.6	22.0
Other income	2,357	2,797	5,455	5,728	6,301
 Depreciation	2,189	2,459	2,828	3,252	4,066
EBIT	18,221	28,659	39,600	50,506	65,106
Interest	814	587	529	555	600
PBT	15,816	25,644	39,072	49,951	64,507
Taxes	6,282	8,852	14,378	18,432	24,190
ETR (%)	39.7	34.5	36.8	36.9	37.5
PAT	9,534	16,792	24,693	31,519	40,317
Assumptions					
Revenue					
Power	75,039	108,939	141,621	184,107	239,339
Industry	33,471	40,680	51,866	62,240	76,244
EBIT Margins (%)					
Power	21.4	21.7	22.7	22.6	21.6
 Industry	11.5	15.9	14.2	14.4	14.2



Balance Sheet (Rs m)

Y/e March	FY05	FY06	FY07E	FY08E	FY09E
Sources of Funds					
Equity Capital	2,448	2,448	2,448	2,448	2,448
Reserves	57,821	70,566	85,382	105,870	130,060
Secured debt	5,000	5,000	-	-	-
Unsecured	370	582	612	673	807
Deferred taxes	(5,183)	(6,737)	(6,737)	(6,737)	(6,737)
Total Liabilities	60,456	71,859	81,704	102,253	126,577
Application of Funds					
Fixed assets	11,396	11,668	11,939	15,077	22,178
Gross block	36,289	38,221	41,221	47,404	59,255
Less: Depreciation	(26,193)	(28,528)	(31,356)	(34,608)	(38,674)
CWIP	1,300	1,976	2,074	2,282	1,597
Investments	90	83	83	83	83
Working capital	48,971	60,108	69,682	87,093	104,316
Inventories	29,161	37,444	44,932	56,345	67,614
Debtors	59,721	71,681	86,017	106,231	125,883
Cash	31,779	41,340	46,340	51,840	58,340
Loans	12,769	12,844	14,128	16,600	18,593
Creditors	(67,188)	(88,077)	(103,491)	(122,119)	(140,437)
Other Liabilities	(17,271)	(15,123)	(18,147)	(21,414)	(24,626)
Total Assets	60,456	71,859	81,704	102,253	126,577

Cash Flow (Rs m)

Y/e March	FY05	FY06	FY07E	FY08E	FY09E
Cash from Operations	16,028	28,634	32,163	37,260	50,712
Net Cash from Operations	9,495	18,477	17,785	18,828	26,522
Net Cash from Investing	(352)	(3,265)	(3,000)	(7,980)	(12,851)
Net Cash from Financing	(2,648)	(5,529)	(9,785)	(5,348)	(5,348)
Change in Cash	6,494	9,683	5,000	5,500	8,323
Opening Balance	26,596	31,779	41,340	46,340	51,840
Closing Balance	10,527	41,462	46,340	51,840	60,163

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## **Key Ratios**

Y/e March	FY05	FY06	FY07E	FY08E	FY09E
Balance Sheet Nos (Days)	)				
Debt: Equity (x)	-	(0.0)	(0.1)	(0.1)	(0.0)
Inventory	107	100	94	92	86
Debtor	219	192	180	174	161
Cash	117	111	97	85	75
Crediors	(247)	(236)	(217)	(200)	(179)
Per share nos (Rs.)					
EPS	39.0	68.6	100.9	128.6	164.6
CEPS	47.9	78.7	112.4	141.9	181.2
FCPS	27.4	64.4	77.4	77.0	121.1
DPS	8.0	14.5	17.0	19.0	19.0
BVPS	246.2	298.3			
DVFO	240.2	290.3	358.8	442.1	540.8
Return ratios (%)					
RoCE	16.6	23.9	30.6	31.2	32.1
RoE	15.8	23.0	28.1	29.1	30.4
Growth Ratios (%)					
Sales	19.4	37.2	27.8	27.5	28.5
EBIDTA	33.8	56.9	30.5	29.9	30.9
PAT	44.9	76.1	47.1	27.6	27.9
EPS	44.9	76.1	47.1	27.5	27.9
Margin (%)					
EBIDTA	18.1	20.7	21.2	21.6	22.0
PAT	9.6	12.3	14.2	14.2	14.1
Tax Rate	39.7	34.5	36.8	36.9	37.5
Other Ratios (%)					
Raw Materials/Sales	43.8	50.3	53.4	52.4	52.6
Employee Cost/Sales	16.6	13.8	13.2	12.7	12.3
Other Income/PBT	14.9	10.9	14.0	11.5	9.8
Dividend Payout	20.5	21.1	16.9	14.8	11.5
Will all and A					
Valuation (x)	F= 0	00.0		,	
PER	57.9	32.9	22.3	17.5	13.7
EV/EBITDA	29.1	18.2	13.7	10.4	7.9
EV/Sales	5.3	3.8	2.9	2.3	1.7
M.cap/Sales	5.5	4.0	3.2	2.5	1.9
P/BV	9.2	7.6	6.3	5.1	4.2



## **Notes**

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#### PL's Recommendation Scale

BUY : > 15% Outperformance to BSE Sensex Outperformer : 5 to 15% Outperformance to Sensex Underperformer : -5 to 5% of Sensex Movement Underperformer : -5 to -15% of Underperformace to Sensex

**Sell** : <-15% Relative to Sensex

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