# FROM OUR RESEARCH DESK

# **BGR Energy Systems Ltd**

# **Issue Highlights**

- BGR Energy (BESL) was originally incorporated in 1985, as a joint venture between GEA Energetechnik GmbH, Germany and the Promoter, Mr. B.G. Raghupathy, to produce and sell on-line condenser tube cleaning systems, debris filters and rubber cleaning balls used in thermal and nuclear power plants.
- BGR Energy enjoys a good track record of executing BOP projects for the Power EPC contractors in the country. It is now in the process of setting up offices in the Middle East region to capitalize on the significant project opportunities in the Oil and Gas and Power sector in this region. Export order books, which are largely from the Middle East countries, currently constitute around 10% of the total current order book of the company. Company believes, in future this order kitty is likely to witness satisfactory growth. Therefore to effectively cater to the emerging business opportunity both at the global and local level the company is increasing its investment in its own equipment base both in India and China.
- The consolidated current order book (As at 30th September 2007) of BGR Energy stands at Rs 33.12 billion and majority of the orders (83% of Total) are from power projects. BoP project constitute a majority of the orders which constitute around 45% of the total project cost of the power project with capacity up to 500MW. It has developed a good skill set (With 600 technical people out of total employee strength of 975), right from civil to mechanical and then to thermal engineering, for capitalizing on the emerging growth opportunities in the power sector. The company is in the process of acquiring the skill set for 600MW to 800 MW power plants which will get application in the upcoming UMPPs (Ultra Mega Power Plants) in the country.
- The lower and upper band offer price discounts the FY08 annualized EPS of Rs 9.62 by 44x and 50x respectively. We believe that BGR with its current order book potential in hand and with the graduation to higher value chain projects in the near future, would augur well for the company in the medium to long term. Hence we suggest a subscribe to the IPO at higher end of the price band for long term investment.

# Objects of the issue

Rs. Mn.

Particulars	Funds
	Requirement
Augment long term working capital requirement	1250
Establish manufacturing and assembly facilities	800
Fund expenditure for general corporate purpose	[.]
Issue Expenses	[.]
TOTAL	[.]

Source : RHP

# **IPO Note**

# SUBSCRIBE at Higher Band

## **Issue Highlights**

Issue Size (At Upper Band): Rs. 4385.28 Mn
Issue Size (At Lower Band): Rs. 3882.8 Mn
Face Value: Rs. 10
Issue Opens on: 05th December, 2007
Issue Closes on: 12nd December, 2007
Price Band: Rs. 425- Rs 480
Bid Lot: 40 shares in multiple

thereof

Lead Manager: SBI Capital,

Kotak Mahindra Capital, UBS Securities, CLSA India.

### Shareholding Pattern (%)

	Pre-	Post
	Issue	Issue
Promoters	36.50	27.38
Promoters Group	63.5	53.93
Employees	-	0.7
Public	-	11.99
Others	-	6.00

# Pattern of Book -Buildng

	(No. of Shares)
Total Issue Size	9136000
(Includes Offer for sale)	
Employee Reservation	500000
Fresh Issue Offered	4320000
Offer for Sale	4816000
Net issue to Public	8636000
QIB Portion (60%)	5181600
(Out of which Mutual Funds 5	%) 259080
Non - Institutional (10%)	863600
Retail Portion (30%)	2590800

#### Rabindra Nath Nayak

022-30443309

rabindra.n.nayak@relianceada.com

**Anwit Goswami** 022-30443317

# Financial Summary

Y/E	Sales	Change	PAT	Change	<b>Equity Capital</b>	EPS#	BV	RoNW
March	(Rs. Mn)	YoY (%)	(Rs. Mn)	YoY (%)	(Rs. Mn)	(Rs.)	(Rs.)	(%)
2002	1,262		64.7		54	0.89	33.0	36.3
2003	1,627	29	76.5	18	54	1.05	44.5	31.8
2004	2,694	66	111.7	46	108	1.54	30.3	34.1
2005	2,991	11	134.4	20	108	1.85	40.4	30.8
2007\$	7,903	NA	408.1	NA	108	3.74	76.8	39.0*
Q1FY08	2,192.7	NA	174.8	NA	727.0	9.62*	92.0	39.6*

<sup>\*</sup> Annualized figures, # Based on Fully Diluted Equity capital of Rs 727.05 mn

NA: Not Applicable

\$ 18 Month's / Source : RHP Contd...

# SECTOR DYNAMICS

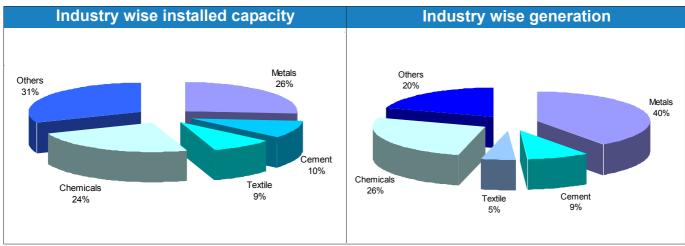
#### **Indian Power Sector:**

The Indian government has an objective of achieving "Power for All by 2012". The development of the power sector has traditionally been the responsibility of the government through the central and state utilities, with a relatively insignificant contribution by the private sector. In order to reduce the gap between supply and demand, the Indian government formulated policies in 1991 for increasing the role of the private sector in the power sector of the country. The 1991 policies have been revised and modified through enactment of the Electricity Act 2003 (the "Electricity Act").

According to CRIS INFAC, over the next five years, Indian investment in generation capacity is expected to increase, with the central sector accounting for the largest share of such increases. CRIS INFAC expects the impact of generation delicensing in the Electricity Act 2003 will be felt largely in the current period, given the minimum three year construction period for Greenfield power projects.

## **Captive Power Generation**

According to CRIS INFAC, captive power capacity, at 19,103 MW, accounted for 16% of the total installed capacity in India in 2004-05. The dependence on captive power has been increasing, due to the continuing shortage of power generation and India's economic growth. This has resulted in high growth in the captive power sub-sector over recent years, in terms of increased capacity and generation.



Source: CRIS INFAC

# **Current Indian Demand and Supply for power in India**

According to the 10th Plan, the growth in generation has been 3.2%, 5.1%, 5.2% and 5.2% during fiscal years 2003, 2004, 2005 and 2006, respectively. In the fiscal year 2007, but up to December 2006, a growth rate of 7.5% was recorded. The CAGR of generation during the 10th Plan period is expected to be about 5.1%. However, higher growth could have been achieved if adequate gas would have been available for the existing and new gas based plants commissioned during 10th plan.

# **Current capacity**

According to the 10th Plan, the total installed capacity as on December 31, 2006, was 127,753 MW comprising 33,642 MW hydro, 84,020 MW thermal, including gas and diesel, 3,900 MW nuclear based power plants and 6,190 MW from renewable energy sources, including wind. The sector-wise details of installed capacity are given in table below:

29th November 2007 Reliance Money

				Thermal					
Sector	Hydro	Coal	Lignite	Gas\$	Oil^	Total	Nuclear	R.E.S@	Total
Central	6,672	24,020	2,490	5,899	0	32,409	3,900	0	42,981
State	25,664	37,386	465	3,500	1,239	42,589	0	2,568	70,821
Private	1,306	2,831	500	4,182	1,507	9,022	0	3,523	13,851
Total	33,642*	64,237**	3,455	13,581	2,746	84,020	3,900	6,091	127,653

Source: DMLF Division, CEA

@ R.E.S. = Renewable energy sources includes small hydro project, biomass gas, biomass power, urban and industrial waste power and wind energy

# Required capacity additions foreseen by the 12th Plan

The requirement of installed capacity and capacity addition to meet the generation requirement during the 12th Plan period is given in table below:

Capacity addition required during 12th plan (2012-17)

<b>GDP Growth</b>	GDP / Electricity	Electricity Generation	PeakDemand	InstalledCapacity	Capacity Addition
	Elasticity	Required (BU)	(MW	(MW)	Required
					During
					12th PLAN (MW)
8%	0.8	1415	215700	280300	70800
	0.9	1470	224600	291700	82200
9%	0.8	1470	224600	291700	82200
	0.9	1532	233300	303800	94300
10%	0.8	1525	232300	302300	92800
	0.9	1597	244000	317000	107500

Source: Working Group on Power-11th Plan (2007-12)

It would be seen from the above table that under various growth scenarios, the capacity addition required during 12<sup>th</sup> plan would be in the range of 71,000 - 107,500 MW, based on normative parameters. The 11th Plan Working Group recommends a capacity addition of 82,200 MW for the 12th Plan based on the scenario of 9% GDP growth rate and an elasticity of 0.8%. During 12th Plan about 30,000 MW capacity additions is likely to be based on hydro and about 11,000-13,000 MW will be nuclear based. The balance capacity addition of about 50,000 MW will be from thermal projects.

(Source: Report of for Eleventh Plan (2007-12), The Working Group on Power Ministry of Power, February 2007)

### **Transmission and Distribution**

In India, the transmission and distribution ("T&D") system is a three-tier structure comprising distribution networks, state grids, and regional grids. These distribution networks and state grids are primarily owned and operated by the respective State Electricity Boards ("SEBs") or state governments (through state electricity departments). Most interstate transmission links are owned and operated by the Power Grid Corporation of India Limited ("PGCIL") though some are jointly owned by the SEBs concerned. In addition, PGCIL owns and operates many inter-regional transmission lines (which are a part of the national grid) to facilitate the transfer of power from a region of surplus to one with deficit.

### Oil and Gas Industry

Demand for engineering construction services in the oil and gas industry is dependent on the level of exploration, production, storage, refining and transportation activity in the oil and gas industry and the corresponding capital spending by energy industry conglomerates. Construction projects in the oil and gas industry generally include exploration rigs and platforms, refineries and other processing facilities, tanks and terminals for storage of oil and gas and derivative products and pipelines for transportation of such products.

<sup>\*</sup> Includes ROR- 15,143 MW, PSS- 664 MW, Storage- 17,835 MW

<sup>\*\* 21,759</sup> MW pithead and 42,478 MW load center/ non pit head

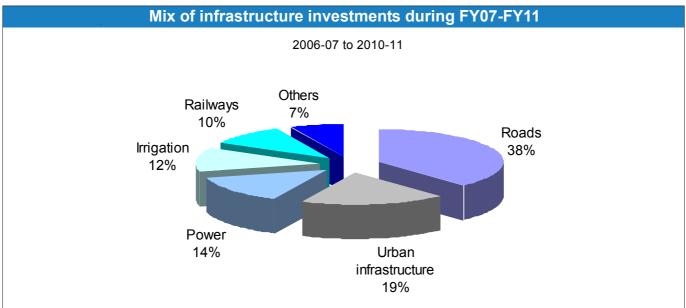
<sup>\$</sup> Includes liquid fuel based Kayamkulam project of 350 MW

<sup>^ 1544</sup> MW dual firing stations included in oil.

The oil and gas sector has been one of the key focus areas of the engineering, procurement and construction industry. The global EPC industry is further expected to experience increased engineering construction activity in the energy industry, resulting in part from the steep increase in oil and gas prices in 2005, especially following the impact of Hurricane Katrina and Rita on oil production in the United States. With global demand expected to grow, oil and gas prices are expected to remain high in the near future, resulting in increased focus on creating additional production, refining and transportation capacities to meet the growing demand for oil and gas.

#### Infrastructure in India

Besides power the other infrastructure sector also likely get favorable boost in demand during the current plan. This investment is imperative for the balanced availability of infrastructures for the growth of the economy. Following table shows the break up of spending in different infrastructure in the country. According to CRIS INFAC the total infrastructure spending during FY07-FY11 would almost double to Rs 6129 billion from Rs 3213 billion during FY 02-FY06.



Source: CRISIL Research

# COMPANY PROFILE

BGR Energy Systems was originally incorporated in 1985, as a joint venture between GEA Energetechnik GmbH, Germany and the Promoter, Mr. B.G. Raghupathy, to produce and sell on-line condenser tube cleaning systems, debris filters and rubber cleaning balls used in thermal and nuclear power plants. In 1993 Mr. B.G. Raghupathy and members of his family became the sole shareholders of the Company and began to expand its product and services range in the power and oil and gas industries. On June 28, 2007 it changed its name from GEA Energy System (India) Limited, to BGR Energy Systems Limited.

# The Company consists of seven complementary businesses:

- 1. Power projects business, which provides turnkey EPC and BOP services for coal-based thermal power plants and gas-based combined cycle power plants typically over 100 megawatts ("MW"), and which completed its first contract in 2002,
- 2. Captive power projects business, which provides turnkey EPC and BOP services for power plants typically under 100 MW which are generally designed primarily to service particular commercial facilities, and which began operating in 2006,
- 3. Oil and gas equipment business, which designs and manufactures gas conditioning & metering skids, storage tanks, pipeline pig launching & receiving systems, gas processing complexes and gas compressor packages related to the oil and gas industry for companies in India and abroad, and which began operating in 2001,
- 4. Air fin coolers business, which manufactures products designed to cool process fluids and gases used in the refining, petrochemical, and oil and gas industries, and which began operating in 1994,
- 5. Environmental engineering business, which manufactures and provides deaerators and other products to treat water used in the operation of various types of power and utility plants and also provides industrial effluent treatment plants, and which began operating in 1996,
- Electrical projects business, which supplies electrical systems and equipment such as gas insulated switchgear substations, optical fiber power ground wires, extra high voltage substations and transmission lines to power stations, refineries and petrochemical plants, and which began operating in 2003, and
- 7. Infrastructure business, which is capable of building roads and industrial buildings, and which began operating in 2004.

The company has executed several BOP power projects within India, including power projects in Valuthur and Karuppur in Tamil Nadu, and Chittorgarh and Dholpur in Rajasthan. It is executing turnkey BOP coal-fired power projects in Vijayawada and Bhoopalapalli in Andhra Pradesh, both with an output capacity of 500 MW, and it is executing an EPC contract in Valuthur for a gas-based power plant with an output capacity of 92.2 MW.

BGR Energy's current order backlog is Rs. 3312 crores. It manufactures certain products related to its businesses through subsidiary Progen Systems and Technologies Limited ("Progen"), which has its own manufacturing facility and through its second facility controlled by its air fin coolers business. Its manufacturing facilities are located in India and are certified by the American Society of Mechanical Engineers ("ASME"). The combined capabilities of the company's manufacturing facilities allow it to offer products and services in a timely and cost-efficient manner. Further, it is capable of manufacturing products specifically tailored to meet clients' needs. The products it manufactures include heat exchangers, pressure vessels, condensers, high frequency resistance welded finned tubes, deaerators, pipeline equipment, heat recovery steam generators and various boiler components.

The company's clients are located in Asia, the Middle East, Africa and Europe. To date, it has executed 131 contracts in 42 countries outside of India and approximately 760 contracts in India. Its air fin coolers, environmental engineering and oil and gas businesses provide products and services both in India and abroad. Its power projects, captive power, infrastructure and electrical projects businesses currently operate only in India.

29th November 2007 ReLIANCE Money

# **I**SSUE PROFILE

#### **Investment Positives:**

## Huge domestic Order book with good in-house design skill set

The consolidated current order book (As at 30<sup>th</sup> September 2007) of BGR Energy stands at Rs 33.12 billion and majority of the orders (83% of Total) are from power projects. BoP project constitute a majority of the orders which constitute around 45% of the total project cost of the power project with capacity up to 500MW. It has developed a good skill set (With 600 technical people out of total employee strength of 975), right from civil to mechanical and then to thermal engineering, for capitalizing on the emerging growth opportunities in the power sector. The company is in the process of acquiring the skill set for 600MW to 800 MW power plants which will get application in the upcoming UMPPs (Ultra Mega Power Plants) in the country.

#### **Order Book**

Business Segment	Order in Rs Mn	%
Power Projects	25073	75%
Captive Power	1819	5%
Oil and Gas Equipments	4268	13%
Air Fin Coolers	1135	3%
Environment Engineering	334	1%
Electrical Projects	583	2%
Total	33212	100%

Source: RHP

## Good Domestic track record would open up opportunities lie at the global level

The company has a good track record of executing BOP projects for the Power EPC contractors in the country. It is now in the process of setting up offices in the Middle East region to capitalize on the significant project opportunities in the Oil and Gas and Power sector in this region. Export order books, which are largely from the Middle East countries, currently constitute around 10% of the total current order book of the company. Company believes, in future this order kitty is likely to witness satisfactory growth. Therefore to effectively cater to the emerging business opportunity both at the global and local level the company is increasing its investment in its own equipment base both in India and China.

# Diversification into selective opportunities in the other infrastructure sector

By being a BoP project implementer in the power sector the company has developed good in-house skill set for the civil engineering projects. In order to capitalize on this skill set the company is further planning to undertake projects in the other infrastructure sector in the country. This will help in reducing the sector concentration risk for the company in the future. Further to capitalize on the opportunity in the power trading in future the company has also taken category-F license for power trading as well.

#### **Concerns:**

# Backward Integration may not fully insulate the company from the erosion of margin when there is a wide swing in commodity prices, rise in employee compensation and change in technology

Company gets its orders from the EPC contractors on fixed price basis. Although the backward integration effort for making comfortable availability of the equipments for the company, is commendable but it would not be sufficient in helping maintaining the operating margin, when there is a wide adverse swing in the basic commodity prices and increase in employee retention cost, going forward.

### **Third Party Order Executor**

Being a major third party project executor the revenue booking of the company would largely depend on the getting of concrete work execution order from the major EPC contractor. So any slow progress of work by the main EPC contractor may result in slow down in revenue booking until the company fully graduates itself to undertake wholesale EPC orders on its own.

# **Business Outlook, Valuation and Recommendation**

After faltering in the addition of capacity during the last five year plans the Government is putting serious efforts to meet the targeted capacity of 78000 MW during the current five year plan through an effective public and private partnership effort. So project implementers like BGR Energy would greatly benefit from the emerging opportunity that are unfolding in the power sector in the country. Further the strategy to graduate from being a BoP project implementer to a complete EPC project executor with effective bout of backward integration will augur well for the company in sustaining the order and revenue momentum both from the domestic and international markets, in the future. The lower and upper band offer price discounts the FY08 annualized EPS of Rs 9.62 by 44x and 50x respectively. We believe that BGR with its current order book potential in hand and with the graduation to higher value projects in the near future, would augur well for the company in the medium to long term. Hence we suggest subscribing to the IPO at higher end of the price band for long term investment.

### **Valuation Metrics**

Particulars	Sales	PAT	Equity	EPS#	СМР	P/E	BV	Price /
	( FY 07)	(FY 07)	Capital	(Rs.)	(as on 26.11.07)			Book Value
BHEL	173,207.4	24,147.0	2,447.6	94.9	2,605.1	27.5	179.5	14.5
ALSTOM Projects	12,196.8	1,370.4	670.2	14.5	971.6	67.2	49.5	19.6
L&T	175,978.0	14,030.2	566.5	48.5	4,175.5	86.0	212.0	19.7
Thermax	20,682.4	1,878.0	238.3	23.2	820.3	35.3	48.6	16.9
ABB India	42,740.1	3,403.1	423.8	21.8	1,566.6	71.7	55.6	28.2
Areva T & D	16,056.9	1,370.2	398.9	40.2	2,650.2	66.0	79.8	33.2
Crompton Greaves	33,599.8	1,923.8	733.2	8.1	434.5	53.6	18.0	24.2
BGR	7,903.0	408.1	727.1	3.74**	425-480	114.0-128.0	37.8-41	11.2-11.7

<sup>#</sup> Latest quarter annualized EPS

<sup>\*\*</sup> The lower and upper band offer price discounts the FY08 annualized EPS of Rs 9.62 by 44x and 50x respectively.

# **COMPANY FINANCIALS**

# **Profit & Loss Statement**

(Rs. In Mn)

Y/E March	Q1FY08	FY07\$	FY06#	FY05	FY04	FY03	FY02
Total operating Income	2,396	7,868	5,245	2,958	2,707	1,583	1,252
Increase/Decrease in Inventory	43	32	21	35	-14	40	8
Other Income	6.2	2.95	1.97	-1.45	2.32	4.06	1.69
Total Income	2,445	7,903	5,269	2,991	2,694	1,627	1,262
Total Expenditure	2,192.7	7,290.0	4,860	2,801.4	2,550.8	1,530.9	1,178.2
PBT	252.5	612.8	408.5	189.9	143.6	95.8	83.8
PAT	174.8	408.1	272.1	134.4	111.7	76.5	64.7

# annualized to the 18 month financials of FY07

Source: RHP and Reliance Money Estimates

Balance Sheet (Rs. In Mn)

Y/E March	Q1FY08	FY07	FY05	FY04	FY03	FY02
Equity Capital	108	108	108	108	54	54
Total Shareholders Fund	994.1	829.2	436.2	327.4	240.6	178.0
Secured Debt	2618	2404.7	831.5	505.2	471.4	405.7
Unsecured Debt	59.08	59.43	57.6	57.0	58.2	54.7
Minority Interest	21.44	15.36	2.34	1.48	1	0.54
Total Liability	3692.9	3308.7	1327.6	891.0	771.1	638.9
Goodwill on Consolidation	5.9	4.6	4.7	4.7	4.7	4.7
Gross Fixed Assets	651.5	633.2	495.9	385.6	302.3	294.5
Accumulated Depreciation	218.2	249.2	165.8	140.2	117.5	100.2
Net Block	433.3	384.0	330.1	245.5	184.9	194.3
Capital WIP	10.07	30.19	5.53	1.83	0	0
Investments	5.3	2.8	1.03	1.03	1.03	1.03
Current Assets						
Inventory	257.5	293.3	187.3	123.4	116.4	84.8
Sundry Debtors	4210.0	3688.0	1181.3	754.6	755.3	573.4
Cash and Bank Balances	1064.6	929.0	185.0	228.8	73.2	66.2
Other Current Assets	108.2	79.5	27.8	10.6	6.2	7.4
Loans and Advances	1184.9	842.3	235.7	183.0	69.0	75.5
Total Current Assets	6825.1	5832.2	1817.1	1300.4	1020.0	807.3
Sundry Liabilities	3234.2	2669.5	706.6	564.5	368.5	314.0
Provisions	352.5	275.6	124.29	97.92	70.98	54.39
Net Current Assets	3238.4	2887.1	986.2	638.0	580.6	438.9
Total Assets	3692.9	3308.7	1327.6	891.0	771.1	638.9

Source: RHP

<sup>\$ 18</sup> months