BHEL Background History and Profile

Introduction

Established in 1964, BHEL is India’s largest engineering and manufacturing company of its kind engaged in the design, engineering, manufacture, construction, testing, commissioning and servicing of a wide range of products and services for the core sectors of the economy, viz. Power, Transmission, Industry, Transportation, Renewable Energy, Oil & Gas and Defence. The company has been earning profits continuously since 1971-72 and paying dividends since 1976-77. In recognition of its consistent high performance, BHEL has been conferred with ‘Maharatna' status by Government of India on 1st February, 2013. It is now one among the seven Maharatna PSEs.

Established more than 40 years ago, BHEL is the largest engineering and manufacturing enterprise of India in the energy & infrastructure related sectors. BHEL is amongst world's rarest few who have the capability to manufacture entire range of power plant equipment. Since its inception, BHEL is maintaining a consistent track record of growth, performance and profitability. The company has grown in stature over the years with continued inflow of orders, manufacturing prowess, continued thrust on technology leading to a strong presence in domestic and international markets as a major supplier of power plant equipments besides establishing substantial inroads in select
Expansions

The company has realised the capability to deliver 15,000 MW p.a. power equipment capacity and the further expansion program is underway to reach 20,000 MW p.a by 2012. BHEL caters to core sectors of the Indian Economy viz., Power Generation and Transmission, Industry, Transportation, Renewable Energy, Defence, etc. The wide network of BHEL's 15 manufacturing divisions, 2 repair units, 4 power sector regions, 8 service centres, 15 regional offices, 2 subsidiaries and a large number of Project Sites spread all over India and abroad enables the company to provide most suitable products, systems and services efficiently and at competitive prices. The company has entered into a number of strategic joint ventures in supercritical coal fired power plants to leverage equipment sales besides living up to the commitment for green energy initiatives.

Awards

BHEL, where Quality Systems as per ISO-9000 have taken deep roots, has now made significant achievements in Business Excellence by securing recognition certificates from CII for four out of five units that participated in the CII-EXIM Business Excellence Award scheme in 2010-11. Continuing its tradition of bagging prestigious national/international awards, the company has been honoured with several awards which included "EEPC Star Performer Award" in the Product Group of Project Exports for 20th consecutive year; SCOPE Award for Excellence and Outstanding Contribution to the Public Sector Management:
"India Power Award for Equipment Manufacturing and for electrifying Lakshadweep Islands with Solar Power" from Council of Power Utilities; Six Prime Minister's Shram Awards including one "Shram Bhushan" and three "Vishwakarma Rashtriya Puraskars"; "IEI Industry Excellence Award 2010" for Overall Business Excellence and Industry Practices from the Institution of Engineers (India); "NDTV Profit Business Leadership

### Multifarious Activities

BHEL has also emerged as a major supplier of controls and instrumentation systems, especially distributed digital control systems for various power plants and industries. The Industry business sector of the company is fully geared to execute EPC contracts for captive power plants from concept to commissioning utilities. BHEL has also emerged as a major supplier of controls and instrumentation systems, especially distributed digital control systems for various power plants and industries. The Industry business sector of the company is fully geared to execute EPC contracts for captive power plants from concept to commissioning. BHEL is a leading manufacturer of a variety of Industrial Systems & Products to meet the demand of a number of industries, like metallurgical, mining, cement, paper, fertilizers, refineries & petro-chemicals etc. besides captive/industrial power utilities. BHEL has supplied systems and individual products including a large number of co-generation Captive power plants, Centrifugal compressors, Drive Turbines, Industrial boilers and auxiliaries, Waste heat recovery boilers, Gas turbines, Pumps, Heat exchangers, Electrical machines, Valves, Heavy castings and forgings, Electrostatic precipitators, ID/FD fans, Seamless steel tubes etc. to a
number of industries other than power utilities. BHEL possesses expertise to design, manufacture and service various types of onshore rigs to suit the Indian service conditions. The range of equipment covers onshore deep drilling rigs, super-deep drilling rigs, heli-rigs, work-over rigs, mobile rigs and desert rigs with matching draw works and hoisting equipment. BHEL now has the capability to manufacture conventional onshore deep drilling rigs up to a depth of 9,000 meters, mobile rigs to a depth of 3,000 meters and well servicing rigs to a well depth of 6,100 meters. The company is in the process of manufacturing environment friendly AC-technology based oil rings for onshore application.

**International Arena**

BHEL is supplying onshore drilling rig equipment viz. Draw works, Rotary-table, Traveling block, Swivel, Mast and Sub structure, Mud systems and Rig electrics, Well heads & X-Mas tree valves upto 10,000 psi rating for onshore as well as offshore application to ONGC, Oil India Ltd. and Private Drilling Companies. In international arena, the prevailing environment of heightened uncertainties worsened by political turmoil in the Arab world has adversely affected the business prospects of BHEL's traditional markets. In spite of such situation, BHEL was able to sustain its exports momentum and expanded its foot print in new markets. The company is poised to maintain its references in the overseas market encompassing almost the entire range of products and services, covering Thermal, Hydro and Gas-based turnkey power projects, Substation projects, Rehabilitation projects, besides a wide variety of products like Transformers, Motors, Compressors,
Valves, Electrostatic Precipitators, Photovoltaic equipments, Insulators, Heat Exchangers, Switchgears etc. The company has been successful in meeting the requirements of international markets in terms of complexity of work as well as technology, quality and other requirements. BHEL has proved its capability to undertake projects on fast-track basis. Continued focus on After-Sales-Services led to orders for Spares & Services from UAE, Bangladesh, Nepal, France, Sri Lanka, Kazakhstan, Iraq, New Zealand, Malta, Thailand, Yemen and Libya. Besides undertaking turnkey projects on its own, BHEL also possesses the requisite flexibility to interface and complement other international companies for large projects, and has also exhibited adaptability by manufacturing and supplying intermediate products.

The company has been successful in meeting the requirements of international markets in terms of complexity of work as well as technology, quality and other requirements. Continued focus on After-Sales Services led to orders for Spares & Services from Indonesia, Bhutan, Oman, Malaysia, Bangladesh, Vietnam, Srilanka, Saudi Arabia and UAE during 2012-13. BHEL also possesses the requisite flexibility to interface and complement other international companies for large projects, and has exhibited adaptability by manufacturing and supplying intermediate products. As a part of its aim to expand offerings through strategic tie-up in International arena, an MoU has been signed with the Ministry of Energy and Industry, Tajikistan for setting up of two Hydro Power Projects (2x50 MW) on Zeravshan River, Tajikistan. As a part of establishing long-term relationships with key customers who can bring longlasting value to the company, Enterprise Framework Agreement (EFA) has been signed with
Shell for the supply of Gas Turbine Generator (GTG) packages to select Shell locations in Asia-Pacific, Middle-East, Central Asia, Eastern Europe and Africa. The company is firmly perched to expand its Vista by taking a number of strategic business initiatives to fuel further growth in international business which includes exploration of opportunities in solar energy related projects, equipments and projects in Transmission & Distribution arena.

Organization is a mechanism or structure that enables living things to work effectively together. Sound organization can contribute greatly to the continuity and success of the enterprise. Organization is more than a chart – it is the mechanism through which management directs, co-ordinates and controls the business. It is, indeed, the foundation of management. If the organization plan is ill designed, if it is merely a makeshift arrangement, then management is rendered difficult and ineffective. If, on the other hand, it is logical, clear cut and streamlined to meet present day requirements, then the first requisite of sound management has been achieved. Moreover, the sound organization facilitates administration of the company and its parts, encourages growth and diversification and helps to improve the operation of the business as a whole. The following sector presents institutional background of BHEL.

The manufacture of additional types of turbines and generators for power stations, boilers and other electrical machines the Haridwar, Hyderabad and Tiruchirapalli plants were to operate under the overall control of Bharat heavy Electrical limited as a separate corporate entity. BHEL, Hyderabad soon
diversified its activities by absorbing latest technologies from world leaders to meet the new challenges and changing needs of the country. Today, BHEL Hyderabad is an integral part of the industrial scene in India. And catch to the needs of industries viz., Fertilizers, Steel Sugar, Paper, Cement, Refineries, Chemicals & Petrol-chemicals, Rayon’s etc., The following table explains the growing investment and production turnover pattern of select enterprise during last six years.

Institutional Background- BHEL - Hyderabad

Electrical energy continues to be one of the basic and foundational inputs for the industrial development of a nation and also perform the role of a catalyst in the transformation of economy from primitive or traditional state to advanced or modern status. In tune with its philosophy on industrial development, especially pertaining to electrical energy, the Government of India entered the field of electrical industry with the commissioning of Heavy Electrical India at Bhopal in the year 1955. Later, on the basis of a review of the country’s requirements of power generation and transmission equipment, three more plants were set up at Hardwar, Hyderabad and Tiruchirapalli with separate Russian and Czechoslavian collaboration. The organizational set up of the Heavy Electrical Industry working under two separate companies vis. Heavy Electrical India Limited and Bharat Heavy Electrical Limited came up for review in 1971. Later, a high level Action Committee was set up by the Government to enquire into the working of the enterprises. The recommendations of the Action
Committee were approved by the Government of India and as a result the Heavy Electrical India Limited controlling the Bhopal unit was merged with Bharat Heavy Electricals Limited in order to ensure optimum utilization of the total available resource and expertise. As a first step towards the merger, a common Chairman and Managing Director was appointed in July 1972 for both the companies. The accounts of the two companies were integrated with effect from 31st March 1973 and the structure of the two companies was ‘dejure’ merged with effect from 1-1-1974. Hence the BHEL had been operating as a multi-unit company. The following paragraphs explain organizational structure both at corporate and Unit level.

**Organizational Structure - Corporate Level**

At the corporate level the BHEL organization is headed by a Governing Board, which is appointed by the President of India from time to time. The Board consists of minimum two and maximum, fifteen members. The Directors are appointed in consultation with the Chairman and Managing Director. The non-official part-time Directors are appointed for a period of three years but official and full time Directors are not given any particular term or appointment. The Directors have the power to reserve the following matters for the decision of the Government of India.

(a) Acquisition of property

(b) Appointment to all posts carrying remuneration of Rs. 3000/- or above.

(c) Profit sharing
(d) Formation of subsidiary company or companies
(e) Any matter relating to sale, lease, exchange, mortgage and/or disposal
    whether of the whole or part of the undertaking
(f) Any matter relating to the promotion of company
(g) Any agreements involving foreign collaborating proposed to be entered into
    by the company and
(h) Purchase and contracts of a major nature involving substantial capital outlay
    which are in excess of powers vested in the company.

The Chairman and Managing Director functions are in a dual capacity as the
Chairman of the Board of Directors and as the Managing Director. As the Chief
Executive, The Chairman and Managing Director of the company is to ensure
that its affairs are so conducted that the targets set for completion of the
projects, optimum production and profitability, are actually achieved in time
and with optimum efficiency.

**Organizational Structure – Unit level**

The BHEL Hyderabad Unit, situated at Ramachandrapuram, in Medak district
of Andhra Pradesh came into existence in 1963. It diversified its activities by
absorbing latest technologies from world leaders to meet the new challenges
and changing needs of the country. Today, BHEL, Ramachandrapuram Unit is
an integral part of a host of core industries viz., fertilizer, steel, sugar, paper,
cement, refineries, oil, chemical, petrochemical, rayon, etc., The Unit is headed
by the Executive Director. He is the Chief Executive of the company and is
appointed by the President of India in consultation with the Board of Directors, as a head of the unit, he will discharge the following powers.

1. In respect of matters falling within their powers, Executive Director shall exercise powers in consultation with Financial adviser and Chief Accounts Officer of the Unit concerned who should be consulted before expenditure is incurred on new capital items, conditions of contracts for sales as well as purchases, pricing policies, evaluation of tenders, issue of regulations and generally all matters having financial bearing.

2. For submitting tenders and quotations and entering into contracts for the sale of company’s products and services, the Executive Directors powers will be subject to the general conditions of sale and the pricing policy, and other regulations, if any, as laid down by higher authority from time to time.

3. Executive Director will assume full powers and complete responsibility to meet any emergency, affecting the safety of the company’s assets like flood, fire, strike, etc., provided immediate report is made to the Chairman or Board and sanction or approval is obtained.

The Executive Director is aided and assisted by a number of competent and professional managers in the discharge of his function. A Deputy General Manger is made directly responsible for the complete production activity of Heavy electrical power plant. In the absence of a works manager in -charge of production shops, about a half a dozen shop superintendents reports to the Deputy General Manager. The other officers who report to the Deputy General Manager are:

1. Chief of External Erection
2. Material Manager

3. Manager in-charge production, planning and control

4. Joint Personnel Manager

The crucial importance as the public sector undertakings to the economic
development as the country needs no emphasis. The growth as public sector
enterprises in Indian is largely a post-independences phenomenon. The
philosophy and programme as public sector undertaking have been incorporated
in the industrial policy resolutions of 1948 and 1956. The public sector in Indian
has grown to a larger extent covering a wide range as productions, manning,
marketing, trading, financial, institutions public utility services etc. Moreover,
its role in eradicating imbalances in the economic structure and in reducing the
scope for accumulation as wealth and large incomes in private hands has also
been well recognized. The investment-wise the public and sophisticated
technology wise the public sector enterprises have come to occupy the
commanding role in the economy as the country. In this context public sector
has to pay its role as a model employer requires sound base of industrial relation
for sustaining and developing high levels of productions.

**Evolution of Industrial Relations in Public Sector**

Immediately after independence in the interest of the national economy
government considered necessary to develop harmonious Industrial relations in
public sector Undertakings. A Tripartite conference was convened in 1947 at
which the industrial truce resolution was adopted giving paramount importance to the maintenance of industrial peace. The minimum wages Act. The factories Act were all enacted in 1948.In the period that followed since 1951 great importance has been giving to maintenance of industrial peace. The first given year plan viewed that the employer-employee relationship has to be conceived of as a partnership in a consistructive endeavor to promote the satisfaction of economic needs of the community in the best possible manner .It insisted that there should be the closest collaboration through consultative committees at all levels between employers and employees for the purposes of increasing production, improving quality, reducing costs and eliminating waste etc.

The second five years plan evolved certain norms, mechanisms and practices –formula for need –based minimum wage, wage boards, guidelines of rationalization, code of discipline, code of conduct etc, to improve the industrial peace. Later, in the third five year plan bonus act was passed and right of an individual worker come to be better safeguarded by amending the industrial disputed act of 1947. Very soon, the act provided for the constitution of works committees, which may act to remove the frictions between employer and workers in day –to-day working .The act, by an amendment in 1950, also established the labour appellate tribunals. Although after having streamlined the legal machinery, the central government directed its efforts towards promoting joint consultation and collective bargaining. The code of discipline 1957 and grievance procedure 1958 were the outcome of experimenting joint consultations.
One more device in industrial relations machinery was setting up of joint management councils, which were aimed at to create increased councils, which were aimed at to create increased consciousness among the workers in regard to higher productivity and to promote a sense of belonging to the enterprise by associating labour progressively in their management. Besides, the bi-partite consultative machinery, and elaborate tripartite consultative machinery was also promoted. Such machinery consists of the India labour conferences, the standing labour committee, the industrial committees and the tripartite joint consultative board of industry and labour. These agencies was supposed to serve as a useful forum to inject a consensus on the issues affecting labour and management.

In spite of all the above efforts of the government it was found that in most of the public sector understandings in Indian, the relations between management and workers have not been cordial. The mechanism of conciliation and mediation as primary agencies deals apparently with largest number of disputes. But these agencies are not functioning effectively due to the retime limit placed on the conciliation proceedings. Moreover, its effectiveness has also been limited due to absence of will trained conciliators. Further, the failure of the conciliation machinery accounts for the increase in the number of cases submitted to adjudication machinery. Its Existence, many a times, tempts labour to resorts to adjudication rather than to conciliation or voluntary arbitration or even collective bargaining. Although the laborious process involved in adjudication often delay the settlement of disputes and it hardly brings for better industrial relations. In regard to voluntary arbitration also the parties have certain reservations about its efficacy. The absence of the provisions for appeal
against perverse awards and the lack of experience and trained arbitrators rendered its use rather risky and uncertain. Further, it also involves long delays in resolving the disputes. The statutory machinery has also failed, partly because of the defective procedures in serving its objectives of promoting industrial peace and harmony. Not only that the statutory and voluntary mechanism has failed to stem the rising tide of labour unrest, they have been less successful in labour management relations. In fact, as the industrial relations machinery has been broadened and strengthened, the conflict have also become more intensive and as longer duration. The direct and indirect impact as the growing labour unrest on the law and order situations, also on industrial production and labour earnings have been grace adversities in the industrial relation in recent years. Therefore round industrial machinery is an essential prerequisite for public sector organizations. Moreover sound successful industrial relations machinery should have the following basic requirements.

1) **Top –management support**
Since industrial relations is a functional staff service, it must derive authority from the line organization.

2) **Sound personnel policies**
They constitute a business philosophy for the guidance of the human relations decision of the enterprise

3) **Adequate practices**
Adequate practices have to be developed by professionals in the field to assist the policy makers of the units.

4) **Detailed supervisory training**
To carry out the policies and practices by the industrials relations State, the job supervisions must be trained in details and the significance of the policies must be communicated to the employees. They must be trained in leadership and communication.

5) **Follow-up of results:**

Constant review of the industrial relations programme is necessary not only to evaluate existing practices but also as a check on certain undesirable tendencies. In any individual organization, employer-employee relationship is not stable but dynamic. In the dynamic public sector environment a sound industrial relations machinery to resolve the conflicts is need of the hour.

**Summing Up**

To sum up sound industrial relations are essential for sustaining industrial peace and also to increase production in public sector enterprises. In Indian attempts have been made since independence to develop a sound industrial relations machinery in public sector. The first, second, and third five year plans specifically stressed the importance of industrial relations in public sector and made an attempt to develop industrial relation machinery in spite of these efforts employee-employer relations in sector has not been cordial. The dynamic public sector environment require a sound industrial relations machinery and its should be supported with sound personnel policies and practices. The top management support is essential pre – requisite for sound industrial relations machinery. Sound organization can contribute greatly to the continuity and success of the enterprise. BHEL is a well-diversified
organization both at corporate and Unit level. The powers and functions are so
distributed to avoid overlapping of functions in the enterprises. The BHEL,
Hyderabad Unit is headed by the Executive Director who is aided and assisted
by a number of competent and professional managers in the discharge of his
functions. The study has been observed that the organizational structure of
BHEL, Hyderabad Unit designed in such a way to achieved optimum
productions with optimum efficiency.