BHARAT HEAVY ELECTRICALS LTD.

(A Government of India Undertaking)
Corporate Systems and Information Technology,
2nd Floor, HRDI Building,
HRD & ESI Complex, Sector 16A
Noida -201301

Ref: AA/CIT/ERP/ConsultantEOI
Date: **25th July, 2011**

Sub: **Expression of Interest (EOI) for providing consultancy services for appraisal of BHEL business systems & awarding of ERP Product and Implementation contract for an integrated solution for BHEL's business processes.**

Dear Sir/Madam,

BHEL proposes to implement Industry Standard ERP solution across company.

In view of this, we are in the process of inviting EOI from experienced firms offering services as detailed in the Scope of Work. The interested firms satisfying the Pre-Qualification Requirements (PQR) and accepting the terms & conditions are invited to submit their EOI.

Any clarifications / queries from the consultancy firms / bidders shall be given in the specified format to BHEL on or before **29th July, 2011 by 1700 hrs.** The pre-bid meeting with the consultancy firms / bidders will be held on **03rd August, 2011, at 1400** hrs at Corporate Information Technology, 2nd Floor, HRD & ESI Complex, Plot No.25, Sector-16A, Noida – 201301

Any corrigendum / notification issued by BHEL, subsequent to invitation of EOI, shall only be available / hosted at www.bhel.com.

The consultancy firm / bidder are expected to do a comprehensive study of BHEL and understand its requirements before submitting the response. Interested consultancy firms / bidders may visit BHEL establishments, at their own cost, to have a firsthand knowledge on the business activities of the enterprise, available infrastructure, work culture and IT systems, prior to submission of the response. Interested consultancy firms / bidders will not be given any additional time for under taking such visits.

Responses received will be evaluated and suitable consultancy firms / bidders shall be short-listed. The detailed tender would be made

available to the short listed consultancy firm / bidder. Based upon the outcome of the main tender, the successful consultancy firm / bidder shall subsequently enter into a separate contract with BHEL for executing the said services.

Please ensure that your response complete in all respect in requisite format with necessary enclosures is delivered on or before the due date & time i.e. **1600 hrs. On 08th August, 2011**. All the envelopes should be indicating "**EOI for providing consultancy services for evaluation of BHEL systems & awarding of ERP Product and Implementation contract for an integrated solution for BHEL's business processes**" shall be addressed to:

AGM (CIT-Purchase)
Bharat Heavy Electricals Limited,
HRD & ESI Complex, Plot No.25,
Sector – 16A, Noida-201301

Thanking you,
Yours faithfully,
For and on behalf of BHEL

- sd -

AGM (CIT-Purchase)

Enclosures:

Annexure-1	:	Background and Business Profile of BHEL
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Background and business Profile of BHEL

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Background and Business Profile of BHEL

Established more than 40 years ago, BHEL is the largest engineering and manufacturing enterprise in India in the energy related/infrastructure sector today. The company has grown in stature over the years with continued inflow of orders, manufacturing prowess and continued thrust on technology leading to a strong presence in domestic and international markets as a major supplier of power plant equipment besides establishing substantial inroads in select segment of products in the industrial sector and railways. Bucking the uncertainties surrounding the global economic recovery, BHEL's turnover has quadrupled in last six years. BHEL synchronized / commissioned a record of 9442 MW (FY 2010-11) of Power Plant equipment in domestic as well as international markets, comprising utility and captive / industrial sets. BHEL managed to secure record orders worth Rs.60,507 crore, during 2010-11, despite various challenges confronting the power sector in recent times. The total orders in hand for execution in 2011-12 and beyond is Rs.1,64,130 crore. BHEL's turnover for the FY 2010-11 is Rs.43,451 crore (Prov.) likely to be around 1 lakh crore in the year 2016-17. The company has realised the capability to deliver 15,000 MW p.a. and the capacity expansion program to 20,000 MW p.a. by 2012 is underway. Currently, 74% of the total power generated in the country is through BHEL sets.

BHEL caters to core sectors of the Indian Economy viz., Power Generation and Transmission, Industry, Transportation, Renewable Energy, Defense, etc. The wide network of BHEL's 15 Manufacturing Divisions, 4 Power Sector Regional Centers, 8 Service Centers, 15 Regional Offices, 4 Overseas Offices, 1 subsidiary and a large number of project sites spread all over India and abroad enables the company to promptly serve its customers and provide them with suitable products, systems and services - efficiently and at competitive prices. The company has its footprints in more than 70 countries all over the world. The company has entered into a number of strategic Joint Ventures in the supercritical segment to leverage equipment sales besides strategic partnerships with technology leaders for business enhancement in transmission and transportation sectors.

The Quality Systems as per ISO-9000 have taken deep roots in BHEL. The company has made significant achievements in Total Quality Management (TQM). With six CII-EXIM Commendations secured during 2009-10, BHEL stands highest among public and private sector companies in the country. In recognition of BHEL's excellent performance on sustainability development, the CII-ITC Sustainability Award 2009 was conferred on BHEL's Hyderabad unit. In recognition of BHEL's contribution to the greening of the Lakshadweep Islands, BHEL was awarded the 'India Power-Jury Award 2009'. For the fourth consecutive year, BHEL's performance was recognised by the prestigious publication 'Forbes Asia', which featured BHEL in its fourth annual 'Fabulous 50' list of the 'Best of Asia-Pacific's Publicly-Traded Companies' with revenues or market capitalisation of at least US$ 5 billion, having highest long-term profitability and sales & earnings growth. BHEL is one of the only four Indian companies, ranked at 590, in 'The Global Innovation 1000' of Booz & Co., a list of 1,000 publicly-traded companies which are the biggest spenders on R&D in the world. Significantly, BHEL won the EEPC's Top Export Award for the nineteenth year in succession. BHEL is the only Indian PSU to be recognized for the second time as Star PSU Company of the year by leading business daily 'Business Standard'.

Power Generation

The power generation sector comprises thermal, gas, hydro and nuclear power plant business. As of 31.3.2010, BHEL- supplied sets account for 91,731 MW or nearly 62% of the total installed capacity of

1,47,750 MW in the country. Significantly, these sets generated 487.56 Billion Units of electricity, which constituted 74% of the total power generated in the country.

BHEL has proven turnkey capabilities for executing power projects from concept-to-commissioning. BHEL manufactures sub-critical sets of up to 600 MW, including recently introduced 270 MW, 525 MW & 600 MW rating thermal sets. In the supercritical range, BHEL has secured orders for 6 sets of 660/700 MW (Boiler & TG) and 5 sets of 800 MW.

The company manufactures 220/235/500/540/700 MW nuclear turbine-generator sets and is geared up to take higher rating nuclear sets. Custom-made hydro sets are also engineered and manufactured by BHEL.

BHEL is one of the few companies worldwide, involved in the development of Integrated Gasification Combined Cycle (IGCC) technology which would usher in clean coal technology. BHEL has set up Asia's first 6.2 MW IGCC power plants with an indigenously designed pressurized fluidized bed gasifier. The company has also signed an MoU with APGENCO for setting up a 182 MW IGCC plant.

Industries

BHEL manufactures and supplies major capital equipment and systems like 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, Reverse Osmosis (RO) based water desalination systems, ID/FD fans, seamless pipes etc. to a number of industries like, metallurgical, mining, cement, paper, fertilizers, refineries & petrochemicals, etc., other than power 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.

Transportation

Most of the trains of Indian Railways, whether electric or diesel powered, are equipped with BHEL's traction propulsion system and controls. The systems supplied are both with the conventional DC drives and state-of-the-art AC drives. India's first underground metro at Kolkata runs on drives and controls supplied by BHEL. BHEL is contributing to the supply of electrics for EMUs for 15 kV DC & 25 kV AC to Indian Railways. Almost all the EMUs in service are equipped with electrics manufactured and supplied by BHEL.

The company also manufactures complete rolling stock i.e. Mainline 25 kV AC locomotives up to 5000 HP, EMU coaches and Diesel Electric Shunting locomotives from 350 HP to 2600 HP. In the area of Urban transportation, BHEL is geared up for turnkey execution of light rail transit systems and metro systems.

Oil and Gas

BHEL is supplying onshore drilling rig equipment viz. draw-works, rotary-table, travelling block, swivel, mast and sub-structure, mud systems and rig electrics to ONGC and Oil India Ltd. Well heads & X-Mas Tree valves up to 10,000 psi rating for onshore as well as offshore application are being supplied to ONGC, Oil, India Ltd. and private drilling companies. BHEL has also supplied Casing Support Systems, Mud line Suspension Systems and Block Valves to ONGC for offshore application. The company also has the capability to supply complete onshore drilling rigs capable of drilling up to 9000M, with AC-SCR

system or AC Drives having latest state-of-the-art technology, mobile Rigs, work-over rigs and sub-sea well heads. Currently, BHEL is executing orders for refurbishment and up-gradation of onshore Oil Rigs from ONGC & Oil India Ltd. BHEL has supplied GT-driven centrifugal compressor packages to GAIL India Ltd. for their gas compressor stations for Dahej - Vijaipur gas pipeline project.

Renewable Energy

BHEL has been manufacturing and supplying a range of renewable energy products and systems. It includes Photovoltaic cells, modules, systems and power plants. BHEL has supplied standalone Power Plants of ratings up to 150 kW peak, usually used as distributed power generation plants. The company is also executing grid-connected MW sized PV plants. BHEL is actively associated with the development of Concentrated Solar Power (CSP) projects and offers power blocks on EPC basis.

Defense

BHEL has emerged as a reliable supplier of strategic equipment and services to Indian Defense and Para-military forces for over 20 years. BHEL has large infrastructure including dedicated engineering and manufacturing facilities at many locations to manufacture various types of equipment and provide complete services to meet the Indian defense requirement. Defense has been identified as a key growth area and BHEL has taken industrial licenses for the production of major defense equipment like all types of gun, Armoured & Combat Vehicles, Advance Naval Systems, Propulsion Systems, Radars, UAVs, etc.

Transmission

BHEL supplies a wide range of products and systems for transmission and distribution applications. The products manufactured by BHEL include power transformers, instrument transformers, dry type transformers, shunt reactors, capacitors, vacuum and SF6 switchgear, gas insulated switchgear, ceramic insulators, etc. BHEL has developed and commercialized the country's first indigenous 36 kV Gas Insulated Substation (GIS) and has also developed 145 kV GIS which has undergone successful field trials at Hyderabad. BHEL has indigenously developed 765 kV transformers and shunt reactors. For the first 1200 kV test station in the country at Bina, BHEL has developed 1200 kV CVT and the 1200 kV transformers. BHEL has successfully developed and tested 420 kN disc insulators for 1200 kV transmission test line and now has a range of disc insulators for EHV and UV AC/DC applications up to 1200 kV AC and ±800 kV DC with electro-mechanical strength from 70 kN to 420 kN suitable for both clean and polluted environments, solid core insulators up to 400 kV and hollow porcelain insulators up to 765 kV AC.

International Business

BHEL has, over the years, established its references in more than 70 countries across all the six continents of the world. These references encompass almost the entire range of BHEL products and services, covering Thermal, Hydro and Gas-based turnkey power projects, Substation projects and Rehabilitation projects, besides a wide variety of products like; Transformers, Compressors, Valves and Oil Field Equipment, Electrostatic Precipitators, Photovoltaic Equipment, Insulators, Heat Exchangers, Switchgear, Castings and Forgings, etc. Some of the major successes achieved by BHEL have been in gas-based power projects in Oman, Libya, Malaysia, UAE, Saudi Arabia, Iraq, Bangladesh, Sri Lanka, China, Kazakhstan, Belarus, Yemen; thermal power projects in Cyprus, Malta, Libya, Egypt, Indonesia, Thailand, Malaysia, Sudan, Syria, Ethiopia, Senegal, New Caledonia; hydro power plants in New Zealand, Malaysia, Azerbaijan, Bhutan, Nepal, Taiwan, Tajikistan, Vietnam, Rwanda, Thailand,

Afghanistan, Democratic Republic of Congo; and substation projects & equipment in various countries. Execution of these overseas projects has also provided BHEL the experience of working with world-renowned consulting organisations and inspection agencies.

The company is taking a number of strategic business initiatives to fuel further growth in overseas business. This includes firmly establishing itself in target export markets, positioning of BHEL as a regular EPC contractor in the global market both in utility and IPP segments, and exploring various opportunities for setting up overseas joint ventures, etc.

Technology Upgradation, Research & Development

BHEL's products and systems are technology intensive and R&D/technology development is of strategic importance in its endeavour to become an all-inclusive engineering enterprise. During the year, BHEL has invested Rs.829 Crore on R&D efforts which correspond to nearly 2.5% of turnover of the company. To meet customer expectations, the company has upgraded its products to contemporary levels through continuous in-house efforts as well as through acquisition of new technologies from leading engineering organisations of the world. IPR capital of the company has grown by 27% in the year with 1 patent/copyright filed every day, taking total to around 1300 nos.

The Corporate R&D Division at Hyderabad leads BHEL's research efforts in a number of areas of importance to BHEL's product range using emerging technologies. Research and product development centres at each of the manufacturing divisions play a complementary role. Centres of Excellence have been set up for Simulators, Computational Fluid Dynamics, Permanent Magnet Machines, and Surface Engineering. As the sixth in the series, BHEL has established a Centre of Excellence for Machine Dynamics (COE-MDF). Centre of Excellence is being established for Compressors & Pumps. It is also working to set up a Centre for Nano-technology at Hyderabad.

In addition to the Corporate R&D Division, BHEL has four specialized institutes, viz., Welding Research Institute (WRI) at Trichy, Ceramic Technological Institute (CTI) at Bangalore, Centre for Electric Traction and Hydro lab at Bhopal and Pollution Control Research Institute (PCRI) at Haridwar.

Reinforcing its position as a world class total solution provider, technology for Controls & Instrumentation for power plants has been upgraded enabling BHEL to offer state-of-the-art controls for power plant and related applications. The company is also engaged in research in futuristic areas like fuel cells for distributed environment-friendly power generation, clean coal technology applications, Ultra supercritical technology based applications in thermal power, standardization of electrode making process, development of process for addition of Nano/Micro particles for improving material characteristics, super conductivity applications in transformers, generators/motors etc. With an array of new technologies at its command, BHEL is confident of meeting the challenges ahead and fulfilling its responsibilities as the premier engineering and manufacturing enterprise of India.

Further details including Annual Reports can be accessed at BHEL website www.bhel.com

Product Profile

Power	Industry	Transmission	Transportation
Air Preheaters	Capacitors	Bushings	Electric Rolling Stock
Boilers	Ceralin	Capacitors	Electrics for Rolling Stock
Control Relay Panels	Compressors	Control Relay Panels	Electrics for Urban Transportation System

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Electrostatic Precipitators	Desalination Plants	Dry-type Transformers	**R&D Products**
Fabric Filters	Diesel Generating Sets	Control Shunt Reactor	Fuel Cells
Fans	Industrial Motors & Alternators	HVDC Transmission System	Surface Coatings
Gas Turbines	Gas Turbines	Insulators	Automated storage & Retrievals
Hydro Power Plant	Oil Field Equipment	Switchgears	Load Sensors
Piping Systems	Solar Photovoltaics	Power Semiconductor Devices	Transparent Conducting Oxide
Pulverizers	Power Semiconductor Devices	Power System Studies	**Non-Conventional Energy Source**
Pumps	Seamless Steel Tubes		Mini/Micro Hydro Sets
Seamless Steel Tubes	Soot blowers		Solar Lanterns
Soot blowers	Steel Castings & Forgings		Solar Photo voltaics
Steam Generators	Steam Generators		Solar Water Heating Systems
Steam Turbines	Steam Turbines		Wind Electric Generators
Turbo generators	Turbo generators		
Valves	Valves		

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Systems & Services

Power Generation Systems	Transmission Systems	Transportation Systems	Industrial Systems
Turnkey power stations.	Sub-stations switchyards.	Traction systems.	Industrial drives and control systems.
Combined-cycle power plants.	HVDC transmission systems	Urban transportation systems.	Erection commissioning, operation and maintenance services.
Cogeneration systems.	Shunt and series compensation systems.	Erection commissioning, operation and maintenance services.	Spares management.
Modernization and rehabilitation of power stations.	Power system studies.	Consultancy services.	Consultancy services.
Erection commissioning, operation and maintenance services.	Erection commissioning, operation and maintenance services.		
Spares management.	Consultancy services.		
Consultancy services.			

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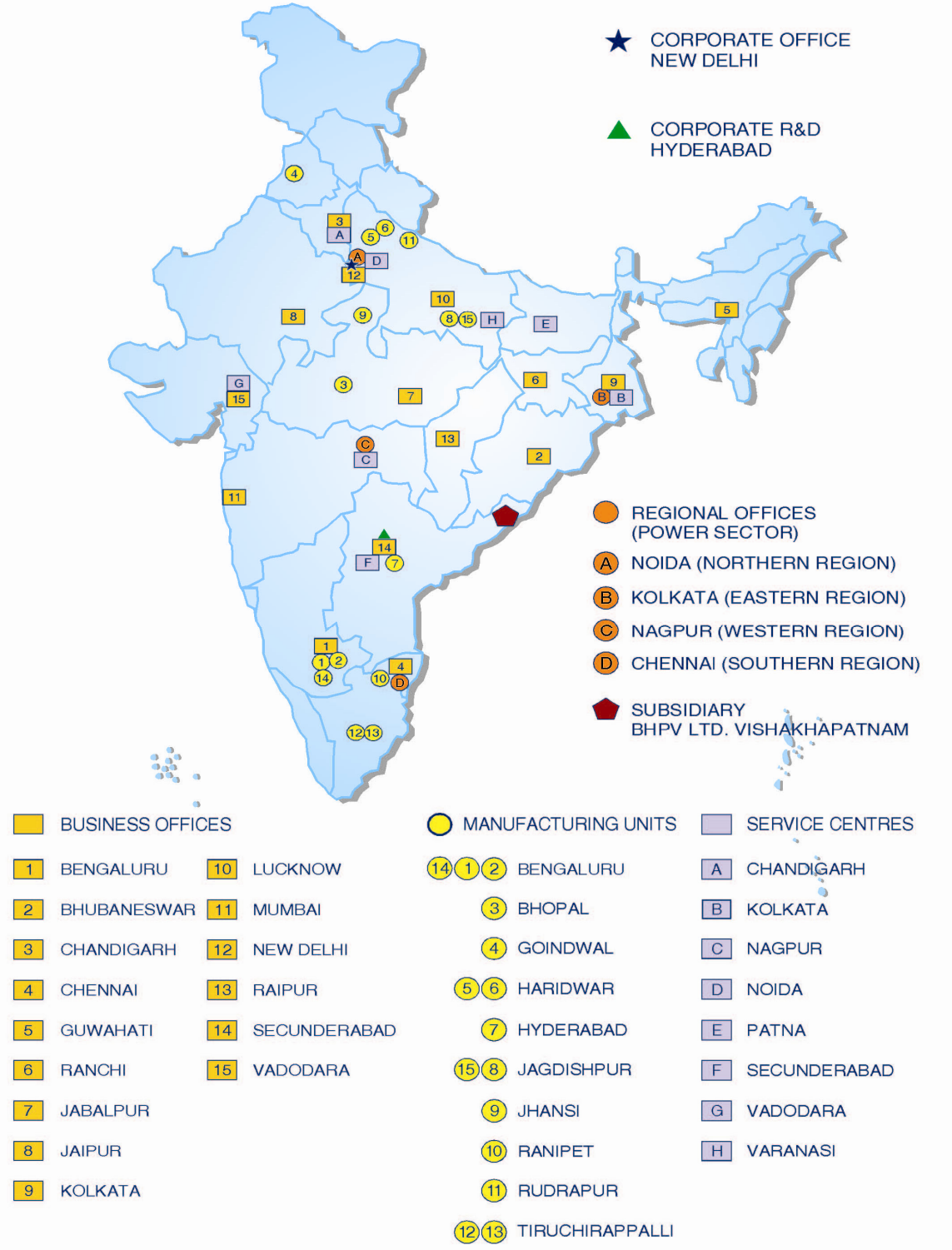
BHEL Units/ Divisions Location Details



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Information Technology in BHEL

In BHEL, Information Technology has deeply penetrated all the functional areas and it is suitably deployed in various facets of company's operations. The company has substantially introduced IT in its Engineering, Manufacturing, and Materials Management & Production functions. IT initiatives have been taken up so as to meet the emerging demands of the business challenges of the New Economy.

Infrastructure

All Units and Divisions have their own computing resources as per their perceived needs. Local connectivity of different departments and groups have been achieved through state of the art LAN technologies (Giga Bit Ethernet/ Fiber optics).BHEL has established its Corporate Level Wide Area Network on MPLS based technology linking Manufacturing Units, Service Divisions, Project Sites and offices. This has enabled exchange of information across the Units / Divisions in a secured way. This network MPLS interconnects all locations of BHEL across the country on OFC/RF Links/VSATs.

Business Applications & Other software used

Integrated end to end Business Applications, largely rendered in web, have been developed and used at various manufacturing units within various processes from receipt of work order to dispatch of equipment.

A number of Web based applications are being developed and implemented in various functions across various Units/Regions/Business Sectors for their local operations. Some Corporate wide web applications have also been developed over a period of time, mostly. Oracle has been standardized as RDBMS technology in BHEL & J2EE is the favored technology for application development.

All engineering centers are well equipped with engineering workstations using advance Engineering Software for Designing, Modeling, Analysis and Drafting etc. Electronic Depositories, with appropriate work flow & change control, have been implemented particularly for Engineering Documents at major units.

Information Systems and ERP in BHEL

Currently, major Manufacturing Units of BHEL have implemented Information Systems (either based on SAP ERP or developed in-house) to meet their Unit specific business requirements while Business Sectors and other Manufacturing Units/ Divisions and Regions have moderate level of computerization in place.

BHEL has implemented SAP for its unit level operations at Trichy, Hyderabad, EDN Bangalore, and EPD Bangalore. Also SAP-HCM module is currently under implementation in BHEL at Corporate Level.

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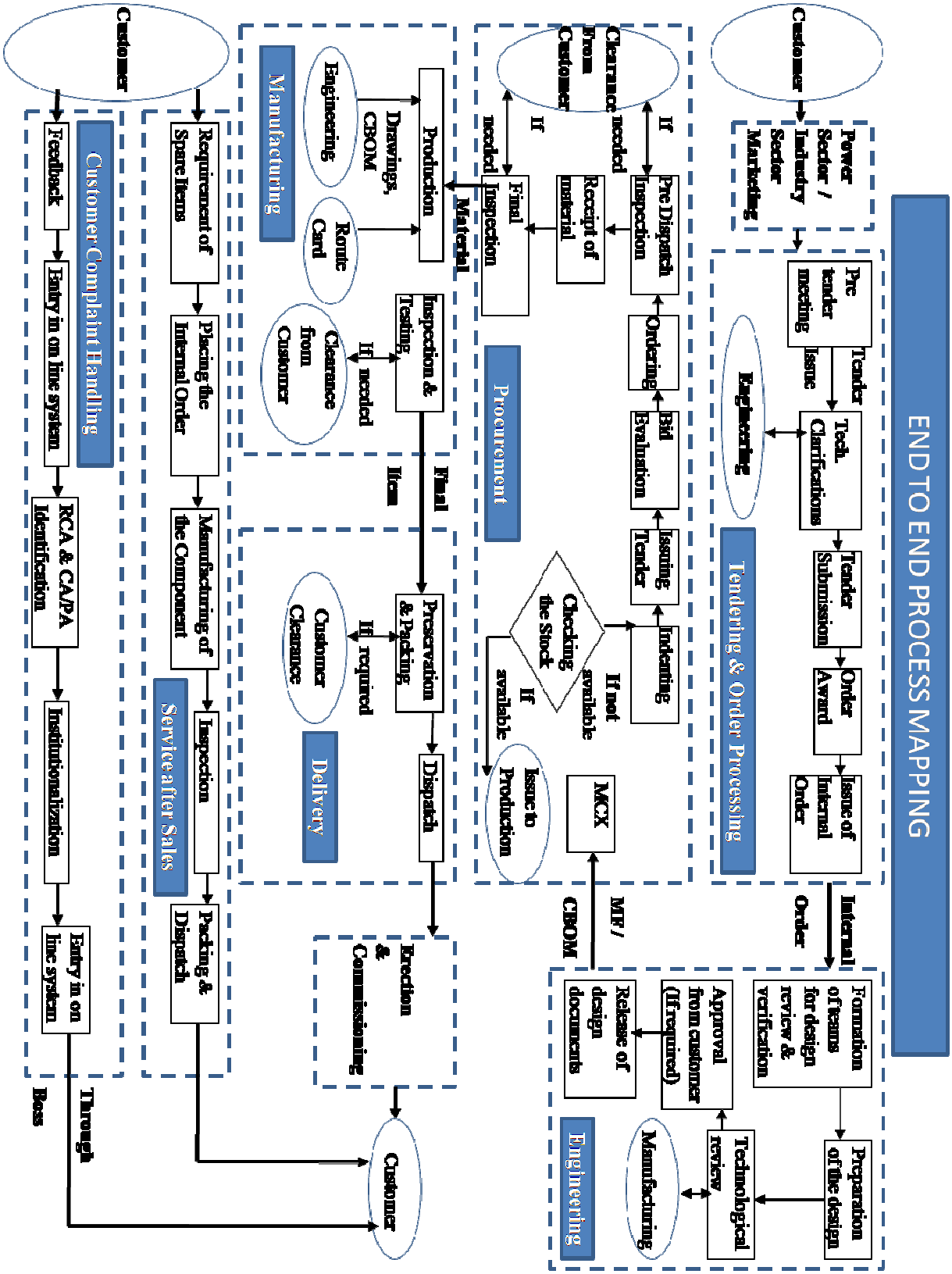

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Life Cycle of a typical project in BHEL

Tendering & Order Processing – Customer and Corporate Marketing

Tendering is collaborative exercise between Corporate Sales outfits, Unit sales & engineering divisions.

Pretender Meeting – Pretender discussions are held with the customer to understand the customer's requirement.

Tender Issue – The tender is issued by the customer.

Technical Clarifications by unit engineering – Technical Clarifications, if required, are taken by Unit engineering and preliminary designs are worked out to estimate the material and labour requirements.

Tender Submission – Offers received from different units are consolidated at corporate level and bid is submitted as per the customer requirements.

Order Award – Further process starts in case the Order is awarded to BHEL else data is used for market analysis.

Issue of internal Order to units – On award of a contract to BHEL, the corporate marketing issues Internal Order to respective units. Unit commercials issues work order based on the Internal Order for respective products.

Unit Engineering

At unit level Design & Engineering groups are organized on product line.

Identification of teams for design review & verification – At Unit engineering, internal teams are formed for design review and verification.

Preparation of the design – Detailed design is worked out by the Unit Engineering and engineering documentation including drawings, BOM etc are prepared. In BHEL Group technology is used where in a large product such as Steam Turbine is broken in several sub-products (Groups) each having their modular documents. Complete product is assembled using these modular sub-products/ Groups.

Technological review by technology groups – There are technology groups at Unit level. These groups do the technological review of the drawings and BOM.

Approval from customer (If required) – Some design documents need approval from customer, in case required.

Release of design documents to Manufacturing – After finalisation and approval of the design documents by engineering, these are released for manufacturing.

Material Forcast (MF)/ manufacturing drawings & Bill of Materials (BOM) – Bill of Materials (BOM) are released for material procurement and subsequent issue of material to manufacturing shops. MF is used for material Procurement wherever Design is still to be finalized.

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Issue of Quality plan and customer drawings – Along with the release of drawings to manufacturing, the customer drawings are also issued. Quality plan is issued by Quality Assurance in consultation with design department as per Customer requirement. It includes erection & commissioning drawings.

Issue of repair and OM manuals – The repair manuals and OM manuals are also prepared by Unit engineering.

Material Procurement

Material procurement is done by unit MCX groups. The existing material stock is checked for availability and issue of material. If material is available, it is issued to Production. If not, indenting of required material quantity is done by engineering.

Purchase

The purchase of material is done as per purchase policy of BHEL. The main steps involved are:

Issuing Tender – The purchase department issues tender for material purchase.

Bid evaluation – The bids from registered vendors are obtained and evaluated for the purchase.

Ordering – The required quantities of material are ordered thru L1 vendor.

Pre dispatch Inspection – The material is inspected either at vendor's premise or at BHEL location before dispatch of the requisite material.

Receipt of Material – Material is received at BHEL.

Clearance from Customer If needed – If required, the clearance is obtained from customer for the inspected material.

Final Inspection, financial accounting and receipt in stores – The material is finally inspected, its accounting done in finance and the same is received in unit material stores.

Payment to supplier by finance – The payment for the supplied material is made by the Unit finance to the supplier.

Issue of material is done by stores for production on clearance from Material Planning & Inventory Control (MPIC).

Manufacturing

The material received against indents is received and stored in the central plant stores. The material is issued for Production against stores issue vouchers accepted by MCX– The production takes place based on the design documents, drawings, BOM and route card.

Stage Inspection & Customer Clearance - If required, the stage inspection is done and customer clearance is taken at agreed stages.

Testing – Testing of components and sub assemblies is done during various stages.

Storage of subassemblies and components – The components and sub assemblies are stored at the block gantry/ Storage area. They are taken to assembly area at the time of final assembly.

Assembly – The final assembly is done by manufacturing after all components and subassemblies are available for that product.

Final Testing – Final testing of the assembled product is done as per the test plan.

Dispatch Clearance from Customer - The dispatch clearance is taken from the customer, if required.

Preservation & Packing – The material to be dispatched is preserved and packed.

Invoicing and Dispatch – For all the dispatches, invoicing is done and the material is actually dispatched.

Delivery to site – The material is delivered to site through approved transporter.

Cash collection from customer – The cash collection is done from the customer by the commercial and other corporate entities.

Sub-contracting

OS yearly tonnage plan is being finalized based on PGMA responsibility.

Yearly Rate contract is finalized and Rate schedules are maintained based on type of operations. For every rate schedule, source list is maintained.

Each demand identified for sub-contracting gets converted to Purchase Requisition (PR) through MRP. These PRs are linked manually to Corresponding Rate schedules based on the operations involved. Vendor is also identified based on his available capacity.

Purchase order (PO) is placed based on the rate contract.

Materials are issued to the vendor based on the Bill of Materials in the PO. *If* original materials are not available, alternate materials are issued.

Gate pass generated at stores for material issue.

Cutting plan prepared by vendor for every material issued in a gate pass.

After completion of product, Inspection call is given by Vendor and closed by Inspection agency.

Vendor hands over accepted materials to Shipping and the finished goods are taken into Stock.

After PO completion, Material Accounting (MAS) is done for a completed PO.

Vendor returns the Excess materials. Recovery is done for the materials not returned.

Import Clearance Process (Port Operations)

Imported content of consumption of raw materials, components, stores & spare parts is 35% (Rs.6200 crore) against 65% of Indigenous value as per annual report data for year 2009-10. Apart from this capital goods and other items are also imported.

License applications/ Registration of Licenses/ Certificates with Customs/ Ports. Around 200 certificates and licenses may be active. Presently BHEL operates through DEEC/PI/Power Cert/R&M Cert/Defense Cert.

Major imports through Mumbai (4000 BLs), Chennai(2000), Bangalore(1500), Delhi(150), Bhopal(20 BLs) including Air/Sea/ICD amounting to approximately 3 lac Metric Tonnes from more than 80 ports worldwide and may be dispatched to manufacturing units/Sites from ports.

Port operations include License Registration, Vessel Monitoring, Bill of Entry (self-filing/through CHA), Customs Clearance, Duty/Freight/Port Payment, Other payments and Debiting expenditure to Units, Dispatch of Material as per transporter contracts, Accounting of License/Certificate Debiting, Bond Closure, Bonding (Section 49/59) and Ex-Bonding, Managing deposit accounts with ports. Material is dispatched to Manufacturing Units/Sites after clearances. Imported Material may also be directly dispatched from Indian port to foreign ports as export.

Importing Unit operations include coordination with ROD/Clearing Agency, License Application/Ratification/ License Allocation/Checklist, Document Retirement, Sending Documents to ROD like NND/OBL etc., Approvals/Dispatch Instructions, SRV Pricing, and Drawbacks etc. Manufacturing Units capture the cost of Customs Duty, CVD and SAD paid at ports and ship cost is arrived based on the actual B.E and GR is priced including these costs. License closure / Bond closure/ Export Obligation Discharge are the responsibilities of Foreign Exchange Division at Units. Units also declare the detailed exposure of risk involved during transit from foreign ports to destination for insurance cover under available policy.

Marketing/Business Sector operations include arrangement of Essentiality/Project Authority Certificates for further processing of Units for arranging Licenses etc depending on the nature of contract e.g. International Competitive Bidding (ICB)/LCB/Negotiable. Time-to-time coordination for schemes like SFIS/Market Focus etc.

Corporate Finance provides daily exchange rates used for various payments.

Corporate Finance provides Insurance related rates for ocean freight. Insurance is also to be done for consignments dispatched from ports. Insurance is covered under Corporate Open Policy and only Units files Declaration of import to the regional insurance agency.

Project Engineering Management - PEM

Project Engineering Management (PEM) Division is BHEL's power plant System Integrator, a nodal agency providing total engineering solutions for conventional thermal and gas based power projects and conventional island of nuclear power plant, enabling BHEL to offer complete Engineering, Procurement and Construction (EPC) services.

PEM's experience of project engineering for over 250 units (coal based units of rating up to 600 MW and gas based units based on 9FA advance class gas turbines) installed and under execution in India and abroad totaling more than 100000 MW, makes it India's largest power plant engineering and design organization. Presently PEM is also engaged in the engineering of supercritical power projects of unit ratings 660 MW, 700 MW & 800 MW being executed by BHEL.

It carries out following functions / activities during the lifecycle of a typical project:

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Design Review – Various teams are formed by PEM for design review and verification.

Preparation of the power plant design – The overall power plant design is prepared by the PEM.

Technological review – PEM does a technological review of the power plant design and suggests any changes, if required.

Approval from customer – If required, PEM takes a formal approval of the power plant design from the customer.

Release of design documents – The design documents are finally released for commissioning and procurement of Balance of Plant (BOP).

Power Sector – Regions and Site Teams

Receipt and Storage – The material dispatched by the various Units of BHEL is received and securely stored by the site teams.

Organizing the resources – The site teams organize the manpower, support equipment and material for the project site.

Purchase - Procurement of Steel, Cement, Chemicals and T & P etc is done by the Site teams.

Subcontracting - Subcontracting Group fixes up Vendor for Material Management and Erection of Equipments.

Document Management: Management of Documents & Drawings required for Erection & Commissioning

Receipt & Storage: Receipt and storage of Bought out Items (BOI)

Erection and commissioning – The site teams carry out the erection and commission (E&C) at the site.

Resolution of site problems – The site teams also need to resolve the various problems encountered at the project site.

Coordination – The site teams also need to coordinate with the units, sub-contractors and customer and other dealing agencies.

Customer Billing

Customer Service after Sales (SAS)

Customer / Site complaint – After handover of the project, the customer complaints are received by commercial, quality or the engineering functions.

Analysis – The analysis of the complaint is carried out by Engineering for man or material requirement.

Problem resolution – The problem is resolved thru Quality, Engineering or production.

Feedback Entry in system – The feedback received from the complaint resolution is captured into some system.

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RCA & CA/PA Identification – Root Cause analysis (RCA) & Corrective Actions Preventive Actions (CA/PA) are worked out.

Institutionalization - Entry in On line system for future corrective action if required.

Requirement of Spare Items

Enquiry – An enquiry is received for the requirement of spare items.

Offer – AN offer is given by BHEL for the supply of spares.

Placing the internal order – An internal order is placed within BHEL Unit for supply of spare item.

Issue of engineering documentation – Engineering documentation is issued for the concerned spare item.

Manufacturing of the component – The spare component is then manufactured as per the design document.

Inspection, Packaging & Dispatch – The spare is then inspected, packed and dispatched for the destination.

Corporate Office Requirements

CEPD	Turnover/ major products developed from In-house Development. Status of MOU projects for Engg and R&D points R&D Expenditure R&D Budget Status Engineering Highlights IPR Information PIRs status report
CMTIP	Monitoring of physical & financial progress of Capital Investments approved by Board/CMD Monitoring of utilization of CNC & Critical manufacturing facilities at units Monitoring of progress/ expenditure of Reconditioning & Retrofitting of Plant &Machinery Capital Expenditure Process
Monitoring	MOU parameters Unit and Company Balanced Score Card Plant Performance calculation T/O Monitoring
Finance	Budget Exercise Cash Management(Including Debtors, Collections) Corporate Books FSD Establishment Taxation
Quality	Status of Product non - conformance Status of Recovery Rate Status of Defectives Status of Quality hold-ups at Site Quality Issues of BOI's Status of Customer Complaints Status of Site Action Request (SAR) Quality Performance Index

Annexure-1

	Specific certification/ Re-certification of Product/ system Quality function manpower status Status of Quality Circles Cost of Rework & Rejection from MUs and ECs Cost of Rework & Rejection from PS Regions
PSM	Monitoring of Contracts MONTHLY/ ANNUAL BILLING BUDGET DAILY/ MONTHLY AND ANNUAL CASH COLLECTION REPORT CONTRACT CLOSING STATUS INCLUDING ADDITIONAL GUARANTEES GIVEN BY UNITS DIRECTLY TO CUSTOMERS
PEM	Engg. Inputs for contract Engg Inputs for proposal Engg
MM	TOTAL INVENTORY Status of steel purchase Development of Ancillaries & SSI O/S High Value Import Commitment / shipment Year wise SIT & Liquidation WIP 1 Year old Finished Goods more than 1 months old Status of AMA Stocking Proposal of Stocking Proposal of AMA Sparable Inventory Status of Non Moving Inventory Status of Slow Moving Inventory Tender Analysis Time Analysis of PI to PO Time Analysis of Incoming Mtl. Value Analysis of PO operating results Purchases in certain currency For certain country From certain region From specific vendor or group etc.
PMG	L1 Network L2 Network L3 Network Project Costs and Resources Static Information: 1) Project Profile, viz., Contract Scope, Contract Value, Zero Date, Contract Duration, Value, etc. Dynamic Information: 2) Engineering Progress, viz., drawings approved in comparison of total drawings 3) Construction progress 4) Procurement Progress 5) Unit-wise manufacturing progress 6) BOP/BOI Progress 7) Payment Status 8) Claims and time extensions Contract Closing Information a) Details of punch points b) Detail of each pending issue c) Category of each pending issue(whether related to Supply, Engineering or Commercial) d)Commitment for closure-previous and revised e) Current Status
P&D	Material Review- Shipments & Commitments Inventory Status and Projections Major Issues-Materials Major-Highlights Major Issues- Operations

Annexure-1

	T/O Performance -Total T/O Projections - Total Physical T/O Performance & Projections Product wise -Physical T/O Performance & Projections T/O Trends Major Concerns Operating Results Cash Flow (Inflow can come from CCS) System to be extended for Outflow or alternately one form can be generated for outflow. Deferred Debts(MIR can be generated from Debtors management system) Sundry Debtors(MIR can be generated from Debtors management system) Capital Expenditure Milestones Capital

Technical Collaborations

Siemens

BHEL Hardwar has collaboration for Generator, Turbine and Gas Turbine. BHEL Hyderabad has collaboration for Steam Turbine, TG, motors.

GE

BHEL Hyderabad has collaboration for Compressor and GT with GE USA.

Alsthom USA

BHEL Hyderabad has collaboration for Pulveriser. BHEL Trichy has collaboration for super critical boilers.

Vogt Power International

BHEL Trichy has collaboration for HRSG.

BHEL Typical Contracts

Hydro

a. EPC – Civil work is handled by a partner
b. Electro Mechanical – Turbine, Generator

Thermal

a. BTG – Boiler, Turbine and Generator
b. EPC – Civil work is handled by a partner

Need for ERP

Annexure-1

Need for ERP

BHEL is the largest engineering and manufacturing enterprise in India in the energy related/infrastructure sector today. The company has grown in stature over the years with continued inflow of orders and manufacturing prowess. BHEL's turnover has quadrupled in last six years. BHEL synchronized / commissioned a record of 9442 MW (FY 2010-11) of Power Plant equipment in domestic as well as international markets, comprising utility and captive / industrial sets. BHEL managed to secure record orders worth Rs.60,507 crore, during 2010-11, despite various challenges confronting the power sector in recent times. The total orders in hand for execution in 2011-12 and beyond is Rs.1,64,130 crore. BHEL's turnover for the FY 2010-11 is Rs.43,451 crore (Prov.) likely to be around 1 lakh crore in the year 2016-17.

The business landscape in front of BHEL is full of challenges warranting quickness in the response. The capacity addition / synchronization target covering power, industry and International operations is 20,185 MW. BHEL needs to focus on following deliverables to maintain its leadership position:

1. Various initiatives including vendor base expansion, greater application of information Technology, more tools at plants and sites, etc., to accelerate project execution. Streamline delivery systems to execute projects on time.

2. Global Sourcing, indigenization and Integrated Operations Improvement initiatives to deliver better product quality at a competitive cost.

3. Grow in to significant areas of business by way of tie-ups and business associations.

In order to meet the current business challenges for sustaining competitiveness in the market, there is a need for BHEL to undertake an ERP implementation driven Business transformation exercise. This exercise will enable BHEL to streamline and standardize business processes across the organization and to adopt some of the global best practices being followed in similar industries.

Currently, four of the BHEL manufacturing units (Trichy, Hyderabad, EDN Bangalore and EPD Bangalore) have implemented SAP ERP in an independent and phased manner while the remaining units and business sectors have implemented in-house developed computer systems to meet their information requirements. SAP HR is currently under implementation at corporate level.

Heterogeneous Information Technology platforms are a major bottle neck in getting a logically integrated view of information, project visibility and data consolidation. For an integrated information system across the company it is imperative that all the business groups work on a common platform. "ONE-BHEL" concept stems from single ERP implementation driven by global template necessitating all units and sectors to run on single integrated system.

Some of the key benefits / objectives envisaged out of "ONE-BHEL" concept are:

- Single version of information with logical "ONE-BHEL" view to all the stakeholders from common database

Need for ERP

Annexure-1

- Material codes standardization and unification for consolidated procurement
- Information available seamlessly and on-demand without manual intervention
- Automate and Integrate business processes
- Online reconciliations of various information (project, financials etc.)
- Real Time and end-to-end visibility of information on multiple dimensions(projects, financials, inventory, customer, vendor database etc.) across BHEL
- Online Collaboration for engineering and projects
- E-procurement
- Management dashboards for monitoring and decision support systems at Unit and Corporate level

There has been learning from our experience of implementing and running SAP-ERP in the said units. The learning's from the existing SAP-ERP implementations have to be factored in and existing standalone instances of SAP-ERP implementations are to be seamlessly integrated in the proposed ERP implementation. A study of the existing ERP implementations shall therefore be required to be taken up by the consultant so as to get an idea / understanding of the customization done and complexity involved in the Unit level implementations. Also a study of the Units who have their own IT solutions shall be required to be taken up by the consultant for the same purpose. This study by the consultant is also needed so that the required integration can be addressed suitably in the proposed ERP solution.

Prequalifying criteria

Annexure-2

Pre-Qualification Requirements (PQRs)

The Clause 1 (General) and Clause 2 (Organizational Parameters) are MUST CONDITIONS and have to be met for a Consultancy firm / Bidder to qualify. For all the other clauses, the Consultancy firm / Bidder will be evaluated against the evaluation criteria.

1) General
   a) Consultancy Firms that are a sister concern of ERP product OEMs are not qualified to participate in this EOI and main consultancy services tender to follow. Either the consultancy firm or the individuals involved in this project work cannot be associated and cannot receive any monetary or other benefits from the recommended product OEM and implementation partner organizations.
   b) Consultancy Firm that will be the successful bidder in the main consultancy services tender shall not be eligible to participate in the main ERP product and implementation tender.
   c) Consultancy Firms are to give information asked for by BHEL as a single entity. Any consortium, JVs, partnerships and sub contracting shall be disqualified from participation in the main consultancy tender.
   d) Consultancy firms are to give relevant information (see below) of pure ERP consultancy projects excluding any ERP implementation. 'Relevant Information' should include: Size and Scale of the Project, Size of the team that executed the project, Duration of the project, Brief Description of the overall project, What methodology/frameworks/tools were used to study the client organization and mapping of the processes, ERP application evaluation and selection methodology, and Client name if referenceable.
   e) Provide names, address, contacts and details of all the major clients within India and globally wherein ERP solution for scope of work (ref clause no. 3a) and business profile (ref clause no. 3b) successfully implemented.

2) Organizational Parameters
   a) A national or International Consultancy Firm registered in India under the Indian Companies act 1956. Copy of Certificate of Incorporation or Registration in India is to be furnished.

3) Functional Core Competency
   a) Experience in number of years as a measure of functional core competency in providing consultancy related to ERP projects towards:
      i. Business process study
      ii. Business process integration and consolidation to a global template
      iii. Preparation of vendor neutral RFP for ERP products and their Implementation
      iv. Selection of ERP product suited for the business processes of an organization through proper Demo scenarios / Performance Tests / Proof of Concepts to verify vendor claims of ERP product capabilities, functionalities & processes with its efficiencies.
      v. Selection of implementation partner for the ERP products and to verify the claimed implementation capabilities through Demo scenarios / Performance Tests / Proof of Concepts.
      vi. Evaluation of bids for ERP product and Implementation Partner and assist in award of contract.
      vii. Working as Owner's consultant with obligations for successful execution and performance of selected ERP solution covering all functions in an integrated manner
   b) Consultancy services provided in India and /or across globe in implementing ERP solution from concept to go-live in heavy industrial organization covering all facets, modules & engines for ERP integration of Marketing & Sales, Project engineering, Product engineering & Technology, Supply Chain Management, Material management, Production Planning and monitoring, Quality

assurance and control, Packing, invoicing & Dispatch, Asset Management Services, Customer interface and project management during execution, Finance Management (AS7 and IFRS compliant), HR Management, Construction site Management, Spares and service after sales.

c) Project Management Experience and Expertise: Overseeing of ERP product implementation partner evaluation process, ERP product implementation, Stabilization and managing the entire process end-to-end.

d) Consultancy services provided for integration of different ERP products and multiple instances of ERP products.

e) Consultancy services provided for integration of ERP product and legacy applications.

4) Localization with respect to India
   a) Understanding of Indian local conditions and India focus for Indian statutory laws, governance, taxes / duties, government budget updates, import / export updates as a consultant for ERP implementation for Clients having Annual turnover of more than Rs.10,000 crores
   b) End-to-end ERP consulting in Indian Govt. / PSU organization covering energy sectors / heavy engineering / manufacturing sectors.

5) Human Capital Strength
   a) Experienced and qualified professionals permanently employed on company's roll with in depth knowledge of ERP products, features, updates and hands-on job experience in implementations.

6) Financial Perspective
   a) Provide last three years Annual turnover indicating turnover from ERP consultancy (Heavy engineering / manufacturing company) in India.
   b) Net Profit of the firm for last three years.

7) Knowledge Management
   a) Availability of documented data bank on the ERP consultancy projects undertaken, key leanings and methodology followed.

Sl No. (1)	**Parameter/ Criteria (2)**	**Minimum Requirement (3)**	**Documents Required (4)**
1.	Functional core competency Clause 3a to 3e	• The company should have been taking such projects globally as covered in clause 3a above for last **seven years**. • At least **2(two)** projects in India and **2(two)** projects in global market (scope as per Cl 3a, 3b and 3c), secured as a Consultant with PO value from the Customer / Client each for at least Rs.70 lacs in last **7 years**. At least 1 (each) of these ERP implementations in India and global should have gone live.	• For 3a, document to prove the fact. • For 3a, 3b and 3c, copy of end user certificates covering scope of work for the four projects. • Documentary evidence for 3d and 3e

Prequalifying criteria

Annexure-2

2.	Localization with respect to India Clause 4a to 4b	At least **2(two)** projects in Indian Government/ Navratna PSU organization (scope as per Cl 4a and 4b), secured as an ERP Consultant with PO value from the Customer / Client each for at least Rs.70 lacs in last **7 years**. At least 1 of these ERP implementations should have gone live. These projects should be pure consultancy projects excluding ERP implementations.	• End users certificate along with document detailing scope of work for the consultant. • Documentary evidence with particular reference to the compliance to local Indian requirements, mentioned herein. Actual date of start of consultancy and date of ERP go-live for both the projects.
3.	Human capital strength Clause 5a	a) Availability of consultants **globally** for at least (2)two ERP products, out of which one has to be SAP: i. 20 no. of Sr. Consultants (7 years or more uninterrupted experience) ii. 30 no. of middle level consultants (4 years or more uninterrupted experience) iii. 50 no. of junior level consultants (2 years or more uninterrupted experience) b) Availability of consultants in **India** for at least (2)two ERP products, out of which one has to be SAP: i. 2 no. of Sr. Consultants (7 years or more uninterrupted experience) ii. 3 no. of middle level consultants (4 years or more uninterrupted experience) iii. 5 no. of junior level consultants (2 years or more uninterrupted experience)	• Certified statement signed by head of Indian operations for ERP business stating i,ii,iii of 'minimum requirement' column for at least 2(two) ERP products. • Certified statement signed by head of Indian operations for ERP business stating i,ii,iii of 'minimum requirement' column for at least 2(two) ERP products.
4.	Financial Perspective Clause 6a to 6b	• Average Annual Turnover of the company should be at least Rs.100 crores (**out of which at least Rs.55 lacs must be from ERP consultancy in India of Heavy engineering / manufacturing company covering the scope as per cl 3b**) with reference to the cl 6a. • The firm should be making profits for the last 3 financial years.	• Copy of Annual report for last 3 years (2008-09, 2009-10, 2010-11) • Certificate of Chartered Accountants in proof of turnover from ERP consultancy in India of Heavy engineering / manufacturing company covering the scope as per cl 3b. • Copy of end user certificates covering scope of work for the projects
5.	Knowledge Management Clause 7a	The data bank should be available for the last **seven years** or more.	Document validating the vendor's claim.

Prequalifying criteria

Annexure-2

Evaluation Criteria

The Clause 1 (General) and Clause 2 (Organizational Parameters) are MUST CONDITIONS and have to be met for a Consultancy firm / Bidder to qualify.

For all the other clauses, the Consultancy firm / Bidder will be evaluated against the evaluation criteria. The Clause wise weight-age for evaluation is detailed below:

S.No.	Parameter/ Criteria	Clause no.	Weight-age
1	Functional core competency	Clause 3a to 3e	30
2	Localization with respect to India	Clause 4a to 4b	20
3	Human capital strength	Clause 5a	30
4	Financial Perspective	Clause 6a to 6b	10
5	Knowledge Management	Clause 7a	10

Scope of work

Annexure-3

Scope of Work (Tentative)

The scope of work for consultancy services is broadly enumerated below. However, certain service though not mentioned here but are essential as determined by BHEL for success of ERP solution across BHEL till **12 months** after go-live across all BHEL centers shall be deemed to be included in consultant scope without additional price and time period. The consultant would act on behalf of BHEL and be responsible for its acts and omissions at all times. The consultant would seamlessly integrate and coexist with our ERP product OEM, implementation partner and other agencies.

Task I: Technical Feasibility Study

a) The Bidder must prepare a Preliminary Project Plan describing, among other things, the methods and human and material resources that the Bidder proposes to employ in the design, management, coordination, and execution of all its responsibilities, if awarded the Contract, as well as the estimated duration and completion date for each major activity. The Preliminary Project Plan should also state the Bidder's assessment of the major responsibilities of the Purchaser and any other involved third parties in System supply and installation, as well as the Bidder's proposed means for coordinating activities by each of the involved parties to avoid delays or interference.

b) Study of existing ERP application landscape and other legacy landscape.

c) Report on the feasibility of IT landscape consolidation and instance consolidation.

d) The As-IS process for the BHEL units and other functions has been compiled by BHEL cross functional team. These need to be vetted and put in standard templates (duly approved by BHEL).

e) Provide details of BHEL's existing business processes, systems and applications which, if any, beyond existing leading ERP products, ways and means of mitigating & integrating the same.

f) Suggest / recommend the way forward, to BHEL, for successful ERP implementation.

g) Suggest/Recommend the way forward for Seamless Integration of Existing standalone instances of SAP-ERP implementations in the proposed ERP implementation.

h) Estimation of detailed cost, time and effort required for ERP application to meet the vision of ONE BHEL as mentioned above.

i) Detailing change in business processes required and effort in affecting those changes before implementing ERP.

j) Report on foreseeing Risks in implementation of such a massive integrated ERP implementation and suggest / recommend plans to mitigate / manage the risks.

k) Estimation of Customization vis-à-vis ERP products available in market.

Task II: EOI/RFP Preparation and Bid Evaluation for short-listed ERP Products/Solutions and Implementation Partner

a) Vetting of EOI / PQ & main RFP/tender document for procurement and implementation of a suitable ERP product to meet the 'ONE BHEL' requirements.

b) Prepare evaluation criteria based on physical verifiable data and product performance parameters for ERP product and implementation as a part of Notice Inviting Tender (NIT).

c) Provide list of names for add-on Solution that are necessary to complement the ERP system to provide comprehensive coverage of business systems/processes of BHEL.

d) Associating in activities with BHEL core team and others, including ERP committees, on various key performance parameters and capabilities and market intelligence of ERP products to create and drive successful ERP implementation in BHEL.

e) Assistance to BHEL team in EOI/NIT/RFP release.

f) Organizing pre bid vendor conferences at PQ and main tender stage jointly with BHEL team on queries, recording responses in such meet of bidders, furnishing clarifications, evaluation and recommendation of responses to BHEL

g) Conduct short-listing of the ERP Solution and complimentary applications after mapping the functionalities available in the modules of these Solution and applications with that of functionalities requirement of BHEL.

h) Evaluation of response to EOI / PQ by ERP bidders and prepare list of non-conformities. Evaluate the response of bidders jointly with BHEL in meetings with bidders and take lead role in meetings.

i) Prepare pointed queries to bidders to ascertain the claim of their technical and resource capability. Evaluation of bidder responses on these queries and recommend to BHEL with supportive action.

j) Prepare a report on the amendment, if any, required in main RFP/tender for ERP product and implementation partner on the basis of Pre-bid Conference.

k) Bids evaluation (technical, commercial and financial) of ERP product and implementation partner. Preparing list of non-conformities / queries for each bidder. Evaluation of all bidder responses and to ensure that all deviations are closed or mapped for loading

l) Submit Technical Evaluation Report of short-listed ERP Solution & Implementation Partner including associated Hardware & Infrastructure and complimentary applications for approval by BHEL.

m) Make time-to-time presentations to BHEL management on key success factors, BHEL's preparedness, assessment on evaluation of bids and recommendations.

n) Prepare well documented demo scenario aligned (walkthrough Proof of Concept (POC) scripts) for ERP vendor claims and BHEL requirement to verify key performance capabilities of each ERP product. Facilitate and evaluate the demos/POC by vendors.

o) Prepare loading chart for non-conformities and deviations taken by bidders and submit final recommendation for award of contract for 'ONE BHEL'.

p) Identify prerequisites for successful ERP product implementation and make roadmap for change management.

Task III: Program Management of Implementation

a) Submit site mobilization plan within 7 calendar days of issue of LOI. Such mobilization plan should have supportive detailed CVs of individuals for BHEL approval within 10 calendar days. The approved individuals are to be mobilized within 7 calendar days, thereafter. No individual can be changed / separated throughout the tenure of the project. Any change has to be approved by BHEL in advance with minimum 2 months overlap period. Financial penalties are linked to absence and demobilization of any individual from BHEL approved CVs.

b) Develop, monitor and control the implementation plan and submit periodic exception report.

c) Vetting the hardware sizing for the proposed ERP implementation.

d) Monitoring and ensuring the compliance of the product/service delivery with requirements.

e) The consultant must review the progress of the ERP implementation with BHEL team periodically and must provide status updates to BHEL management in the form of a report and highlight any deviations with recommended actions.

f) Ensuring successful rollout of ERP System at various locations.

g) Assistance and evaluation of Technical users training & End Users Training at various locations.

A. ERP Business Blueprint/System Design document Review:

h) The Business Blue print/system design document to be vetted by the consultant. It would be consultant's obligation to optimize process timings to best global practices.

i) The consultant needs to ensure implementation of uniform and standardized IT enabled business processes at all BHEL locations based on the Global template.

j) Analyze in finding the functional gaps on the ERP with the help of Implementation partner and assist BHEL in addressing the issues pertaining to functional gaps

B. ERP Configuration/Set Up Review:

k) Review the ERP configuration/setup and its alignment to the BBP/solution design document

l) Verify whether automated control solutions available within ERP have been adequately mapped and implemented by implementation partner.

m) Identify and confirm with the business process owners, the existing controls as implemented in the system and assess the control design.

n) Perform a detailed review of the configured processes to identify the control gaps, highlight and recommend mitigating ways for potential impact on the business processes as well as information availability from the ERP system.

o) Evaluate the opportunities to use standard ERP functionalities and share experiences / work-around etc. followed to meet the business requirements.

C. Pre-Go Live Readiness Review

p) Design and ensure the adequacy of Integration testing, unit testing and User Acceptance Test (UAT) process/ sign-offs

q) Assess to ensure whether the conversion process adopted for transferring data to the ERP system is adequate, documented and signed off by BHEL management and ensure implementation of all features and fundamentals for integrated transactions and processing.

r) Assess whether sufficient processes and controls exist for data verification during the data upload process

s) Review the adequacy of the pre go live readiness documents drafted by the implementation partner.

Task IV: Managing change

a) Identify and document the changes required in the existing processes in terms of systems, procedures, formats, rules, policies, training needs, delegation of power and other soft issues etc. for faster and better implementing the ERP package / complimentary applications decided by BHEL.

b) As complete redesign of processes is not envisaged, the consultants are expected to have framework for short-listing critical processes that need to be addressed in terms of suggesting above changes.

Scope of work

Annexure-3

c) Educate management and employees at all levels of the proposed changes and their benefits to the organization.

d) Project Planning including developing timelines, resource allocation and monitoring, etc. along with BHEL and Implementation Partner.

e) Interviewing, thru well trained and experienced psychologists, at least 200 BHEL officials across BHEL Units to map change management requirement in phases, recommend methodology and implement successfully to the satisfaction of BHEL.

Note: The bidders must understand and give unqualified acceptance that creating and delivering qualitative performing successful “ONE-BHEL”, at par with best industrial and global practices, across BHEL within agreed cost and time are part of bidder’s basic obligation.

Procedure for Submission of EOI

Annexure-4

Procedure for Submission of EOI

The EOI may be submitted in the following manner:

a) Pre-Qualification Check-list with supporting documents – Annexure 2

b) Deliverable timelines – Annexure 5

c) Non-Disclosure Agreement (NDA) – Annexure 8

d) The envelope should clearly super scribe the following:

- Due Date and Time of submission of EOI
- Name and address of the firm
- BHEL address as mentioned in the covering letter

Deliverables

Annexure-5

Deliverables

D= Date of issue of LOI to consultant, G = Date of ERP go-live across all BHEL locations

Tracks	Deliverable	Details	Suggested Timelines	Accepted Timelines as per Bidder
Task I	Technical Feasibility Study	To be detailed in the main tender	D+1.5 Months	
Task II	EOI/RFP Preparation and Bid Evaluation for short-listed ERP Products/Solutions and Implementation Partner	To be detailed in the main tender	D+4 months	
Task III	Program Management & Implementation to the satisfaction of BHEL achieving all key benefits of "ONE BHEL"	To be detailed in the main tender	G+12 months	
Task IV	Managing change	To be detailed in the main tender	G+12 months	

The time lines given above are indicative. Accepted time lines are to be furnished by the bidder at the time of response to this EOI/PQ.

Pre-bid Query Format

Annexure-6

Pre-bid Query Format

S.No.	Reference of the Clause No. of the EOI	Query / Clarification

Signed By:

Name: _____

Designation: _____

Organization: _____

Date & Place: _____

Phone/Fax/Mobile/Email: _____

Stamp & Seal: _____

Deviation Sheet

Annexure-7

Deviation Sheet

S.No.	Reference of the Clause No. of the EOI	Text as written in BHEL EOI	Deviation asked for by the bidder	Remarks

Signed By:

Name: _____

Designation: _____

Organization: _____

Date & Place: _____

Phone/Fax/Mobile/Email: _____

Stamp & Seal: _____

Non Disclosure Agreement (NDA)

Annexure-8

Third Party Non-Disclosure Agreement

I, _____, on behalf of the _____ (Name of Company), acknowledge that the information received or generated, directly or indirectly, while working with BHEL on contract is confidential and that the nature of the business of the BHEL is such that the following conditions are reasonable, and therefore:

I warrant and agree as follows:

I, or any other personnel employed or engaged by our company, agree not to disclose, directly or indirectly, any information related to the BHEL. Without restricting the generality of the foregoing, it is agreed that we will not disclose such information consisting but not necessarily limited to:

- Technical information: Methods, drawings, processes, formulae, compositions, systems, techniques, inventions, computer programs/data/configuration and research projects.

- Business information: Customer lists, project schedules, pricing data, estimates, financial or marketing data,

On conclusion of contract, I, or any other personnel employed or engaged by our company shall return to BHEL all documents and property of BHEL, including but not necessarily limited to: drawings, blueprints, reports, manuals, computer programs/data/configuration, and all other materials and all copies thereof relating in any way to BHEL's business, or in any way obtained by me during the course of contract. I further agree that I, or any others employed or engaged by our company shall not retain copies, notes or abstracts of the foregoing.

This obligation of confidence shall continue after the conclusion of the contract also.

I acknowledge that the aforesaid restrictions are necessary and fundamental to the business of the BHEL, and are reasonable given the nature of the business carried on by the BHEL. I agree that this agreement shall be governed by and construed in accordance with the laws of country.

I enter into this agreement totally voluntarily, with full knowledge of its meaning, and without duress.

Dated at _____, this ____ day of _____, 20__.

Name

Company

Signature

Terms and Conditions

Annexure-9

Terms and Conditions

1.0 Submission of EOI

Your profile/proposal should be complete in all respects. Profile/Proposals should be preferably typed or neatly handwritten in English. Alterations/overwriting, if any, in the profile/proposal should be attested by the person signing the profile/proposal. Profile/Proposals with alterations etc. not authenticated as above may be rejected by BHEL.

2.0 Eligibility Condition

The responses received will be evaluated for the **PRE QUALIFICATION REQUIREMENT (PQR)** as per the evaluation criteria of the EOI. The detailed tender would be made available to the eligible short listed consultancy firm / bidder.

3.0 Cost of Document

NIL

4.0 Rotation of Consultants

Consultants deployed for this project shall be subject to approval by BHEL. At least 70% of the consultants deployed for BHEL project should not be changed till the end of the consultant engagement. Mitigation of the risks due to rotation of the consultants will be in the scope of bidder's without involving extra cost and time.

5.0 Selection Procedure

For selection of the final firms to be appointed, the following procedure shall be adopted:
All the proposals received by BHEL would be scrutinized wrt the Pre Qualification Requirement (PQR) against the evaluation criteria. Firms meeting the PQR shall only be considered. These firms shall be called as 'Eligible' firms. The 'Eligible' firms would then be issued a detailed tender document containing detailed scope of work, terms and conditions, evaluation criteria, contract etc., for final selection of the firm to be appointed.

The firms may please note that mere meeting of the PQR does not entitle any firm the right for short listing / appointment.

6.0 Pre-bid Queries

All the Consultancy Firm's / Bidder's queries / clarifications are to be captured in the Bidder Query Format (Annexure-6). If the queries / clarifications are not captured in the desired format then not withstanding whatsoever is written anywhere, it'll be assumed that there are no further queries / clarifications.

7.0 Deviations

All the Consultancy Firm's / Bidder's deviations are to be captured in the deviation Format (Annexure-7). If the deviations are not captured in the desired format then the Consultancy Firm / Bidder is deemed to have accepted all the clauses and there are no deviations.

8.0 Arbitration

Any dispute or difference, whatsoever arising between the firms out of or relating to the EOI shall be referred to the sole arbitration of the GM (CIT) Corporate Office, BHEL whose decision shall be final, conclusive and binding. The arbitrator shall give reason(s) for the award. Subject to the above, the provisions of Arbitration Act, 1996 and the Rules made there under shall be deemed to apply to the arbitration proceedings under this clause. The venue of arbitration shall be in New Delhi

9.0 Effect and Jurisdiction

The law applicable to this EOI shall be the laws in force in India. The courts in Delhi, India, shall have exclusive jurisdiction in all matters arising under and on account of this EOI.

Terms and Conditions

Annexure-9

10.0 Confidentiality

All the material sent to the firms shall be treated as confidential and should not be disclosed in any matter to any unauthorized person under any circumstances. The Consulting Firms / Bidders are to furnish a Non Disclosure Agreement (NDA) as per Annexure-8 in line with our Information Security Management System (ISMS).

11.0 Information Security Management System (ISMS)

The Consultancy Firms / Bidders shall comply with the Information Security Management System of BHEL.

12.0 Incomplete EOI

Incomplete EOIs, which do not contain all the information called for, are liable to be rejected.

13.0 Pre Bid Meeting

The pre-bid meeting with the consultancy firms / bidders will be held on **03rd August, 2011, at 1400** hrs at Corporate Information Technology, 2nd Floor, HRD & ESI Complex, Plot No.25, Sector-16A, Noida – 201301.

14.0 Cancelling the EOI

BHEL reserves the right to cancel/scrap the EOI without assigning any reason whatsoever.

15.0 Contact Person

Shri Ashwini Kumar, AGM (CIT-Purchase), Corporate IT, HRD & ESI Complex, Plot No.25, Sector 16A, Noida – 201301. (Phone 0120-2510505)