



Bharat Heavy Electricals Limited

(A Government of India Undertaking)

Ref. : EPD/WEX/PROJ/AUTO

Date : 02.09.2010

Invitation for Expression Of Interest (EOI) for "Design & Development of Automation Systems for mass manufacturing of higher rating porcelain disc insulators".

1. ABOUT THE COMPANY

Bharat Heavy Electricals Limited (BHEL) :

BHEL, an ISO-9001:2000 certified premier engineering and manufacturing organization has majority stake owned by Government of India. BHEL is catering to the core infrastructure sectors of Indian economy viz. Power Generation and Transmission, Industry, Transportation and Renewable energy. BHEL has been in this business for more than five decades now. BHEL has 14 manufacturing units, 4 Power Sector regions, 8 Service centers and 15 Regional offices besides host of Project sites spread all over India and abroad. BHEL supplied equipments account for more than 65% of the total installed Thermal Generating capacity in India and contribute approx. 73% of the Total Power Generation in the country. The annual turnover of BHEL for the year 2009-10 was more than Rs. 34,000 crores. More details about the entire range of BHEL's products and operations can be viewed by visiting our web site www.bhel.com.

Ceramic Business Unit (CBU), Bangalore:

BHEL- Ceramic Business Unit headquartered in Bangalore is having two manufacturing facilities: Electroporcelains Division (EPD) at Bangalore and Insulator Plant (IP) at Jagdishpur, UP. CBU is the leading manufacturer of high voltage porcelain insulators for transmission and distribution sector in the country for voltage ratings upto 800 kV in both AC and DC systems. Ceramic wear resistant liners, composite insulators, industrial ceramic components are some of the other products manufactured by CBU, more details about CBU can be obtained by visiting our web site www.bhelceramics.com.

Corporate Research & Development Group, Hyderabad:

BHEL's Corporate R&D Division at Vikasnagar in Hyderabad is the pivotal centre for all the research activities. In its progressive march aimed at realizing the objectives advocated by the principles of BHEL's vision, mission and values. Corporate R&D is spearheading the R&D efforts by utilising the advanced laboratory facilities and the manpower of about 700 highly qualified and experienced engineers, scientists and supporting staff. Corporate R&D is committed to achieve the following major objectives:

- Improvement in quality and performance of BHEL's products

- Generation of know-how through advanced basic and applied research investigations
- Development of new products and processes
- Development of life assessment and modernisation techniques for power and industrial
- equipment
- Exploring new and renewable energy sources
- Cost effective indigenization
- Research in frontier areas of relevance to BHEL

Corporate R&D has developed more than 100 products and systems, most of which have been transferred to the company's manufacturing units for regular production. As recognition of these efforts, organisation has received many prestigious awards. Corporate R&D is today poised for meeting greater challenges and provide technological stimulus to the company in its pursuit of excellence.

2. SCOPE OF THE PROJECT :

BHEL is the only manufacturer in the country which has successfully developed 420 kN disc insulator for \pm 800 kV HVDC transmission line. In the process of manufacturing of porcelain disc insulators, product needs handling at various stages, the insulators are heavier and poses challenges in manual handling. The task becomes onerous for mass manufacturing and has a bearing on the quality and productivity. Thus, BHEL is embarking on development of an automation system for handling these insulators and other associated activities in the manufacturing process line in association with Corporate R & D group. The details of the automation system proposed for the 6 (six) identified stages are provided in the annexure.

3. QUALIFICATION CRITERION :

The interested vendors participating in the EOI shall fulfill the following qualification criterion:

- The prospective vendor shall be an Original Equipment Manufacturer (OEM) or their authorized channel partner.
- The vendor shall have their own adequate manufacturing / integrating and testing facilities for the kind of work required for this project.
- The vendor shall have proven track record for manufacturing, supply, testing and servicing of custom made automation systems or projects for mass manufacturing; preferably non-metallic products or components.
- The vendor shall be in the line of business for at least 3 years in the immediate past.
- The vendor shall be financially sound for undertaking the scale and type of work required for the execution of automation system envisaged under the EOI.
- The vendor shall have qualified & experienced manpower and with adequate engineering setup for design, evaluation and validation of the systems envisaged.

4. THE PROPOSAL

We seek Expression of Interest (EOI) from qualified vendors for "**DESIGN AND DEVELOPMENT OF AUTOMATION SYSTEMS FOR MASS MANUFACTURING OF HIGHER RATING PORCELAIN DISC INSULATORS**" in line with scope defined above. Interested vendors who wish to participate may submit their Expression of Interest by 3-00 PM on 24th September 2010.

Expression of Interest should be accompanied with:

- Point wise compliance to Qualifying Criterion
- Company Profile
- Product and service range
- Reference list of projects executed (copy of the orders / performance certificate shall be enclosed)
- Annual financial report of the organization for the last two years

5. THE PROCESS

The Expression of Interest – EOI will be processed as follows:

- Evaluation of the EOI's received vis-à-vis the requirements provided in this document.
- Short listing of the qualified vendors.
- Detailed tour of the process stages needing automation systems and call for broad frame of proposal.
- Pre-bid discussions and freezing of basic design concepts.
- Competitive bidding among shortlisted and qualified vendors.
- Evaluation of Tenders
- Award of work.

The 'Expression of Interest – EOI' incorporating above details may be sent to the following address on or before 24th September 2010

Dy. General Manager - Works Engineering
Bharat Heavy Electricals Limited
Electroporcelains Division, IISc Post
Bangalore – 560 012
Tel : 080+2218 2426
Mobile : 97400 16633
e-mail : cnp@bhelepd.com

Further information required if any, please feel free to contact at the above address.