

BHEL-PS-PEM

PRE-QUALIFYING REQUIREMENTS FOR ENGG. CONSULTANTS FOR 3D PDMS MODELLING AND ENGINEERING SERVICES

1. The Project Engineering Management Division of Bharat Heavy Electricals Limited (BHEL-PEM), situated in Noida (UP), wishes to empanel vendors/agencies to provide services for 3D Plant Modeling (using PDMS software from AVEVA, UK) and power plant design and engineering. This document broadly describes the pre-qualification requirements for vendors/ agencies desirous to get empanelled and methodology of BHEL-PEM engaging such vendors/agencies for specific projects
2. The vendor / agency should have experienced mechanical and electrical engineers in sufficient numbers well versed in detailed thermal power station engineering with minimum 15 years design experience in project engineering of power stations or similar engineering work for refineries and large Petro-Chemical plants etc during the last 7 years. The experienced engineers will oversee and shall be responsible for overall interfacing and coordination within PEM for a specific project and will internally supervise their engineering staff.
3. The bio data/ experience of these engineers shall be submitted to BHEL for approval with this prequalification and also will be reviewed prior to placement of a specific project orders.
4. Projects executed by the vendor/agency should be listed with brief details of scope of work and vendor/agency should furnish documentary evidence from client for having successfully completed project(s).
5. The vendor/agency should have in-house adequate qualified engineers with skills to carry out 3D modeling in PDMS for mechanical (Turbine and generator ,heat exchangers, pumps, and electrical equipments(including power and distribution transformers, HT and LT switchgear, control panels, etc.) piping, ventilation ducting ,cable trays/cabling and civil structural steel ,concrete etc so as to be able to build a complete thermal plant and extract the required 2D and 3D drawings .Engineers should be well versed in all modules of latest version of PDMS. Minimum 2 years of actual hands on experience in PDMS is desirable. In cases where some preliminary 2D drawings may have to be made using Autocad software, manpower with knowledge of Autocad shall be deployed. Details are to be furnished regarding these qualified Engineers, their experience and drafting manpower employed herewith. BHEL may award 4-6 projects of varying scope at one point of time.
6. In addition to the experienced supervisory engineers defined at Sl no 2 above typically minimum of four experienced graduate Mechanical / Electrical engineers (with minimum qualifications of Graduation in Engineering), six mechanical and electrical design assistant or draftsmen (with minimum qualifications of Diploma in Engineering and 2 years work experience, out of which at least one year should be on PDMS), will need to be dedicated to each project awarded. The vendor/agency shall depute at least one person additionally per project with working knowledge of PDMS administration, catalogue item creation,

specification creation, etc. Sufficient and adequate manpower which should be enhanced at BHEL request whenever work load so demands.

7. The vendor/agency shall usually deploy its human resources to work at BHEL premises, presently in Noida. However, vendor/agency should have the necessary computer facilities and possess all legal licenses / softwares for PDMS & AUTOCAD at his office so that work if needed can be carried out at his premises. The minimum number of available PDMS licenses shall be two/project ordered. However, no extra charges shall be claimed by the vendor/agency for carrying out work at his office.
8. The vendor/ agency should have facility for Electronic mailing for communication and transmittal of engineering drawings and documents. The vendor/agency shall agree to work using Document management and Workflow solutions as implemented at BHEL-PEM.
9. The vendor/agency shall agree to sign non- disclosure agreements to ensure information security of BHEL-PEM.
10. Methodology of Engaging Services for a specific project
 - a. The vendor/agency shall usually deploy its human resources to work at BHEL premises, presently in Noida. Office accommodation, hardware, hospitality, etc. shall be provided by BHEL.
 - b. BHEL-PEM has done extensive customization of PDMS for executing thermal power projects. All the customization done and PDMS models of previous projects done by BHEL-PEM shall be made available to the vendor/agency. Normally, no major customization or new catalogue item creation is envisaged, the vendor/agency shall do so to meet any project specific requirements.
 - c. BHEL-PEM shall issue a specification detailing scope of work for each specific project to all empanelled vendors/agencies and ask for quotations, based on which the order would be placed on the vendor/agency.
11. Should have the necessary computer facilities and PDMS licenses at his office so that work if needed can be carried out at his premises .Should have facility for Electronic mailing for communication and transmitted of engineering drawings and documents.
12. The bidder shall furnish the Certificate of Registration with Registrar of Companies or any equivalent document.
13. Average Annual financial turnover during the last 3 years, ending 31st March of the previous financial year, should be at least Rs 2.0 crores. The bidder shall have sound financial health for the last three financial years.
14. A brief representative scope of work (10 SHTS) is attached along with to supplement above and acquaint the agency with the work involved.