

## **TECHNICAL SPECIFICATION FOR CIVIL WORKS**

### **1.0 GENERAL SCOPE OF WORK**

Power Grid Corporation of India Ltd. (POWERGRID), a Govt. of India Enterprise is responsible for bulk Power transmission of electrical energy from various Central Govt. Power Projects to various utilities/beneficiaries and interconnecting regional grids, operating and maintaining the National electrical grid of India. It is established with mandate of "Establishment and operation of regional and national power grids to facilitate transfer of power within and across the regions with reliability, security and economy on sound commercial principles", as its mission.

POWERGRID desires to execute the work “Construction of Semi closed & Open store, oil drum platform, foundation platform for spare equipment’s at 765/400/220 KV POWERGRID Rampur SS & Open store, oil drum platform, foundation platform for spare equipment’s at Sambhal ”

### **2.0 SPECIFICATION FOR QUALITY AND WORKMANSHIP**

- a. Work shall be carried out as per POWERGRID Specification. If any items are not covered in POWERGRID specification, CPWD specifications are to be followed for Civil works for all the scheduled/DSR Items. For non-scheduled items the work shall be executed according to the specifications given herein or in its absence the relevant CPWD Specifications, or the best practice recommended by reputed manufacturers, or the best Public Works Department practices or to the recommendations of relevant Indian Standard/ International Practice or according to the instructions of the Engineer-in-Charge.
- b. The specifications are intended for the general descriptions of the work, quality and workmanship. The specifications are not, however, intended to cover the minute details and the work shall be executed according to the best Central Public Works Department practices or to the recommendations of relevant Indian Standard/International Codes like ASTM/DIN or according to the instructions of the Engineer-in-Charge.
- c. All the materials of the project shall be from the approved makes of materials specified in this specification and POWERGRID’s approved compendium of vendors available on its web site. Materials for which approved makes are not available in above, the same shall be decided by the Engineer-in-charge. The procurement of various materials shall be either from the manufacturer or their main authorized dealers to ensure that no duplicate/spurious makes are used in the works. The Contractors are required to submit manufacturer’s test certificates for the lots supplied at site with due endorsements by the actual dealers/vendors/sellers. Notwithstanding all the above, the contractor shall be held responsible for the execution of works and use of proper materials as per the tender specifications. Any material shall be approved by the Engineer-in-charge before put to use.
- d. Wherever reference to CPWD/Indian Standard Codes and Practices is made, it shall be to the latest edition/revision of the same, issued up to 7 days prior to the date of opening of this tender.

- e. The tenderer must obtain clarifications, if any, regarding the specifications and all other tender documents before submission of the tender in writing with the Employer in respect of interpretation of any portions of these documents.
- f. The work to be performed under this specification shall include providing all labour, supervision, materials, storages, inventories, all enabling works like scaffolding, shuttering watch and ward for the works, power, fuel, construction equipment, water, tools and plants, supplies, transportation, all taxes and duties, all labour welfare and safety measures, complete and all other incidental items not shown or specified, but reasonably implied or necessary for successful completion of the work including Contractor's supervision and in strict accordance with the drawings and specifications, inspection and testing standards and field quality control and testing as given in the tender documents and the complete execution of the works. The scope shall also include preparation of reinforcement placement drawings, fabrication drawings and bar bending schedules, based on the drawings released for construction and getting the same approved by the Engineer-in-Charge.
- g. The contractor shall have sole responsibility of co-ordination for construction activities, though he may employ separate sub- contractors. All co-ordination and interfacing with all the sub- contractors shall be done by the contractor.

### **3.0 TESTS OF MATERIALS/WORKMANSHIP**

All mandatory tests shall be carried out as per **POWERGRID Standard Field Quality Plan attached in the contract document**. Test mentioned in individual items/specifications shall also be carried. All tests required for all materials shall be at the Contractor's cost. In case of items not covered in the field quality plan contractor shall arrange testing as per practice of the industry without any additional cost. Manufacturer's test certificate of the relevant batch of material procured shall also be submitted for all measure items.

### **4.0 LAYOUT AND LEVELS**

The layout and levels of all buildings, structures etc. shall be made by the Contractor at his own cost from the general grid of the plot and bench marks as approved by the Engineer-in-Charge. The Contractor shall also assist in the form of instruments, materials and men to Engineer-in-Charge for checking the detailed layout and correctness of the layout and levels, at his own cost. But the Contractor shall be solely responsible for correctness of layout and levels. The levels and heights mentioned in the tender drawings are only tentative. The works shall be carried out as per Construction drawings issued after the award of the works.

### **5.0 CONSTRUCTION METHOD**

The tenderer shall submit construction schedule, names of specialized agencies/products, list of construction equipment to be deployed and write-up to indicate in a broad outline how he intends to execute the work with the best co-ordination among various sub-packages (or sub-heads). These shall form part of this Tender.

### **6.0 APPROVED VENDORS AND MAKES:**

The Items which are available in POWERGRID's "Compendium of Vendors", shall be sourced from POWERGRID approved manufacturers. For items which are not available in the "Compendium of Vendors", the decision of Engineer-in-charge shall be final.

**7.0 MAINTENANCE CREW DURING DEFECT LIABILITY PERIOD:**

The tenderer shall submit along with the offer, the details of crew (number, level and detailed skills) to take adequate care of routine maintenance and also the minimum inventory of spares for the Employer's approval.

**8.0 Miscellaneous**

- (a) The contractor shall be responsible for watch and ward of all the works, equipments and various materials till complete handing over the works and all necessary arrangements to co-ordinate with watch and ward of other contractors working simultaneously and also of the Employers shall be made to the complete satisfaction of the Engineer-in-Charge.
- (b) The contractor shall co-operate with the representatives of the Employer for due verifications of various compliances of various statutory regulations and tax compliances as and when required. All the documents of record shall be made available to the Employers and copies, wherever required, shall be submitted.
- (c) Employer reserves the right to inspect all the material before dispatch. However, depending upon nature of material, waiver of inspection may be granted for which the Contractor shall take prior approval of the Employer. This will be done on case to case basis.
- (d) The work is located in the premises of existing sub-station. The Contractor shall make arrangements for regulation of traffic by engaging security staff. They shall also make necessary arrangements to prevent unauthorized entry in the premises.
- (e) Contractor shall comply with all regulations of local authorities without any financial implication to POWERGRID.

**9.0 Completion Certificate**

On completion of the work the Contractor shall obtain completion certificate from local bodies or statutory body for and on behalf of the Owner for the construction as contemplated in this contract. However, the Owner may also help contractor to the extent of writing letters to Local bodies for expediting approval, if required. Further if any fee is required to be paid to the local/statutory bodies, the same shall be reimbursed to contractor by the owner against documentary evidence.

**10.0 Completion period – 6 Months**