

## **SECTION - 1**

### **SCOPE, SPECIFIC TECHNICAL REQUIREMENTS & QUANTITIES**

#### **1.1.0 SCOPE**

1.1.1 The scope of work under this specification is Civil Works for Phase Shifting transformer as Kothagudem TPS Stage-VI (1 x 500MW), being executed by BHEL on turnkey basis. The Customer is Andhra Pradesh Power Generation Corporation Ltd. (**APGENCO**).

1.1.2 The Civil Works shall generally include, *but not limited to*, following:

- (i) Tower & Equipment foundations.
- (ii) Transformer foundation including soak pit, rail track, etc.
- (iii) Cable trenches including precast covers & cable trench crossings.
- (iv) Antiweed treatment & Stone spreading.
- (v) Any other civil work required for completion of the project.

1.1.3 The works to be performed in the above constructions include preparation of bar bending schedules, based on the drawings released for construction and getting the same approved by the Engineer-in-charge plus the execution of the work including providing of all labour, supervision, materials, scaffolding, power, fuel, construction equipments, tools and plants, supplies, transportation, all incidental items necessary for successful completion of the work including contractor's supervision and in strict accordance with the drawings and specifications and with inspection and testing standards. The nature of work shall generally involve excavation in all type of soil including dewatering, shoring, strutting, and filling under and around structures , backfilling with available excavated earth around completed structures and cable trenches with covers, road crossing of trenches, disposal of surplus soil, concreting including reinforcement and formwork, providing necessary steel embedments and other inserts, stone spreading, etc., all complete as per detailed specification, drawings and directions of Engineer-in-charge.

#### **1.2.0 SPECIFIC TECHNICAL REQUIREMENT**

1.2.1 The specific technical requirements for the execution of civil works shall be as per latest CPWD/IS Specifications.

#### **1.3.0 BILL OF QUANTITIES**

1.3.1 The Bill of Quantity-cum-Price Schedule shall be as per page 1.3 to page 1.6.

1.3.2 The quantities indicated in the 'Bill of Quantity-cum-Price Schedule' are indicative and can vary to any extent. Contractor shall not be entitled for any claim for any such variation in the quantities.

1.3.3 The provision of Bill of Quantity-cum-Price Schedule, specifications and drawings shall be read in conjunction with each other and in case of conflict amongst them, the clarification shall be obtained from the Engineer-in-charge whose decision shall be final and binding.

1.3.4 Method of measurement:

1.3.4.1 Excavation shall be measured in cubic metres. The lateral dimensions to be considered for working out excavation quantity shall be the PCC dimension below the footing as per approved drawing. The sides shall be considered vertical with the lateral dimension indicated above. Nothing extra shall be paid for slope cutting, etc irrespective of whatever is provided. Backfilling & disposal quantities shall be worked out based on the above dimensions only.

For other items, unless otherwise described the method of measurement as described in 'Method of Measurement of Building and Civil Engineering Works'-IS 1200(Part I to XXV) latest edition of BIS shall be followed.