

SECTION - 1

SCOPE, SPECIFIC TECHNICAL REQUIREMENTS & QUANTITIES

1.1.0 SCOPE

1.1.1 The scope of work under this specification covers for switchyard foundations, gravelling of new & existing yard, DC hall grade slab, DC hall RCC wall and associated works required for +-800kV NE-Agra HVDC Project at Agra in Uttar Pradesh, being executed by BHEL on turnkey basis. The Customer/Employer is Power Grid Corporation of India Ltd.

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

- (i) Tower and equipment foundations.
- (ii) Drain, cable trench and Chain link fencing.
- (iii) Road and road crossings.
- (iv) Reactor foundations including soak pit, jacking pad, rail track etc.
- (v) Anti weed, Gravelling and PCC in new and existing switchyard area along with removal of old gravel.
- (vi) Grade slab & RCC wall of DC Hall Building of Pole 2, 3 & 4.
- (vii) Any other work necessary for the project in the HVDC area.

1.1.3 The layout and levels of all structures shall be made by the Contractor at his own cost from the general grids of the plot and benchmarks set by Contractor and approved by BHEL/Customer. The Contractor shall give all help in instruments, materials and personnel to BHEL/Customer for checking the detailed layout and shall be solely responsible for the correctness of the layout & levels.

1.1.4 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/material handling equipments, tools and plants, supplies, transportation, all incidental items necessary for successful completion of the work including contractor's supervision in strict accordance with the drawings and specifications. 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, disposal of surplus soil, concreting including reinforcement and formwork, providing necessary steel embedments and other inserts, brick work, finishing, gravelling, drains, cable trenches, fixing of foundation bolts 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 PGCIL Technical Specification (Refer SECTION 3) and latest CPWD Specifications. **In case of any difference between PGCIL Technical Specification & latest CPWD Specifications, the provisions of PGCIL Specification shall be considered.**

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 1.9.

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, specification 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 meters. The lateral dimensions to be considered for working out excavation quantity shall be the PCC dimension below the footing as per approved drawing. Nothing extra shall be paid for slope cutting, etc. Backfilling & disposal qtys shall be worked out based on the above dimensions only.

1.3.4.2 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.