



भारत भारी बिजली सी. लि.
(भारत भारी बिजली सी. लि.)

Bharat Heavy Electricals Limited
Industry Sector, Transmission Business Group
Integrated Office Complex
Lodhi Road, New Delhi-110 003
Phones: 011-41793381, Fax: 011-24369509

AMENDMENT NO- 2 TO NIT

DATE: 09.05.07

SUB : AMENDMENT - 02 To NIT 2618 For Civil Works

REF: TENDER SPECIFICATION. No. –TBSM/WARDHA/SEONI/CIVIL/TENDER, Dtd: 23.03.07.

With reference to above tender for Civil Works for 400/220 kV substation at Wardha in Maharashtra and 400kV substation extension at Seoni in Madhya Pradesh, following amendments/addendums may be noted.

1. Underground Earthing & Electrodes (Annexure-III) is being added to our civil works BOQ provided in the subject tender. BOQ for underground earthing and electrodes is enclosed.
- All other terms & conditions of the tender specification shall remain unchanged.
 - Bidders are required to quote as per BOQ (Annexure-III) along with the other BOQ (Annexure-I & Annexure-II) provided in tender document.
 - Please enclose a copy of this amendment-02 alongwith your Technical Bid duly signed by your authorised signatory and stamped.

(R.LODWAL)
DGM/TBSM

ANNEXURE-III

BILL OF QUANTITIES FOR UNDER GROUND EARTHING AND ELECTRODES REV.00

Name of Project

400/220kV Substation at Wardha & 400kV substation Extn. at Seoni

Name of Work

Bill of Quantity for Under Ground Earthing and Electrodes

S. No	Description	Unit	Quantities			Rate	
			Wardha	Seoni	Total	Unit Rate (Rs.)	Amount (Rs.)
1	Unloading, storing and laying of 40 mm dia MS Rods at a depth of ---- -600----- mm measured from the top of FGL (either top of gravel or top of land as the case may be) for bringing out risers just below gravel level near the equipment foundations as per requirement including following works: - excavation of trenches - laying of MS rod - welding of rods (refer Drg No. TB-STD-316-Rod Welding Rev 00 for Welding details of rods) - backfilling of soil for bringing out pig tail risers of 40 dia MS rod (approximately 2000) for equipments. Risers shall be raised from the earthmat (at 600 mm depth) to 150 mm above ground level to the nearest point of the equipment. This shall include all cutting, bending, welding, fixing, application of zinc rich paint on cutting surface, etc to the main earthmesh. - any other work necessary to complete the laying of earthmat (40 Diameter MS rod will be supplied by BHEL Quantity may vary by +/- ----40-----% at contract stage.)	kM	25	1.1	26.1		
2	Fabrication & laying of Auxiliary Mat of 40 mm Dia MS Rods at a depth of 300 mm from top of FGL including excavation & backfilling as per Drg No. TB-STD-316-Auxiliary mat Rev 00. - any other work necessary to complete the laying of earthmat (40 Diameter MS rod will be supplied by BHEL Quantity may vary by +/- ----40-----% at contract stage.)	Nos.	90	6	96		
3	Installing of Pipe Electrode(to be driven - 3.0 Mtr) as per Drg. No. TB- STD-316-Pipe Electrode Rev 00 including following works: - excavation - installing the pipe electrode with alternate layers of Coke & charcoal, salt - backfilling and compaction - Casting the Test Pit with Cast Iron covers - any other work necessary to complete the work (GI Pipe, Nuts, Bolts & Washers and funnel with wire mesh will be supplies by BHEL. Quantity may vary by +/- -----40-----% at contract stage).	Nos.	30	13	43		
4	Installing of 40 mm diameter Rod Electrode with test pit as per Drg. No. TB-STD-316-Rod Electrode Rev 00 including following works for reactors and transformers: - excavation - installing the rod electrode - backfilling and compaction - Casting the Test Pit with Cast Iron covers - any other work necessary to complete the work (40 Diameter MS rod will be supplied by BHEL Quantity may vary by +/- ----40-----% at contract stage)	Nos.	24	2	26		
5	Installing of 40 mm diameter Rod Electrode without test pit including following works: - excavation/hammering of rod in earth - installing the rode electrode - backfilling and compaction - any other work necessary to complete the work (40 Diameter MS rod will be supplied by BHEL Quantity may vary by +/- ----40-----% at contract stage)	Nos.	150	50	200		
TOTAL AMOUNT							