



# भारत हेवी इलेक्ट्रिकल्स लिमिटेड BHARAT HEAVY ELECTRICALS LIMITED

भारत सरकार का उपक्रम (A Govt. of India Undertaking)  
पावर सेक्टर : पूर्वी क्षेत्र / Power Sector Eastern Region  
VIZAG THERMAL POWER PROJECT  
Pavalavasa Village T. Devada Post  
Pedagantayada Mandal Visakhapatnam-530 031

Ref.No: BHEL/HNPCL/GM/01

Date: 31.01.2017

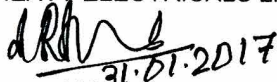
## Work Completion Certificate

This is to confirm that **M/s. Mukand Engineers Limited** has been awarded a contract for Erection, Testing & Commissioning of cable trays, cabling, lighting and earthing protection, HT/LT Transformer, HT/LT Bus duct, HT/LT Switchgears, Panels, DG Set, Miscellaneous Electrical Equipment for 2x520 MW HNPCL VIZAG UNIT # 1 & 2 PROJECT. vide **Work Order No. PSER:SCT: VIZ-E 1385:12: WO: 3187 Dated 14.03.2012**. M/s Mukand Engineers Limited has executed following electrical works successfully and satisfactorily.

Sl.No.	Item	Quantity
1	<b>Transformers:</b> i) Generator Transformer: <b>216MVA, {(420/√3)/21KV, 1 Phase}</b> ii) Station Transformer : <b>90MVA, 400/11.5 KV, 3Phase</b> iii) Unit Transformer: <b>25 MVA 21/11.5 KV</b> iv) Unit Auxiliary Transformer: 16 MVA 11/3.5 KV v) Station Auxiliary Transformer: 16 MVA 11/3.5 KV	7 Nos. 2 Nos. 4 Nos. 4 Nos. 2 Nos
2	<b>Bus Ducts:</b> i) IP bus duct ( <b>21KV, 19KA</b> ) ii) SP bus duct ( <b>11 KV/ 1600A</b> ) iii) SP bus duct ( <b>3.3 KV/ 3000A</b> )	800 Mtr. 400 Mtr. 600 Mtr.
3	LT Bus Ducts ( <b>415V, 3000A/2500A/1600A</b> )	36 Sets.
4	Battery System ( <b>220V</b> )	4 Sets.
5	DG Set ( <b>1500 KVA, 50 HZ, 415 V</b> )	3 Sets.
6	HT Switchgear ( <b>11 KV &amp; 3.3 KV</b> )	14 No. of Boards
7	LT Switchgear and DCDB & ACDB	86 No. of Boards
8	Cable Tray Erection	98 KM
9	Cable Tray Support ( <b>ISA 50X50X6, ISMC100 &amp; ISMC150</b> )	460 MT
10	Earthing Materials: Galvanized Flats <b>75X10, 50X6, 35X6, 25X3</b>	55000 Meters
11	HT Power Cable Laying ( <b>3.3/11 KV</b> ) & Termination	80 KM
12	LT Power, Control & Instrumentation Cable Laying including Termination	1600 KM

The value of Erection, Testing & Commissioning works executed till date is **Rs. 900 Lakhs.**

For and on behalf of  
BHARAT HEAVY ELECTRICALS LIMITED

  
31.01.2017

General Manager  
BHEL/HNPCL/Vizag

**M.R. DAS, AGM**  
**BHEL: PSER: Vizag**  
**HNPCL, Visakhapatnam**