

BILL OF QUANTITY (MAIN EQUIPMENT)

S.L.	ITEM DESCRIPTION	kV	QTY.	SYMBOL
1	125 MVA, 3–PH, AUTO TRANSFORMER	400/132/133	1	
2	63MVAR, 3–PH, SHUNT LINE REACTOR ALONG WITH NGR	400	02	
3	80 MVAR, 3–PH, SHUNT BUS REACTOR	400	01	
4	2000A,3–PH ,40kA FOR 1 SEC, SPRING OPERATED SF6 CB SUITABLE FOR 1ø & 3ø OPERATION WITH CLOSING RESISTOR.	400	6	
5	2000A,3–PH ,40kA FOR 1 SEC, SPRING OPERATED SF6 CB SUITABLE FOR 1ø & 3ø OPERATION WITHOUT CLOSING RESISTOR.	400	9	
6	2000A,3–PH ,HDB ISOLATOR(ELECTRICALLY GANGED MOTOR OPERATED) WITH 1E/S (MANUALLY OPERATED).	400	31	
7	2000A,3–PH ,HDB ISOLATOR(ELECTRICALLY GANGED MOTOR OPERATED) WITH 2E/S (MANUALLY OPERATED).	400	09	
8	2000 A, 5 CORE CURRENT TRANSFORMER,1 PHASE WITH 120% EXTENDED CURRENT RATING.	400	27	
9	2000 A, 6 CORE CURRENT TRANSFORMER,1 PHASE WITH 120% EXTENDED CURRENT RATING.	400	12	
10	4400 pF CVT 1PH.	400	36	
11	SURGE ARRESTER, 1–PH. 20kA CLASS–4	360	30	
12	SURGE ARRESTER, 1–PH. 10kA CLASS–3 FOR REACTOR	120	03	
13	WAVE TRAP (2000A, 0.5mH), 1–PH	400	4	
14	1600A,3–PH ,31.5kA FOR 1 SEC, SPRING OPERATED SF6,CB. SUITABLE FOR 1ø & 3ø OPERATION	132	3	
14A	1600A,3–PH ,31.5kA FOR 1 SEC, SPRING OPERATED SF6,CB. SUITABLE FOR 3ø OPERATION	132	3	
15	1600A,3–PH ,HDB ISOLATOR(MECHANICALLY GANGED MOTOR OPERATED) WITH 1E/S (MANUALLY OPERATED).	132	15	
15A	1600A,3–PH ,HDB ISOLATOR(MECHANICALLY GANGED MOTOR OPERATED) WITH 2E/S (MANUALLY OPERATED).	132	1	
16	1600A,3–PH ,HDB ISOLATOR(MECHANICALLY GANGED MOTOR OPERATED) WITHOUT E/S	132	5	
17	1600A,3–PH ,HDB TANDEM ISOLATOR (MECHANICALLY GANGED MOTOR OPERATED) WITHOUT E/S	132	5	
18	1600A, 5 CORE CURRENT TRANSFORMER,1 PHASE WITH 120% EXTENDED CURRENT RATING.	132	18	
19	13200 pF CVT 1–PH.	132	15	
20	SURGE ARRESTER, 1–PH. 10kA CLASS–3	120	15	
21	EMVT 1–PH.	132	6	
22	WAVE TRAP (1600A, 0.5mH), 1–PH	132	4	

BILL OF QUANTITY FOR 400/132kV SYSTEM

- NOTES : –
- 01) EQUIPMENT FAULT LEVEL–40kA FOR 1 SEC FOR 400kV AND 31.5kA FOR 1 SEC FOR 132kV.
- 02) 400kV WAVE TRAP WOULD BE PROVIDED IN TWO PHASE ONLY. 132kV WAVE TRAP WOULD BE PROVIDED IN ONE PHASE ONLY.
- 03) #(PEM SCOPE)– RATING OF GTG, STG, ST & BUSHING DETAILS SHALL BE AS PER APPROVED PEM DRG.

REFERENCE : –

1 DRG. NO:– 10–6725–E–202–400 AND 132kV KEY SINGLE LINE DIAGRAM

LEGEND : –

PRESENT \_\_\_\_\_

FUTURE -----

04	02.07.11	REVISED AS PER APPROVED CT/CVT/EMVT PARAMETERS	RK	SK.	VK.	AS.
03	02.09.09	AS PER FICHTNER MAIL DATED–12.06.09	JUGENDRA –SD–	SK.	VK./DS.	SN.
02	27.04.09	AS PER FICHTNER LETTER DATED–25.03.09	JUGENDRA –SD–	SK.	DS./GC.	SN.
01	09.03.09	AS PER MOM DATED–30.01.09	JUGENDRA –SD–	SK.	DS./GC.	SN.

REV.	DATE	REVISED FOR REVISION	DATE	PREPARED BY	CHECKED BY	APPROVED BY
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OWNER  
**ONGC - Tripura Power Company Limited**

PROJECT  
**726.6 MW Combined Cycle Power Project  
PALLATAHA, TRIPURA, INDIA**

OWNER'S ENGINEER  
**FICHTNER Consulting Engineers (India) Pvt. Limited  
Chennai.**

EPC CONTRACTOR  
**BHARAT HEAVY ELECTRICALS LTD  
TRANSMISSION BUSINESS GROUP**

EPC CONTRACTOR		BHARAT HEAVY ELECTRICALS LTD		TRANSMISSION BUSINESS GROUP	
PROJECT CODE		PROJECT NAME		SIGN.	
422		1912.08		1912.08	
CHD		DS/GC		1912.08	
APPD		SN		1912.08	

TITLE		SINGLE LINE DIAGRAM FOR 400/132kV S/S AT ONGC TRIPURA		BHET/SUB VENDOR DRG NO.	
CV		ME		EL	
I&C		DEPT.		SCALE	
SIGN		DATE		NTS	
SHT. NO		3		OF	
REV.		04		REV.	