
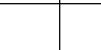

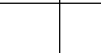






S.NO.	DESCRIPTION	400KV
01	SYSTEM OPERATING VOLTAGE	400kV
02	MAXIMUM OPERATING VOLTAGE OF THE SYSTEM (rms)	420kV
03	RATED FREQUENCY	50Hz
04	FULL WAVE IMPULSE WITHSTAND VOLTAGE (1.2/50 MICROSEC.)	1550kVp
05	SWITCHING IMPULSE WITHSTAND VOLTAGE (250/2500 MICRO SEC.) DRY AND WRT	1050kVp
06	ONE MINUTE POWER FREQUENCY DRY WITHSTAND VOLTAGE (rms)	630kV
07	ONE MINUTE POWER FREQUENCY DRY AND WET WITHSTAND VOLTAGE (rms)	--
08	CORONA EXTINCTION VOLTAGE	320kV
09	MAX. RADIO INTERFERENCE VOLTAGE FOR FREQUENCY BETWEEN 0.5 MHz AND 2 MHz	1000µV AT 266Kv rms
10	MINIMUM CREEPAGE DISTANCE--FOR EQUIPMENT OTHER THAN INSULATOR STRING	10500mm
11	SYSTEM FAULT LEVEL	40KA FOR 1 SEC
12	MINIMUM CLEARANCE PHASE TO PHASE	4000/4200mm
13	MINIMUM CLEARANCE PHASE TO EARTH	3500mm
14	SECTIONAL CLEARANCES OTHER THAN INSULATOR STRING	6500mm

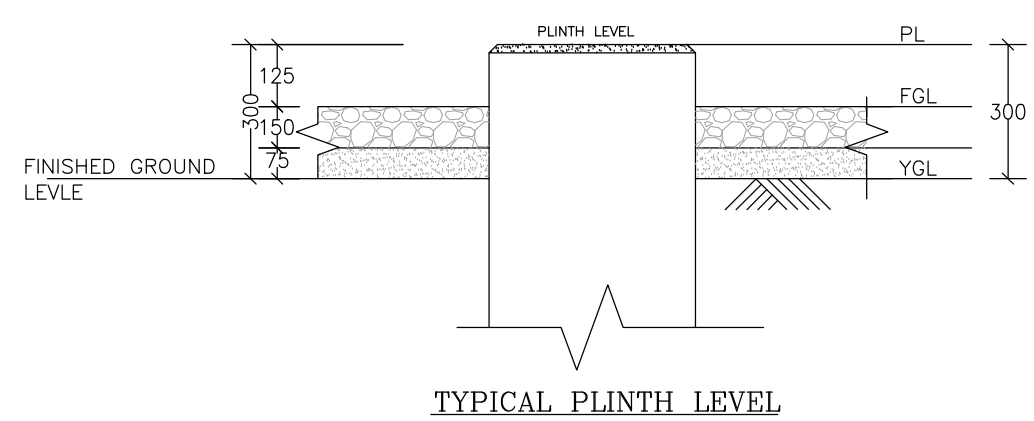
BILL OF QUANTITIES-400KV:

S.NO.	DESCRIPTION	SYMBOL	QTY. AS PER NOA (NOS.)	QTY. AS PER PRESENT SCOPE(NOS.)
01	125MVAR 400kV, 3-PH BUS REACTOR (SUPPLY AND ETC IS NOT IN BHEL SCOPE)		01	01
02	400KV, 3150A, 3-PH, 40KA FOR 1 SEC, CIRCUIT BREAKER WITHOUT CLOSING RESISTOR		01	00
03	CONTROLLED SWITCHING DEVICE (SUITABLE FOR 3 PHASE CIRCUIT BREAKER)	--	02	02
04	400KV, 3150A, 3-PH, 40KA FOR 1 SEC, HORIZONTAL DOUBLE BREAK ISOLATOR WITH 1 E/S		02	01
05	400KV, 3000A, 1-PH, 40KA FOR 1 SEC, CURRENT TRANSFORMER WITH 120% EXT. CURRENT RATING		03	00
06	336KV, 1-PH, SURGE ARRESTER		03	03
07	400KV, 1-PH, BUS POST INSULATOR		03	03



NOTES : —

1. ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE SPECIFIED.
2. 125MVAR, 400KV REACTOR SUPPLY AND ETC IS NOT IN BHEL SCOPE.
3. * DIMENSIONS TO BE CHECK AT SITE.
4. FIRE DIMENSIONS SHALL BE PROVIDED BY PGCIL.



CONDUCTOR & STRINGING DETAILS -400kV




S.NO.	DESCRIPTION	LEVEL FROM PLINTH	SUB-CONDUCTOR	TENSION INSULATOR STRING/PHASE
1.	MAIN BUS-I & II	(AT 15M HEIGHT)	QUAD AAC BERSIMIS CONDUCTOR WITH 450MM SUB-CONDUCTOR SPACING	
2.	JACKBUS	(AT 22M HEIGHT)	QUAD/ TWIN BERSIMIS ACSR CONDUCTOR WITH 450MM SUB-CONDUCTOR SPACING	
3.	DROPPERS/JUMPERING	— —	TWIN BERSIMIS ACSR CONDUCTOR WITH 450MM SUB-CONDUCTOR SPACING	SINGLE SUSPENSION STRING-120KN POLYMER STRING INSULATOR
4.	EQUIPMENT INTERCONNECTION	(AT 8M HEIGHT)	4.5" IPS AL. TUBE / TWIN ACSR BERSIMIS CONDUCTOR WITH 450MM SPACING	

LEGENDS:-

_____	PRESENT SCOPE
_____	EXISTING / FUTURE

BHEL REF. DRAWING:
SLD OF 400KV KHANDWA EXTN. DWG. NO.
TB-408-510-K01 REV 01
PGCIL REF. DRAWING:
LAYOUT PLAN/SECTION DWG. NO.:
KPTL/ PGCIL /WO-SS003J-796/02E/KHW/05 REV 03

NOA NO. : CC-CS/901-WR2/SS-3931/3/G3/NOA-I/8864 & 8865 DT. 29.07.19

<div>ADDITIONAL INFORMATION W.O.No. I19T000001</div>		<div>प्राक्कक्ष /प्रतिबोधना क्ता पात्र NAME OF CUSTOMER/PROJECT</div> <div>POWER GRID CORPORATION OF INDIA LIM</div> <div>Substation Package-SS19 for extension of (i) 765kV Solapur S/S; 765kV Aurangabad S/S; (iii) 765kV Wardha S/S; (iv) 400kV Khanda S/S; (v) 400kV Rajgarh S/S; (vi) 400kV Champa S/S; (vii) 400/220kV Itarsi S/S & (viii) 400/220kV Jalapuri Substation under WRSS-20.</div>																					
STATUS OF DRAWING		CONTRACT																					
DISTRIBUTION OF PRINTS		<table><tr><td>सिस्टम ड्राइंग</td><td>पावर हेवी इलेक्ट्रिकल्स विभाग</td><td>डिजाइन</td><td>जाम /NAME</td><td>हस्ता./SIGN.</td><td>दि.</td></tr><tr><td rowspan="3"></td><td rowspan="3">BHARAT HEAVY ELECTRICALS LTD. TRANSMISSION PROJECTS DIVISION</td><td>करारा करार</td><td>DS</td><td></td><td>04</td></tr><tr><td>निरा चेकट</td><td>JK</td><td></td><td>04</td></tr><tr><td>अनुमोदित</td><td>SKS</td><td></td><td>04</td></tr></table>		सिस्टम ड्राइंग	पावर हेवी इलेक्ट्रिकल्स विभाग	डिजाइन	जाम /NAME	हस्ता./SIGN.	दि.		BHARAT HEAVY ELECTRICALS LTD. TRANSMISSION PROJECTS DIVISION	करारा करार	DS		04	निरा चेकट	JK		04	अनुमोदित	SKS		04
सिस्टम ड्राइंग	पावर हेवी इलेक्ट्रिकल्स विभाग	डिजाइन	जाम /NAME	हस्ता./SIGN.	दि.																		
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		निरा चेकट	JK		04																		
		अनुमोदित	SKS		04																		

PLAN/ SECTION LAYOUT
FOR EXTN. OF 400KV KHANDWA S/S

डाईंग.क्र./DRAWING NO. TB-408-316-K02	पुनः/REV. 02
पृष्ठ क्र./SHEET No. 01	उगला पृष्ठ/NEXT SHEET --