



BILL OF QTY. FOR 765kV MAIN EQUIPMENTS (40KA, 1 SEC):

SL.NO.	DESCRIPTION	QTY. (NO.)	SYMBOL
1	765KV, 80MVAR, 1-PH BUS REACTOR NOT IN PRESENT SCOPE OF SUPPLY	3	
2	765KV, 3150A, 3-PH, SPB CIRCUIT BREAKER WITHOUT PIR	01	
3	765KV, 3150A, 3-PH, ISOLATOR WITH ONE E/S, VERTICAL KNEE TYPE	01	
4	765KV, 3150A, 1-PH, ISOLATOR WITH ONE E/S, VERTICAL KNEE TYPE	06	
5	765KV, 3150A, 1-PH, HDB ISOLATOR WITHOUT E/S, VERTICAL KNEE TYPE	03	
6	765KV, 3000A, 1-PH CURRENT TRANSFORMER WITH 120% EXTENDED CURRENT RATING	03	
7	624KV, 1-PH, SURGE ARRESTER (1 PH.)	03	
8	765KV, BUS POST INSULATOR	09	
9	765KV, GUY WIRE	06	

SYSTEM PARAMETERS-765KV

S.NO.	DESCRIPTION	765KV
01	SYSTEM OPERATING VOLTAGE	765kV
02	MAXIMUM OPERATING VOLTAGE OF THE SYSTEM (rms)	800kV
03	RATED FREQUENCY	50Hz
04	FULL WAVE IMPULSE WITHSTAND VOLTAGE (1.2/50 MICROSECS.)	2100kVp
05	SWITCHING IMPULSE WITHSTAND VOLTAGE (250/2500 MICRO SEC.) DRY AND WET	1550kVp
06	ONE MINUTE POWER FREQUENCY DRY WITHSTAND VOLTAGE (rms)	830kV
07	ONE MINUTE POWER FREQUENCY DRY AND WET WITHSTAND VOLTAGE (rms)	---
08	CORONA EXTINCTION VOLTAGE	508kV
09	MAX. RADIO INTERFERENCE VOLTAGE FOR FREQUENCY BETWEEN 0.5 MHz AND 2 MHz	2500µV AT 508kV rms
10	MINIMUM CREEPAGE DISTANCE-FOR EQUIPMENT OTHER THAN INSULATOR STRING	20000mm
11	SYSTEM FAULT LEVEL	40KA FOR 1 SEC
12	MINIMUM CLEARANCE PHASE TO PHASE	7600/9400mm
13	MINIMUM CLEARANCE PHASE TO EARTH	4900/6400mm
14	SECTIONAL CLEARANCES OTHER THAN INSULATOR STRING	10300mm
15	SYSTEM FAULT LEVEL	40KA / 1SEC

BILL OF QTY. FOR 145kV MAIN EQUIPMENTS (31.5KA, 1 SEC):

SL.NO.	DESCRIPTION	RATING	QTY. (NO.)	SYMBOL
01	145 KV, BUS POST INSULATOR		8	

BILL OF QTY. FOR 33kV MAIN EQUIPMENTS:-

SL.NO.	DESCRIPTION	RATING	QTY. (NO.)	SYMBOL
01	33 KV, NEUTRAL CT		01	

- NOTES -
- ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE SPECIFIED.
 - 3XBOMVAR, 765KV REACTOR SUPPLY AND ETC IS NOT IN PRESENT SCOPE OF CONTRACT.
 - BILL OF QUANTITY OF 145KV POST INSULATORS (FOR NEUTRAL BUS) SHALL BE FINALIZED DURING AUX./NEUTRAL BUS LAYOUT APPROVAL.

- DRAWING REFERENCES -
- BHEL DWG: SLD OF 765KV SOLAPUR EXTN. S/S DWG. NO: TB-408-510-S01 REV0
 - PGCIL DWG: ELECT. LAYOUT PLAN, DWG NO: 3VIN12053570001 REV 04

NOA NO. : CC-CS/901-WR2/SS-3931/3/G3/NOA-1/8864 & 8865 DT. 29.07.19

ADDITIONAL INFORMATION W.O.No. 119TB00001		POWER GRID CORPORATION OF INDIA LIMITED NAME OF CUSTOMER/PROJECT	
STATUS OF DRAWING CONTRACT		Substation Package-SS19 for extension of (i) 765kV Solapur S/S; (ii) 765kV Aurangabad S/S; (iii) 765kV Wardha S/S; (iv) 400kV Khandwa S/S; (v) 400kV Rajgarh S/S; (vi) 400kV Champa S/S; (vii) 400/220kV Harsi S/S & (viii) 400/220kV Jabalpur Substation under WRSS-20.	
DISTRIBUTION OF PRINTS		BHEL BHARAT HEAVY ELECTRICALS LTD. TRANSMISSION PROJECTS DIVISION	
REV.	DATE	ALTERED	DS
01	14.11.19	CHECKED	JK
ZONE		APPROVED	SKS
1. DRAWING REVISED AS PER POWERGRID COMMENTS VIDE LETTER NO. VIDE LETTER REF NO. 06.11.19.		2. GUY WIRE ARRANGEMENT ADDED.	
3. HOLD CLEAR FOR REACTOR AREA			
PLAN & SECTION LAYOUT FOR EXTN. OF 765KV SOLAPUR S/S		TBM DEPT. 422	
DRAWN / NAME		PK	
CHECKED / NAME		DS/JK	
APPROVED / NAME		SKS	
SCALE		CARD CODE	
DRAWING NO.		TB-408-316-S02	
SHEET NO.		01	