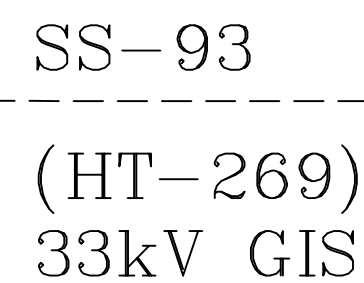


INVENTORY NO



ALTERED		REV.	DATE	ALTERED		REV.	DATE	ALTERED		REV.	DATE	ALTERED		REV.	DATE
CHD / APPD				CHD / APPD				CHD / APPD				CHD / APPD			
ZONE				ZONE				ZONE				ZONE			
1				2				3				4			

PROJECT:

CAPTIVE POWER PLANT (CPP) PACKAGE
VISAKH REFINERY MODERNIZATION PROJECT (VRMP)
JOB NO. B016

OWNER:


HINDUSTAN PETROLEUM CORPORATION LIMITED

PMC:


ENGINEERS INDIA LIMITED (EIL), NEW DELHI


BHARAT HEAVY ELECTRICALS LTD.
HYDERABAD

DRN.	NAME	SIGN.	DATE	NO.OF VAR.
CHD.	GRM/AVS	-SD-	30.03.18	
	P.SURESH	-SD-	30.03.18	
APPD.	J.K.PATTANAIK	-SD-	30.03.18	

DEPT. FILESD CODE:	UNTOL. DIMS. GR.	SCALE	WEIGHT (KG)	REF. TO ASSY. DRG.	ITEM NO.	NO. OF ITEMS
450				-N.A.-	-N.A.-	-N.A.-

TITLE	CARD CODE	REV.
SINGLE LINE DIAGRAM OF 33kv GIS SWITCHGEAR	BHEL DRG NO. PY-DL-1-M104-8801-01 CUST DRG NO. 03	
	SHT. No 01 NO. OF SHT. 01	

COMMENT SHEET

DOC.	B016		
No.	JOB No.	TR .NO.	S.NO.

PROJECT: VRMP PROJECT, VIZAG
NAME OF PACKAGE: CPP PACKAGE

CLIENT : M/s HPCL-Vizag
CONTRACTOR: M/s BHEL

Sr. No.	COMMENT/ OBSERVATION	RESOLUTION/ ACTION
1	DRAWING / DOCUMENT TITLE : 11 kV SWITCHGEAR SLD DOCUMENT NUMBER: PY-DL-1-M104-8801-01 R 02 CATEGORY/CODE: 2	
1.1	33kV Cable to SWGR-270 shall be 2 runs of 1CX630 sqmm copper / ph.	Noted and incorporated in the revised SLD.
1.2	BHEL has not provided Provide resolutions to HPCL comments sent vide email dtd 19/04/18. Pending points are reproduced below for ready reference: i. As per EDB, All master trip relay (86) shall be part of numerical relay. No electromechanical type relay shall be provided. ii. As per the contract - Section –C sub section C -2.3 interface between owner and EPCC contractor “Supply, installation, termination and jointing of 33kV cables from 33kV GIS to straight through joint location in existing 33kV cables to switchgear 71-HV-111 including straight through jointing kit. This includes cutting of existing 33kV cables from existing HT-269 to 71-HV-111 at suitable location within CPP and jointing to new 33kV cable from 33kV GIS using straight through joints..” Same to be included in Notes.	Noted and incorporated in the revised SLD.
	Client comments	
1.3	The physical location of Relays 87T, 64LV (of 220/66KV Tr & 220/33KV Tr) will be on 220KV GIS end. Hence, burden of 66KV GIS/33KV GIS CTs (which are being used as 2nd input to 87T, 64LV at 220KV GIS side) to be checked / provided by BHEL.	Noted and incorporated in the revised SLD, Please note that, as the relays of 87T,64R(LV) are in 220kV GIS relay panel. The Knee point voltage (V_k), Magnetizing current (I_m) & R_{ct} values of CTs (located in 33kV/66kV GIS giving 2 nd input to 87T,64R(LV) relays) shall be informed by the 220kV GIS vendor based on the relay model selected at their end. Accordingly requirements will be informed to 33kV /66kV GIS vendors
1.4	BHEL to confirm the CT ratios of 66KV GIS/33KV GIS CTs(which are being used as 2nd input to 87T, 64LV at 220KV GIS side) to enable PTC to ensure matching factors for P643 relay.	

LEGENDS FOR REVIEW CODE:-

- 1: NO COMMENTS
- 2: PROCEED WITH MANUFACTURE/FABRICATION AS PER COMMENTED.DRAWING/DOCUMENTS.
- 3: REVISED DRAWING/DOCUMENT REQUIRED.
- 3: DOCUMENT DOES NOT CONFORM TO BASIC REQUIREMENTS AS MARKED. RESUBMIT DOCUMENT.
- I: RETAINED FOR RECORDS.
- V: VOID.

COMMENTS BY (NAME & SIGN)
DATE:
DEPARTMENT:

Sai
09.06.18
ELECTRICAL