



FICHTNER Consulting Engineers (India)
Private Limited, (FI) Chennai.

VENDOR DRAWING REVIEW STATUS

☒ Action - 1 Approved

☐ Action - 2 Approved except as noted on drawing. Revise drawing and resubmit for records.

☐ Action - 3 Returned with Comments. Resubmit for approval.

☐ Action - 4 Not Approved. Resubmit for review

Information noted. Retained for reference and records.

This document has been reviewed as noted with regard to general conformity with the Contract specifications and requirements. The Vendor / Contractor is responsible for correctness of design calculation and details. Approval of this document does not relieve the Vendor / Contractor of his responsibility in carrying out the work correctly and fulfilling the complete requirements of the contract nor does it limit the purchaser's rights under the contract.

FI Letter Ref. No. :
CNT 6725/PM-6.7/5870/034

Date: 17/02/2009

Signature

Initials: TAI

ENGG. REF. DWGS.
PE-DG-319-165-N101 P&ID CW/ACW SYSTEM
PE-DG-319-179-N104 P&ID DMCW SYSTEM
PE-DG-319-172-N001 P&ID PLANT WATER SYSTEM

LEGEND:
XXX FLOW RATE IN CUM/HR
ACW AUXILIARY COOLING WATER
CW CIRCULATING WATER
CAP CAPACITY
DMF DUAL MEDIA FILTER
ETP EFFLUENT TREATMENT PLANT
PHE PLATE HEAT EXCHANGER
SCS SELF CLEANING STRAINER
NOR NORMAL
MAX MAXIMUM
INTR INTERMITTENT
MUP MAKE UP
PW POTABLE WATER
SW SERVICE WATER
CS/OW COMMON SERVICE UNIT-WISE
UW UNIT-WISE
TEMP. DIFF. TEMPERATURE DIFFERENCE
COC CYCLE OF CONCENTRATION

03	09.02.09	REVISED IN LINE WITH COMMENTS DTB:05.02.09		PK	
02	30.01.09	REVISED IN LINE WITH COMMENTS DTB:21.01.09		PK	
01	22.01.09	REVISED IN LINE WITH COMMENTS DTB:21.01.09		PK	
REV.	DATE	DESCRIPTION	DRN.	STR.	MECH/ELEC/INST.

APPROVED BY

OWNER

TPC ONGC - Tripura Power Company Limited

PROJECT

726.6 MW Combined Cycle Power Project
PALLATANA, TRIPURA, INDIA

OWNER'S ENGINEER

FICHTNER Consulting Engineers (India) Pvt. Limited
Chennai.

EPC CONTRACTOR

BHARAT HEAVY ELECTRICALS LTD
UNIT : PROJECT ENGINEERING MANAGEMENT, NEW DELHI

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DEPT	CODE	NAME	SIGN.	DATE
DRN	DESN	SUNIL	GC	22.01.09
CHK	SC	SC	SC	22.01.09
APPRO	PK	PK	PK	22.01.09

TITLE

WATER BALANCE DIAGRAM

CV	ME	EL	ISC	DEPT	SCALE	BHEL/SUB VENDOR DRG NO.
				SIGN		PE-DG-319-172-N007
				DATE		

SHT. No 1 OF 1

REV. 03

DESCRIPTION	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
PUMP SERVICE	RW PUMP	CW MUP PUMP	FIRE PUMP	SERVICE WATER PUMP	DM SUPPLY PUMP	CW PUMP	ACW BOOSTER PUMP	DMCW PUMP
QUANTITY	3 (2W+1S)	2(1W+1S)	5(3W+2S)	2(1W+1S)	3 (2W+1S)	3 (2W+1S)	2 (1W+1S)	2 (1W+1S)
FLOW/ PUMP M3/hr	585	1090	273	65	30	12000	1950	1730
DUTY	CS	CS	CS	CS	CS	UW	UW	UW
TOTAL NO OF PUMPS	3	2	5	2	3	6	4	4