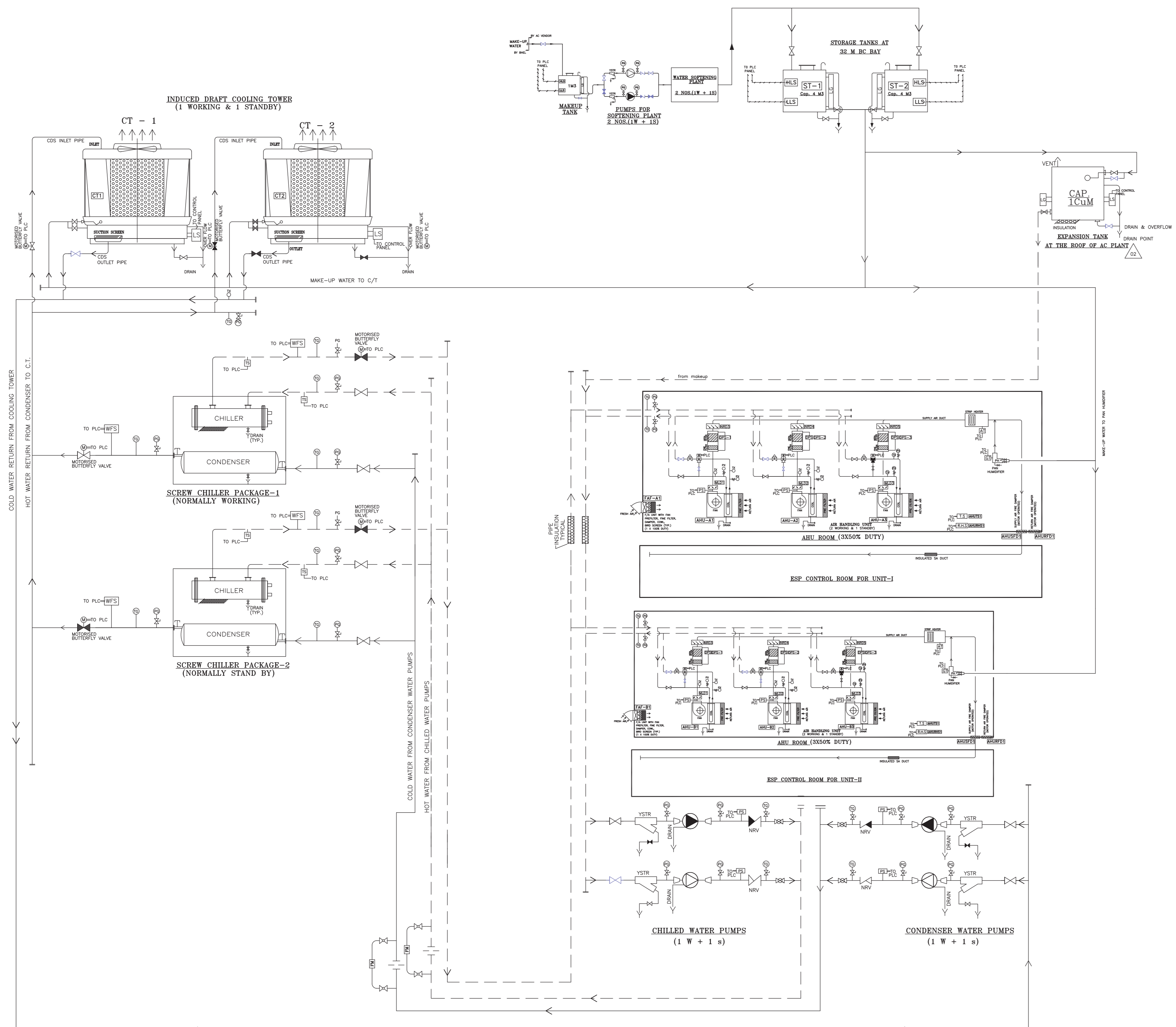


LEGEND :-

	PIPES	CHILLED WATER PIPES
	PIPES	CONDENSER WATER PIPES
	TEMP. ELEMENT	CHILLED & CONDENSER PUMP OUTLET
	GLOBE VALVE	CHILLER BY PASS LINE
	WFS	WATER FLOW SWITCH
	PS	PRESSURE SWITCH
	AT	AIR STAT
	GT	GYSESTAT
	STRIP HEATER	SUPPLY AIR DUCT LINE
	HEPA FILTER	AS SHOWN
	FINE FILTER LEVEL GAUGE	AS SHOWN
	PRE-FILTER LEVEL SWITCH	MAKE-UP TANK, COOLING TOWER, EXPANSION TANK, SOFT WATER STORAGE TANK, MAKEUP TANK
	MULTI-LVR DAMPER	AS SHOWN
	NON-RETURN DAMPER	AFTER FILTER PLENUM EACH AHU, EXPANSION TANK, SUPPLY WATER STORAGE TANK,
	PUMP	COND.WTR, CHILLED WTR & MAKE-UP WATER
	TX	TEMP. TEST POINT
	TG	TEMP. GAUGE.
	PX	PR. TEST POINT
	PG	PRESSURE GAUGE.
	TS	TEMP. SENSOR
	RHS	R.H. SENSOR
	PH	PAN HUMIDIFIER
	FIRE DAMPER(SOL)	AS SHOWN(AT WALL)
	Y- STRAINER	ALL PUMP INLET
	FLOAT VALVE	ALL COOLING TOWER/ EXPANSION TANK PAN HUMIDIFIER
	NON RETURN VALVE	ALL PUMP OUT LET
	3-WAY-MXNG. VALVE	ALL AHU CHWTR. RETURN LINE
	BALANCING VALVE	ALL AHU CHWTR. RETURN
	BUTTERFLY VALVE	ALL MAKE-UP/QUICK FILL/DRAIN
	MOTDRISED BUTTER FLY VALVE	CONDENSER OUTLET/ CHILLER OUTLET COOLING TOWER INLET
	BUTTERFLY VALVE	CDSW.PUMP INLET/OUTLET/CHW.PUMP&OUT COOLING TOWER OUT/COND&CHILLER IN/AHU IN,OUT
	FM	FLOW METER
	ORIFICE PLATE	CONDENSER WATER OUTLET/CHILLED WATER OUT LINE



NOTES :-

- 1 ALL EQUIPMENT DRAIN SHALL BE CONNECTED TO NEAREST BUILDING/ PLANT ROOM DRAIN (BY AC SUPPLIER)
- 2 THE STANDBY CONDENSER WATER PUMPS, CHILLED WATER PUMPS & AHU'S SHALL BE STARTED AUTOMATICALLY WHEN THE WORKING EQUIPMENT ARE STOPPED / TRIPPED.

For reference purpose only.

CUSTOMER	NEYVELI LIGNITE CORPORATION LTD. (NLC LTD)		
CONSULTANT	LAHMEYER INTERNATIONAL (INDIA) PVT. LTD.		
JOB NO.	400	DEPT CODE	NAME
STATUS	CONTRACT	DRN VJ	SGP
DISTRIBUTION		DESN VJ	SGP
TO		CHK HK	SGP
NO/DFT		APPD SAK	SGP
REV	DATE	ALTD	CHD

JOB NO.	400
STATUS	CONTRACT
DISTRIBUTION	
TO	
NO/DFT	
REV	DATE
ALTD	CHD

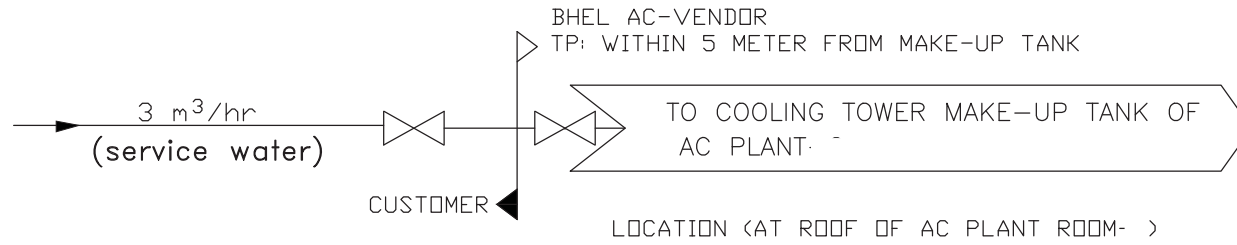
2X500 MW NEW NEYVELI TPP

TITLE	P & I DIAGRAM FOR CONDENSER AND CHILLED WATER SYSTEM FOR SG AREA		
DEPT.	SCALE	BHEL DRAWING NO.	PE-DG-400-553-A001.
SIGN		SHEET	1 OF 1
DATE		REV	02

Varun Jain  
 SA Khan  
 K. Keshav  
 Praveen Kishore

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NOTE:-

AC - SYSTEM MAKE-UP WATER PIPING FROM TERMINAL POINT TO MAKE-UP WATER TANK, EXPANSION TANK & PAN HUMIDIFIER SHALL BE IN SCOPE OF BHEL HVAC SYSTEM VENDOR

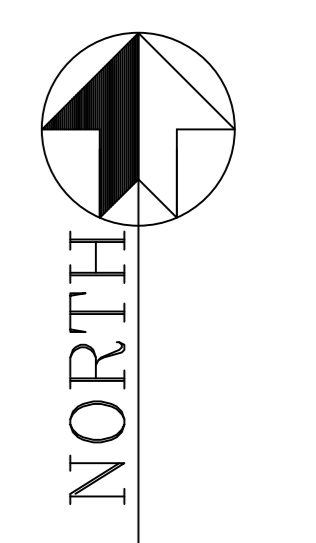
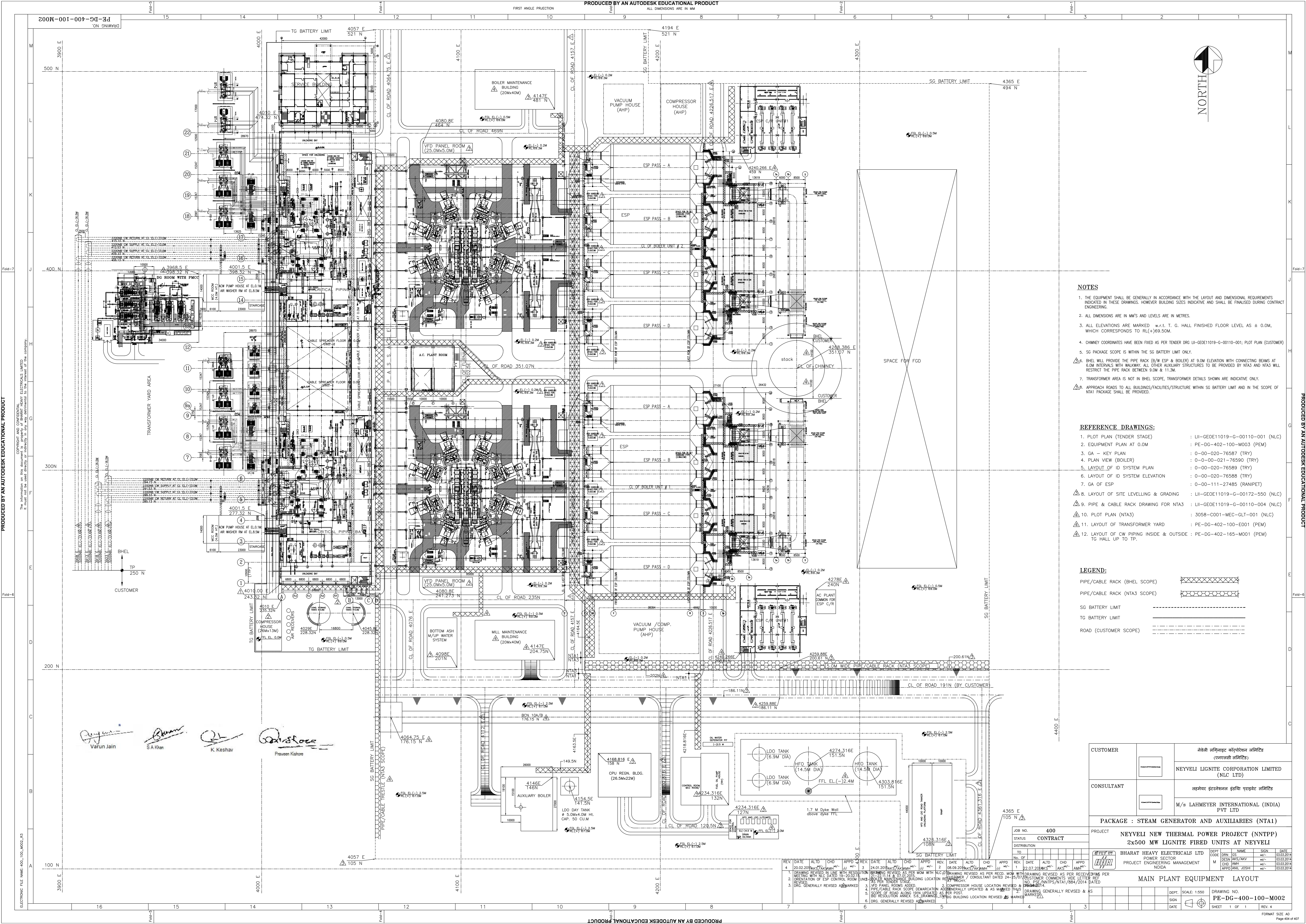
  
Varun Jain

  
S A Khan

  
K. Keshav

  
Praveen Kishore

**MAKE UP WATER SCHEME FOR HVAC SYSTEM**  
**PE-DG-400-553-A003**



**NOTES**

1. THE EQUIPMENT SHALL BE GENERALLY IN ACCORDANCE WITH THE LAYOUT AND DIMENSIONAL REQUIREMENTS INDICATED IN THESE DRAWINGS. HOWEVER BUILDING SIZES INDICATIVE AND SHALL BE FINALISED DURING CONTRACT ENGINEERING.
2. ALL DIMENSIONS ARE IN MM'S AND LEVELS ARE IN METRES.
3. ALL ELEVATIONS ARE MARKED w.r.t. T. G. HALL FINISHED FLOOR LEVEL AS ± 0.0M, WHICH CORRESPONDS TO RL(+69.50M).
4. CHIMNEY COORDINATES HAVE BEEN FIXED AS PER TENDER DRG LI-GOE11019-G-00110-001; PLOT PLAN (CUSTOMER)
5. SG PACKAGE SCOPE IS WITHIN THE SG BATTERY LIMIT ONLY.
6. BHEL WILL PROVIDE THE PIPE RACK (B/W ESP & BOILER) AT 9.0M ELEVATION WITH CONNECTING BEAMS AT 6.0M INTERVALS WITH WALKWAY. ALL OTHER AUXILIARY STRUCTURES TO BE PROVIDED BY NTA3 AND NTA3 WILL RESTRICT THE PIPE RACK BETWEEN 9.0M & 11.3M.
7. TRANSFORMER AREA IS NOT IN BHEL SCOPE, TRANSFORMER DETAILS SHOWN ARE INDICATIVE ONLY.
8. APPROACH ROADS TO ALL BUILDINGS/FACILITIES/STRUCTURE WITHIN SG BATTERY LIMIT AND IN THE SCOPE OF NTA1 PACKAGE SHALL BE PROVIDED.

**REFERENCE DRAWINGS:**

- |  |                                 |
|--|---------------------------------|
| 1. PLOT PLAN (TENDER STAGE)                                  | : LI-GOE11019-G-00110-001 (NLC) |
| 2. EQUIPMENT PLAN AT 0.0M                                    | : PE-DG-402-100-M003 (PEM)      |
| 3. GA - KEY PLAN   | : 0-00-020-76587 (TRY)          |
| 4. PLAN VIEW (BOILER)  | : 0-00-00-021-76590 (TRY)       |
| 5. LAYOUT OF ID SYSTEM PLAN                                  | : 0-00-020-76589 (TRY)          |
| 6. LAYOUT OF ID SYSTEM ELEVATION                             | : 0-00-020-76588 (TRY)          |
| 7. GA OF ESP   | : 0-00-111-27485 (RANIPET)      |
| 8. LAYOUT OF SITE LEVELLING & GRADING                        | : LI-GOE11019-G-00172-550 (NLC) |
| 9. PIPE & CABLE RACK DRAWING FOR NTA3                        | : LI-GOE11019-G-00110-004 (NLC) |
| 10. PLOT PLAN (NTA3)   | : 3058-C001-MEC-GLT-001 (NLC)   |
| 11. LAYOUT OF TRANSFORMER YARD                               | : PE-DG-402-100-E001 (PEM)      |
| 12. LAYOUT OF CW PIPING INSIDE & OUTSIDE : TG HALL UP TO TP. | : PE-DG-402-165-M001 (PEM)      |

**LEGEND:**

- PIPE/CABLE RACK (BHEL SCOPE)
- PIPE/CABLE RACK (NTA3 SCOPE)
- SG BATTERY LIMIT
- TG BATTERY LIMIT
- ROAD (CUSTOMER SCOPE)

Varun Jain  
 S A Khan  
 K Keshav  
 Praveen Kishore

CUSTOMER	नेवेली लिग्नाइट कॉर्पोरेशन लिमिटेड (एनएलसी लिमिटेड) <b>NEYVELI LIGNITE CORPORATION LIMITED (NLC LTD)</b>
CONSULTANT	बहमेयर इंटरनेशनल इंडिया प्राइवेट लिमिटेड <b>M/s LAHMEYER INTERNATIONAL (INDIA) PVT LTD</b>
<b>PACKAGE : STEAM GENERATOR AND AUXILIARIES (NTA1)</b>	
JOB NO.	<b>400</b>
STATUS	<b>CONTRACT</b>
<b>PROJECT</b> <b>NEYVELI NEW THERMAL POWER PROJECT (NNTPP)</b> <b>2x500 MW LIGNITE FIRED UNITS AT NEYVELI</b>	
DEPT CODE	<b>BHARAT HEAVY ELECTRICALS LTD</b>
NAME	<b>POWER SECTOR</b>
DATE	<b>PROJECT ENGINEERING MANAGEMENT</b>
NO. OF SHEETS	<b>NOIDA</b>

DEPT.	SCALE: 1:550	DRAWING NO.
SIGN		<b>PE-DG-400-100-M002</b>
DATE		SHEET 1 OF 1 REV. 4

REV.	DATE	ALTD	CHKD	APPROV	REV.	DATE	ALTD	CHKD	APPROV	REV.	DATE	ALTD	CHKD	APPROV
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2	24.01.2014				2	08.09.2014				2	08.09.2014			

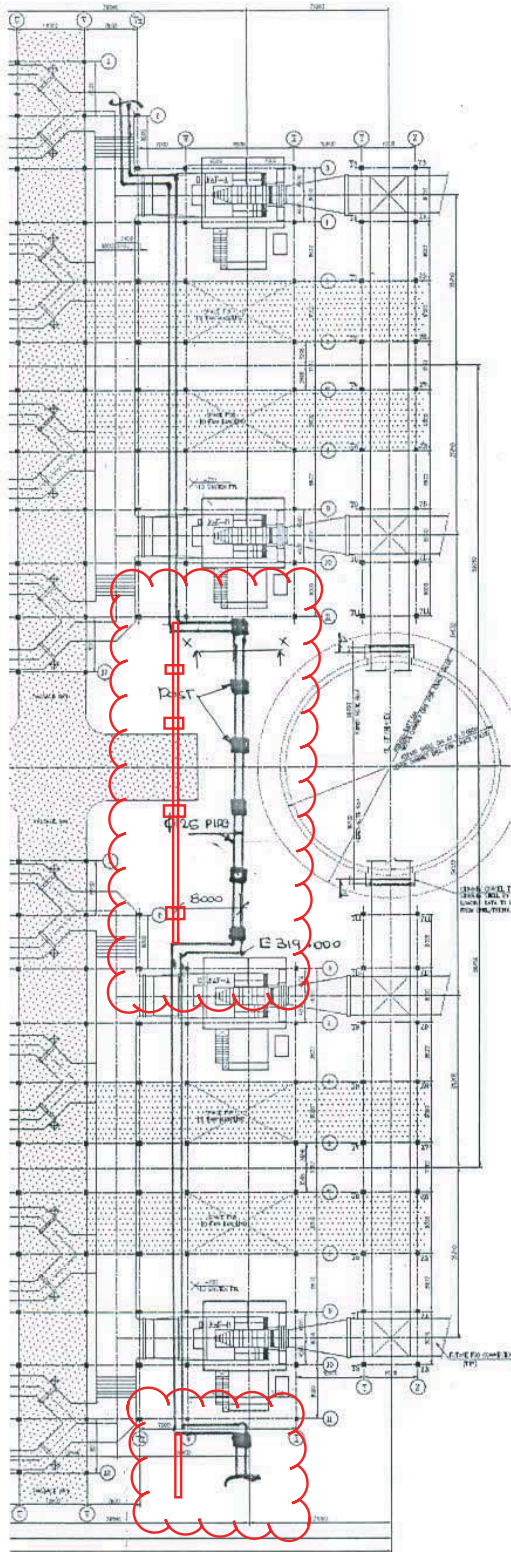
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 FIRST ANGLE PROJECTION  
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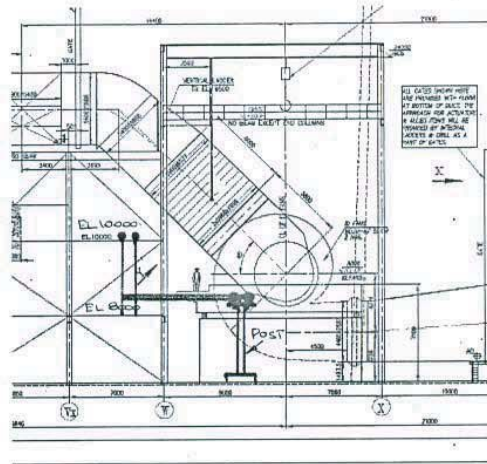




ESP-CB-1

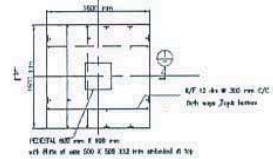


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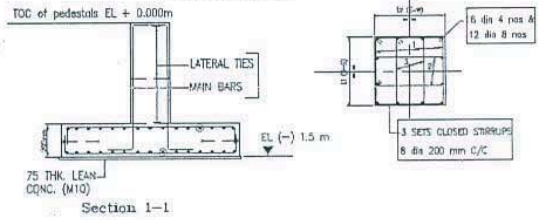


Section - x x

Foundation details of AC <sup>pipings</sup> supports (Near Chimney)



TYPICAL DETAIL OF FLOORING



Section 1-1

*Varun Jain*  
Varun Jain

*S A Khan*  
S A Khan

*Praveen Kishore*  
Praveen Kishore