




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	CONDENSER, CHILLER OUTLET
PS	PRESSURE SWITCH	CDSWTR, CHWTR PUMP OUT, AHU FAN DISH.
AT	AIR STAT	AS SHOWN
GT	GYSERSTAT	IN PAN HUMIDIFIER OR NEAR
—	STRIP HEATER	SUPPLY AIR DUCT LINE
HEPA	HEPA FILTER	AS SHOWN
FINE	FINE FILTER	AS SHOWN
PRE	PRE FILTER	AS SHOWN
MLD	MULT. LVR. DAMPER	AS SHOWN
LG	LEVEL GAUGE	EXPANSION TANK, SOFT WATER STORAGE TANK, MAKE UP TANK
LS	LEVEL SWITCH	COOLING TOWER, EXPANSION TANK, CONDENSATE TANK, SOFT WATER STORAGE TANK, MAKEUP TANK
NRD	NDN RETURN DAMPER	AFTER FILTER PLENUM EACH AHU
⊙	PUMP	COND. WTR, CHILLED WTR & MAKE-UP WATER
TX	TEMP. TEST POINT	ALL AHU-CHWTR. IN/OUT
TG	TEMP. GAUGE	COND-IN/OUT, CHILLER IN/OUT, AHU ROOM CHILLED WATER HEADER
PX	P.R. TEST POINT	ALL AHU-CHWTR. IN/OUT
PG	PRESSURE GAUGE	COND-IN/OUT, CHILLER IN/OUT, PUMP-IN/OUT AHU ROOM CHILLED WATER HEADER
T.S	TEMP. SENSOR	AS SHOWN
R.H.S	R.H. SENSOR	AS SHOWN
P.H	PAN HUMIDIFIER	IN SIDE AHU ROOM
FD	FIRE DAMPER (SDL)	AS SHOWN AT WALL
Y	Y- STRAINER	ALL PUMP INLET
FV	FLOAT VALVE	ALL COOLING TOWER/ EXPANSION TANK PAN HUMIDIFIER
NRV	NDN RETURN VALVE	ALL PUMP OUT LET
3-WAY	3-WAY-MXNG. VALVE	ALL AHU CHWTR. RETURN LINE
BV	BALANCING VALVE	ALL AHU CHWTR. RETURN
BFV	BUTTERFLY VALVE	ALL MAKE-UP/QUICK FILL/DRAIN
M	MOTORIZED BUTTER FLY VALVE	CONDENSER OUTLET/ CHILLER OUTLET COOLING TOWER INLET
BFV	BUTTERFLY VALVE	CDSW/PUMP INLET/OUTLET/CHW/PUMP IN/OUT COOLING TOWER OUT/COND/CHILLER IN/AHU IN/OUT
FM	FLOW METER	CONDENSER WATER OUTLET/CHILLED WATER OUT LINE
DP	DRIFICE 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.

COSTUMER	NEYVELI LIGNITE CORPORATION LTD. (NLC LTD)		
CONSULTANT	LAHMEYER INTERNATIONAL (INDIA) PVT. LTD.		
JOB NO.	402	DEPT CODE	NAME SIGN DATE
STATUS	CONTRACT	MAX.	DRN VJ sb/- 20.09.2014
DISTRIBUTION			CHD MK sb/- 20.09.2014
TO			APPD SAK sb/- 20.09.2014
No. OF REV	DATE	ALTD	CHD
			APPD
2X500 MW NEW NEYVELI TPP			
TITLE P & I DIAGRAM FOR CONDENSER AND CHILLED WATER SYSTEM FOR TG AREA & SERVICE BUILDING			
DEPT.	SCALE	BHFL DRAWING NO.	
SIGN		PE-DG-402-553-A001.	
DATE		SHEET	1 OF 1 REV 00

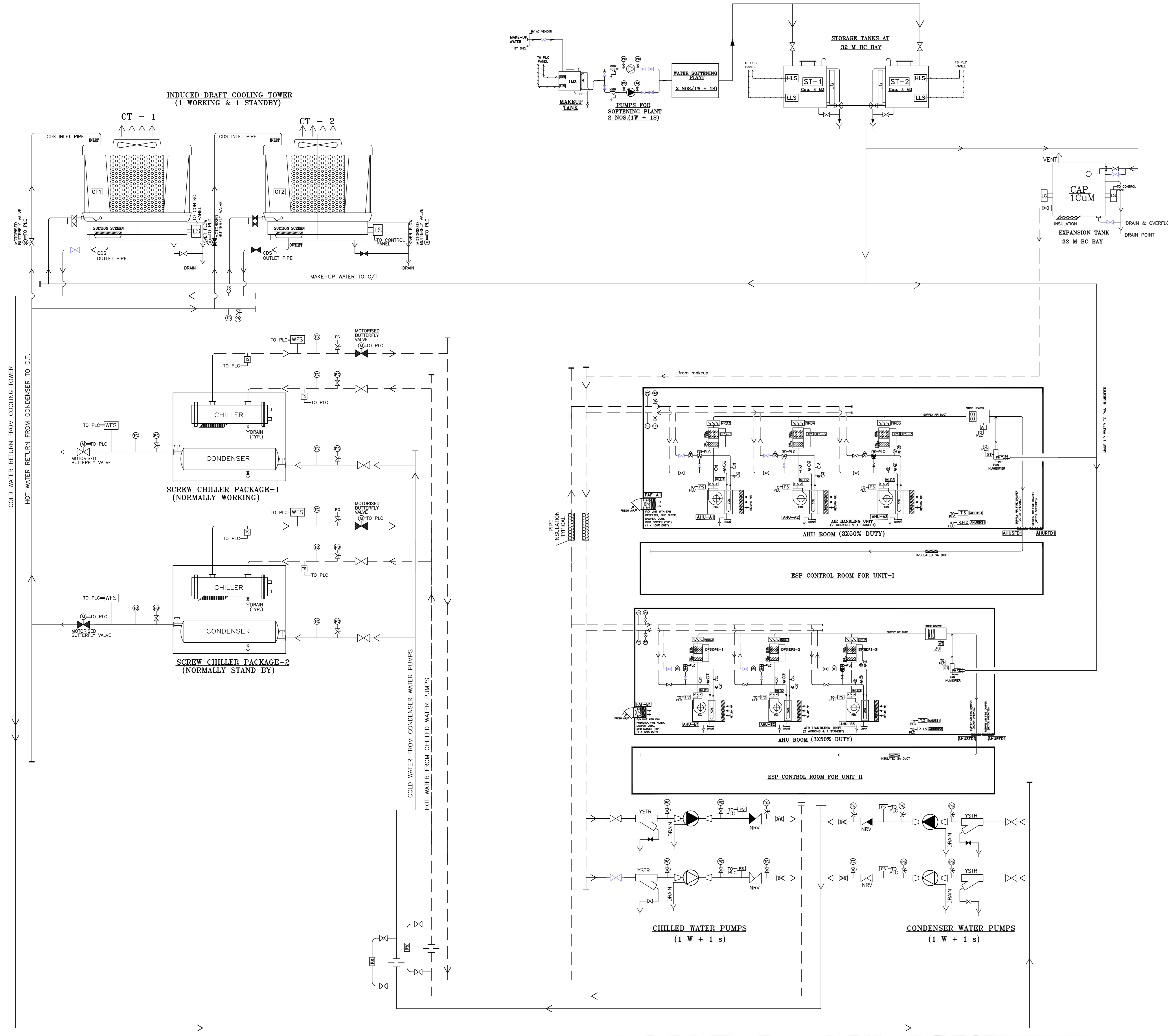
 Varun Jain
 S A Khan
 Praveen Kishore

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COMPUTER FILE NAME:

PRODUCED BY AN AUTODESK EDUCATIONAL PRODUCT

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LEGEND :-

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—	PIPES	CONDENSER WATER PIPES
⊙	TEMP. ELEMENT	CHILLED & CONDENSER PUMP OUTLET
⊗	GLOBE VALVE	CHILLER BY PASS LINE
WFS	WATER FLOW SWITCH	CONDENSER, CHILLER OUTLET
PS	PRESSURE SWITCH	CDSWTR, CHWTR PUMP OUT, AHU FAN DISH.
AT	AIR STAT	AS SHOWN
GT	GYSERSTAT	IN PAN HUMIDIFIER OR NEAR
—	STRIP HEATER	SUPPLY AIR DUCT LINE
—	HEPA FILTER	AS SHOWN
—	FINE FILTER	AS SHOWN
—	PRE-FILTER	MAKE UP TANK
—	LEVEL SWITCH	COOLING TOWER, EXPANSION TANK, SOFT WATER STORAGE TANK, MAKEUP TANK
—	MULTI-VR DAMPER	AS SHOWN
—	NON RETURN DAMPER	AFTER FILTER PLENUM EACH AHU, EXPANSION TANK, SOFT WATER STORAGE TANK,
⊙	PUMP	COND. WTR, CHILLED WTR & MAKE-UP WATER
TX	TEMP. TEST POINT	ALL AHU-CHWTR. IN/OUT
TG	TEMP. GAUGE	COND-IN/OUT, CHILLER IN/OUT, AHU ROOM CHILLED WATER HEADER
PX	PR. TEST POINT	ALL AHU-CHWTR. IN/OUT
PG	PRESSURE GAUGE	COND-IN/OUT, CHILLER IN/OUT, PUMP-IN/OUT AHU ROOM CHILLED WATER HEADER
T.S	TEMP. SENSOR	AS SHOWN
R.H.S	R.H. SENSOR	AS SHOWN
P.H	PAN HUMIDIFIER	IN SIDE AHU ROOM
—	FIRE DAMPER(SOL)	AS SHOWN(AT WALL)
Y	Y- STRAINER	ALL PUMP INLET
FLD	FLD AT VALVE	ALL COOLING TOWER/ EXPANSION TANK PAN HUMIDIFIER
NRV	NRN RETURN VALVE	ALL PUMP OUT LET
3-WAY	3-WAY-MXNG. VALVE	ALL AHU CHWTR. RETURN LINE
BAL	BALANCING VALVE	ALL AHU CHWTR. RETURN
BFV	BUTTERFLY VALVE	ALL MAKE-UP/QUICK FILL/DRAIN
MDR	MODRISED BUTTER FLY VALVE	CONDENSER OUTLET/ CHILLER OUTLET COOLING TOWER INLET
BFV	BUTTERFLY VALVE	CDSW.PUMP INLET/OUTLET/CHW.PUMP IN/OUT COOLING TOWER OUT/COND&CHILLER IN/AHU IN,OUT
FM	FLOW METER	CONDENSER WATER OUTLET/CHILLED WATER OUT LINE
ORIF	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.

	CUSTOMER	NEYVELI LIGNITE CORPORATION LTD. (NLC LTD)
	CONSULTANT	LAHMEYER INTERNATIONAL (INDIA) PVT. LTD.
	BHEL	BHARAT HEAVY ELECTRICALS LTD POWER GROUP PROJECTS ENGINEERING MANAGEMENT NOIDA, UP

JOB NO.	400
STATUS	CONTRACT
DISTRIBUTION	
TO	
NO. OF 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.	
DATE		PE-DG-400-553-A001.	
		SHEET 1 OF 1	REV 00

Varun Jain

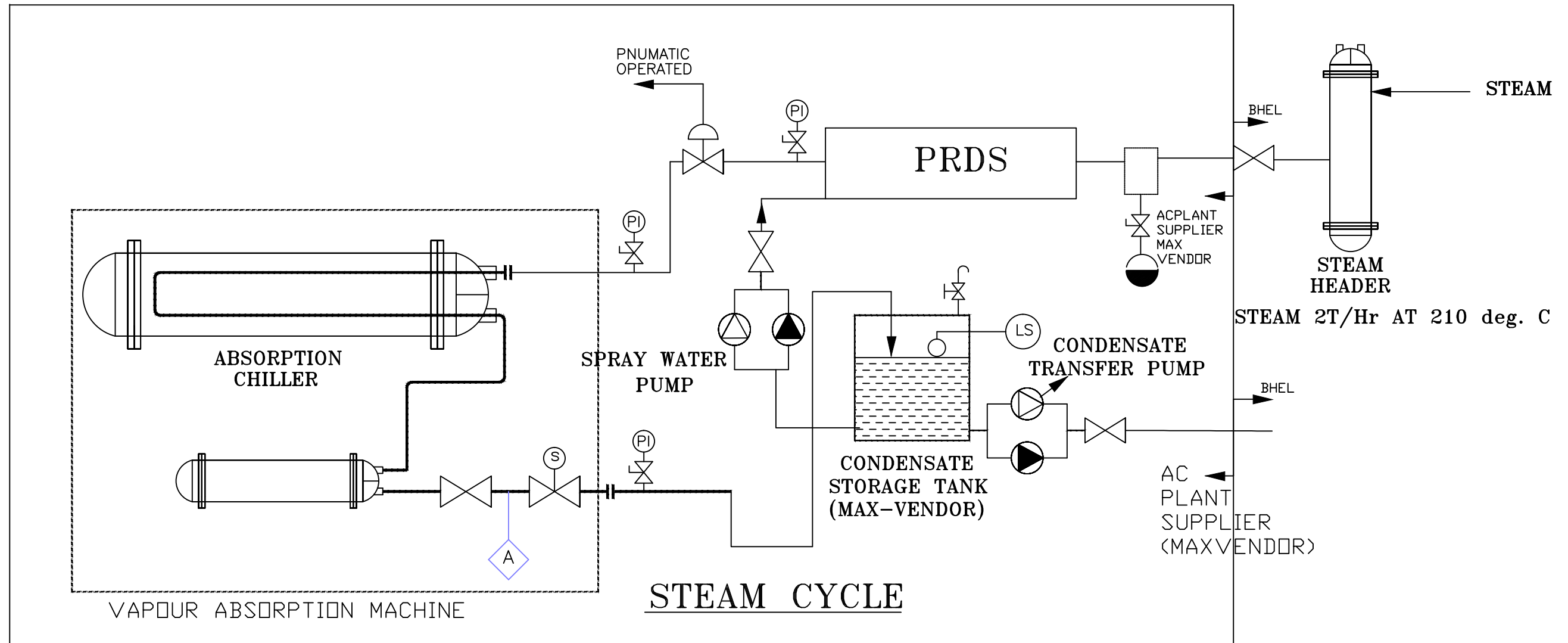
S A Khan

Praveen Kishore

COMPUTER FILE NAME:

PRODUCED BY AN AUTODESK EDUCATIONAL PRODUCT

NLC
(2X250 MW)
AIR-CONDITIONING SYSTEM

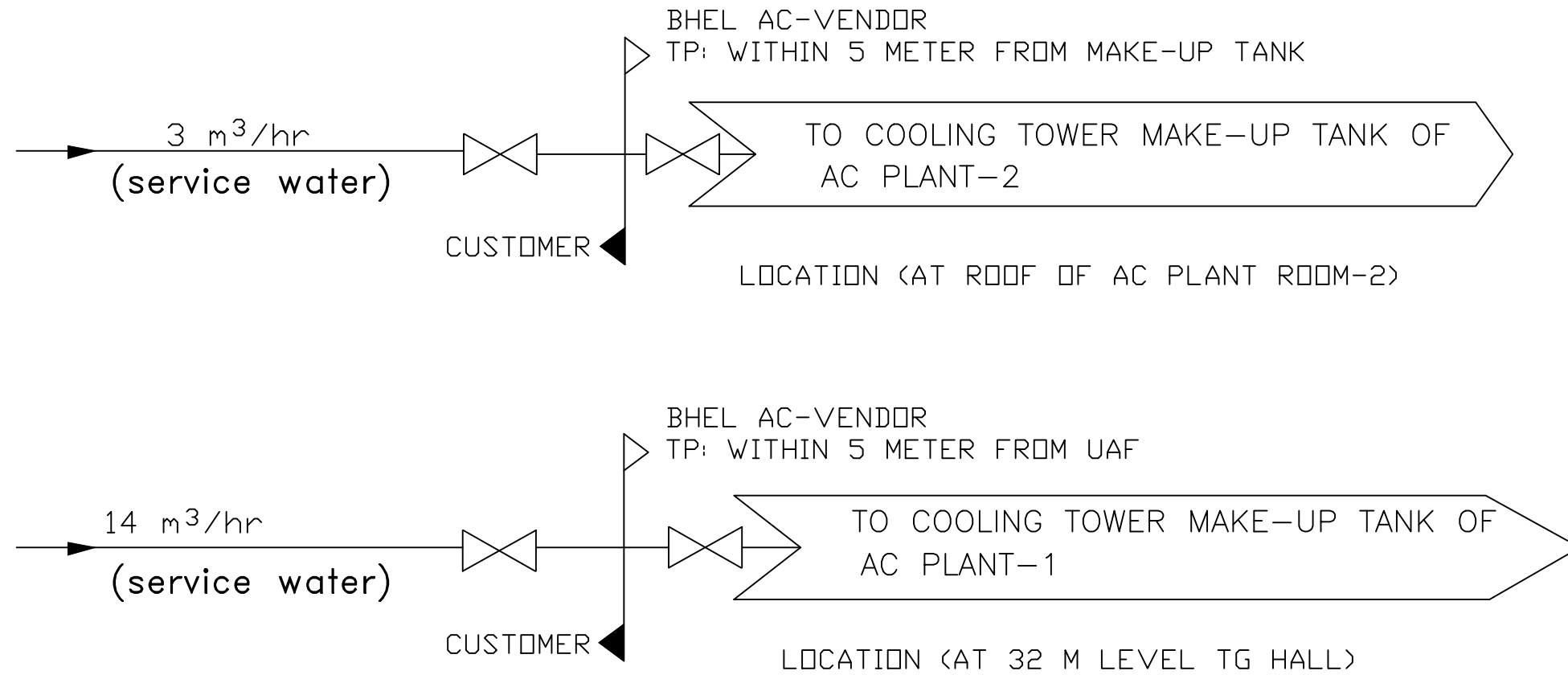


- NOTE:
1. STEAM PIPING INCLUDING PRDS AS MARKED INSIDE THE AC PLANT ROOM IN THE SCOPE OF AC PLANT SUPPLIER (MAX-VENDOR).
 2. CONDENSATE LINE FOR DE SUPERHEATING SHALL BE TAKEN FROM CONDENSATE TANK BY AC VENDOR

SCOPE OF WORK & TERMINAL POINTS FOR STEAM & CONDENSATE WATER FOR VAPOUR ABSORPTION MACHINES IN AC SYSTEM BETWEEN BHEL & AC PLANT SUPPLIER (MAX-VENDOR)

STEAM CONDENSATE PIPING SCOPE
PE-DG-400-553-A002


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 S A Khan
 
 Praveen Kishore



NOTE:-

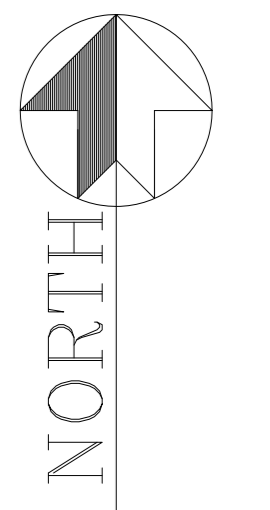
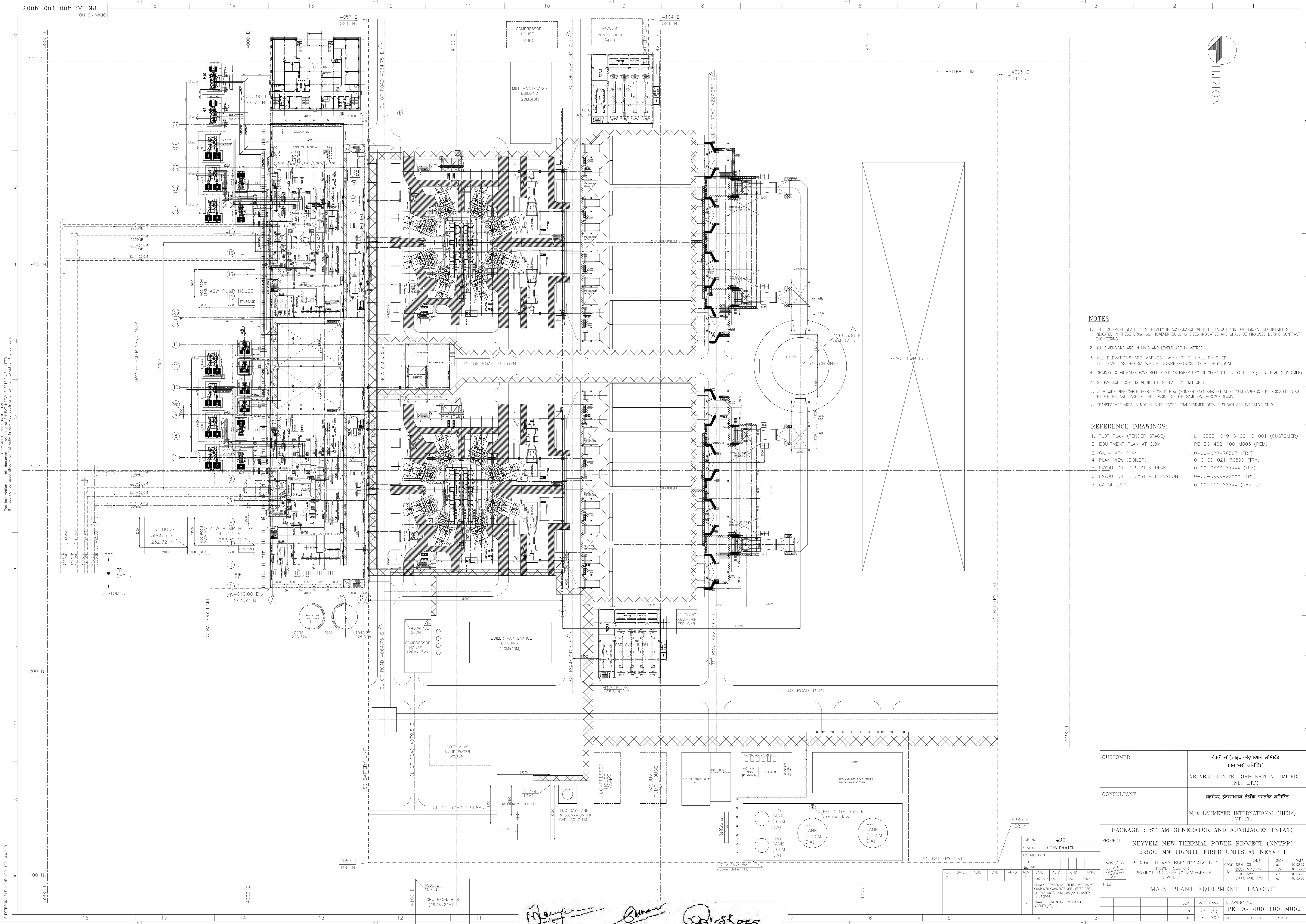
AC - SYSTEM MAKE-UP WATER PIPING FROM TERMINAL POINT TO MAKE-UP WATER TANK, EXPANSION TANK & PAN HUMIDIFIER SHALL BE IN SCOPE OF BHEL HVAC SYSTEM VENDOR

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

Varun Jain

S A Khan

Praveen Kishore



- 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 FL. LEVEL AS +0.0M WHICH CORRESPONDS TO RL +69.50M.
 4. CHIMNEY COORDINATES HAVE BEEN FIXED AS TENDER DRG LI-GE011019-G-00110-001; PLOT PLAN (CUSTOMER)
 5. SG PACKAGE SCOPE IS WITHIN THE SG BATTERY LIMIT ONLY.
 6. 3.5M WIDE PIPE/CABLE TRESTLE ON D-ROW (BUNKER BAY) BRACKET AT EL.7.5M (APPROX.) IS INDICATED. INTAS BIDDER TO TAKE CARE OF THE LOADING OF THE SAME ON D-ROW COLUMN.
 7. TRANSFORMER AREA IS NOT IN BHEL SCOPE, TRANSFORMER DETAILS SHOWN ARE INDICATIVE ONLY.

- REFERENCE DRAWINGS:**
- | | |
|----------------------------------|--------------------------------------|
| 1. PLOT PLAN (TENDER STAGE) | : LI-GE011019-G-00110-001 (CUSTOMER) |
| 2. EQUIPMENT PLAN AT 0.0M | : PE-DG-402-100-M003 (PEM) |
| 3. GA - KEY PLAN | : O-00-020-76587 (TRY) |
| 4. PLAN VIEW (BOILER) | : O-00-021-76590 (TRY) |
| 5. LAYOUT OF ID SYSTEM PLAN | : O-00-OXXX-XXXXX (TRY) |
| 6. LAYOUT OF ID SYSTEM ELEVATION | : O-00-OXXX-XXXXX (TRY) |
| 7. GA OF ESP | : O-00-111-XXXXX (RANIPET) |

CUSTOMER	नेनेली नवितर्मल पावर कॉर्पोरेशन लिमिटेड (नगरवसी लिमिटेड)	
	NEYVELI LIGNITE CORPORATION LIMITED (NLC LTD)	
CONSULTANT	सहमेयर इंटरनेशनल इंडिया प्राइवेट लिमिटेड	
	M/s LAHMEYER INTERNATIONAL (INDIA) PVT LTD	
PACKAGE : STEAM GENERATOR AND AUXILIARIES (NTA1)		
PROJECT	NEYVELI NEW THERMAL POWER PROJECT (NNTPP) 2x500 MW LIGNITE FIRED UNITS AT NEYVELI	
JOB NO.	400	
STATUS	CONTRACT	
DISTRIBUTION	TO: [] FROM: []	
REV. NO.	DATE	BY
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 Dhanraj Kumar