

REPORT- PV-A Plant Design Parameters

WEATHER FILE- Houston TX TMY2

*** CIRCULATION LOOPS ***

HEATING CAPACITY (MBTU/HR)	COOLING CAPACITY (MBTU/HR)	LOOP FLOW (GAL/MIN)	TOTAL HEAD (FT)	SUPPLY UA PRODUCT (BTU/HR-F)	SUPPLY LOSS DT (F)	RETURN UA PRODUCT (BTU/HR-F)	RETURN LOSS DT (F)	LOOP VOLUME (GAL)	FLUID HEAT CAPACITY (BTU/LB-F)
Primary Loop 0.000	8.300	1370.6	51.6	0.0	0.00	0.0	0.00	2055.9	1.00
Condenser Water Loop 0.000	9.760	1939.0	61.6	0.0	0.00	0.0	0.00	0.0	1.00
DHW Plant 1 Loop (1) -0.184	0.000	4.9	0.0	0.0	0.00	0.0	0.00	7.3	1.00
Secondary Loop 0.000	8.277	1370.6	36.6	0.0	0.00	0.0	0.00	2055.9	1.00

*** PUMPS ***

ATTACHED TO	FLOW (GAL/MIN)	HEAD (FT)	HEAD SETPOINT (FT)	CAPACITY CONTROL	POWER (KW)	MECHANICAL EFFICIENCY (FRAC)	MOTOR EFFICIENCY (FRAC)
Primary Pumps Primary Loop PRIMARY LOOP	2 PUMP (s) 1098.8	49.6	32.6	STAGED	15.080	0.770	0.885
CW Loop Pump Condenser Water Loop PRIMARY LOOP	2 PUMP (s) 1903.2	72.6	42.6	STAGED	36.840	0.770	0.917
Secondary Pump Secondary Loop SECONDARY LOOP	1 PUMP (s) 1327.7	42.5	37.6	VAR-SPEED	15.070	0.770	0.917

*** PRIMARY EQUIPMENT ***

EQUIPMENT TYPE	ATTACHED TO	RATED CAPACITY (MBTU/HR)	FLOW (GAL/MIN)	RATED EIR (FRAC)	RATED HIR (FRAC)	AUXILIARY (KW)
Chiller1a ELEC-HERM-CENT	Primary Loop Condenser Water Loop	4.189 4.851	691.1 969.5	0.167	0.000	0.000
Chiller1b ELEC-HERM-CENT	Primary Loop Condenser Water Loop	4.189 4.851	691.1 969.5	0.167	0.000	0.000

*** COOLING TOWERS ***

EQUIPMENT TYPE	ATTACHED TO	CAPACITY (MBTU/HR)	FLOW (GAL/MIN)	NUMBER OF CELLS	FAN POWER PER CELL (KW)	SPRAY PWR PER CELL (KW)	AUXILIARY (KW)
Open Tower OPEN-TWR	Condenser Water Loop	9.760	1950.5	1	64.714	0.000	0.000

1370.6 ≠ 1,098.8 ≠ 1382.2
R
(691.1 × 2)