

REPORT- PV-A Plant Design Parameters

WEATHER FILE- SEATTLE BOEING FI WA

*** 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)
WLHP Water Loop									
-2.888	3.936	767.7	51.6	0.0	0.00	0.0	0.00	1151.5	1.00
DHW Plant 1 Res Loop (1)									
-0.545	0.000	16.3	0.0	0.0	0.00	0.0	0.00	24.4	1.00

*** PUMPS ***

ATTACHED TO	FLOW (GAL/MIN)	HEAD (FT)	HEAD SETPOINT (FT)	CAPACITY CONTROL	POWER (KW)	MECHANICAL EFFICIENCY (FRAC)	MOTOR EFFICIENCY (FRAC)
WLHP Loop Pump	1 PUMP(s)						
WLHP Water Loop	1185.6	95.6	42.6	VAR-SPEED	29.828	0.770	0.930
PRIMARY LOOP							
WLHP Blra (HWNatDrft) Pump	1 PUMP(s)						
WLHP Blra (HWNatDrft)	402.7	9.5	0.0	ONE-SPEED	1.119	0.770	0.840
HOT WATER (RUN-AROUND)							
WLHP Blrb (HWNatDrft) Pump	1 PUMP(s)						
WLHP Blrb (HWNatDrft)	402.7	9.5	0.0	ONE-SPEED	1.119	0.770	0.840
HOT WATER (RUN-AROUND)							

*** PRIMARY EQUIPMENT ***

EQUIPMENT TYPE	ATTACHED TO	RATED CAPACITY (MBTU/HR)	FLOW (GAL/MIN)	RATED EIR (FRAC)	RATED HIR (FRAC)	AUXILIARY (KW)
WLHP Blra (HWNatDrft)						
HW-CONDENSING	WLHP Water Loop	-1.906	506.6	0.003	1.049	0.000
WLHP Blrb (HWNatDrft)						
HW-CONDENSING	WLHP Water Loop	-1.906	506.6	0.003	1.049	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)
WLHP Fluid Cooler							
FLUID-COOLER	WLHP Water Loop	3.240	647.5	1	11.186	0.000	0.000

*** DW-HEATERS ***

EQUIPMENT TYPE	ATTACHED TO	CAPACITY (MBTU/HR)	FLOW (GAL/MIN)	EIR (FRAC)	HIR (FRAC)	AUXILIARY (KW)	TANK (GAL)	TANK UA (BTU/HR-F)
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DHW Plant 1 Res Wtr Htr (1)								
GAS DW-HEATER	DHW Plant 1 Res Loop (1)	-0.235	7.0	0.000	1.049	0.000	500.0	15.00
AWHP-1								
HEAT-PUMP DW-HTR	DHW Plant 1 Res Loop (1)	-0.112	3.3	0.292	0.000	0.000	500.0	15.00
AWHP-2								
HEAT-PUMP DW-HTR	DHW Plant 1 Res Loop (1)	-0.112	3.3	0.292	0.000	0.000	500.0	15.00