

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									
-2.311	3.802	748.7	51.6	0.0	0.00	0.0	0.00	1123.0	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	748.7	75.0	42.6	VAR-SPEED	16.273	0.650	1.000
PRIMARY LOOP							
WLHP Blra (HWNatDrft) Pump	1 PUMP(s)						
WLHP Blra (HWNatDrft)	489.5	7.8	0.0	ONE-SPEED	1.119	0.770	0.840
HOT WATER (RUN-AROUND)							
WLHP Blrb (HWNatDrft) Pump	1 PUMP(s)						
WLHP Blrb (HWNatDrft)	489.5	7.8	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-BOILER	WLHP Water Loop	-1.152	374.3	0.000	1.250	0.000
WLHP Blrb (HWNatDrft)						
HW-BOILER	WLHP Water Loop	-1.152	374.3	0.000	1.250	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	3.200	639.5	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	1.111	0.000	500.0	15.00
AWHP-1								
ELEC DW-HEATER	DHW Plant 1 Res Loop (1)	-0.112	3.3	1.000	0.000	0.000	500.0	15.00
AWHP-2								
ELEC DW-HEATER	DHW Plant 1 Res Loop (1)	-0.112	3.3	1.000	0.000	0.000	500.0	15.00