

Fountain House – Database Notes

Table 1 Database Notes

Data Collection	Data Logger: Data Collection Interval: Collection Method: Timestamp Reference:	Obvius Aquisuite (CDH) 1-minute Obvius Upload Eastern Standard Time
Site Information	Cogeneration Units: Nameplate Capacity: Heat Recovery Medium: Heat Recovery Uses: Excess Heat Use:	1 - Capstone C65 Microturbine 65 kW Hot water Space Cooling, Domestic Hot Water Rejected from ICHP unit exhaust bypass damper
DG/CHP Generator Electrical Output	Engineering Units: Energy Measurement (net/gross): Measurement Type: Generator Power Measurements: Parasitic Power Measurements:	kWh Net calculated: Gross minus parasitic (one time readings) Accumulated energy per interval One - on single microturbine One time readings
DG/CHP Generator Electrical Output Demand	Engineering Units: Measurement Type:	kW From energy measurement, based on peak 1-minute power
DG/CHP Generator Fuel Input	Engineering Units: Measurement Type:	CF Engine heat rate calculated from utility data and measured generator energy output. Monthly billing data collected via internet
DG/CHP Useful Heat Recovery	Engineering Units: Heat Measurement Type:	MBtu (calculated value) One thermal loop – flowmeter and multiple temperature measurements (across all useful loads).

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DG/CHP Unused Heat Recovery	Engineering Units: Heat Measurement Type:	Not collected
DG/CHP Status/Runtime	Engineering Units:	0 – 1, System ON/System Off
Facility Purchased Energy	Engineering Units:	Not collected
Facility Purchased Demand	Engineering Units:	Not collected
Other Facility Gas Use	Engineering Units:	Not collected

Note: See addendum for further details

Table 2 Event Timeline

Date	Event
March 1, 2013	Logging begins.
October 2, 2013	CDH on site to verify flow and temperature sensor measurements and collect instantaneous DG/CHP output data

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Range Checks

Table 3. Range Checks

Data Point	Hourly Data Method	Units	Sensor Lower Range	Sensor Upper Range	Database Lower Range	Database Upper Range	Notes
DG/CHP Generator Output	Sum	kWh/int	0	65/int	0	1	
DG/CHP Generator Output Demand	Max	kW	0	65	0	65	
DG/CHP Generator Gas Use	Sum	cf/int	-	-	0	1500	
Total Facility Purchased Energy	Sum	kWh/int	-	-	-	-	Not installed
Total Facility Purchased Demand	Max	kW	-	-	-	-	Not installed
Other Facility Gas Use	Sum	cf/int	-	-	-	-	Not installed
Useful Heat Recovery	Sum	MBtu/int	0	600	0	600	Calculated Value
Unused Heat Recovery	Sum	MBtu/int	-	-	-	-	Not installed
Status/Runtime of DG/CHP Generator	Sum	hr	0	1	0	1	
Ambient Temperature	Avg	°F	-30	130	-30	130	

Notes:

1. This table contains values from *fountainhouse.csv*

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Relational Checks

Table 4. Relational Checks

Evaluated Point	Criteria	Result

Notes: