

VALLEY VIEW CENTER FOR NURSING CARE AND REHABILITATION – DATABASE NOTES

Table 1 Database Notes

Data Collection	Data Logger: Data Collection Interval: Collection Method:	Obvius AcquiSuite A8812 15 – Minute Nightly Obvius Building Manager Online upload to Frontier Energy servers.
Project Information	DER Unit (make & model): Nameplate Capacity: Heat Recovery Medium: Heat Recovery Uses: Excess Heat:	Three (3) Aegen PowerSync 75 units 225 kW (75 kW each) Hot Water DHW and space heating Rejected to atmosphere using heat dissipation radiator
DER Electricity Generated (WG)	Engineering Units: Energy Measurement (net/gross): Measurement Type:	kWh Net generator power Calculated using accumulated gross kWh values from installed Veris H8035 power meter and stipulated parasitic loads
DER Fuel Consumed (FG)	Engineering Units: Measurement type:	cf Calculated using accumulated cf values from Romet RM-5000 gas meter
DER Heat Used (QU)	Engineering Units: Heat Measurement Type:	MBtu /hr Calculated from accumulated BTU values from installed Badger 380 BTU meter

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Table 2 Event Timeline

Date	Event
10/23/2020	Data collection begins
1/29/2021	Regular system operation begins.
9/28/2021	Gas data stops.
8/15/2022	Added to NYSERDA website. Power and heat recovery data only from 9/28/21 to present.
9/27/2022	Gas data stipulated, from 9/28/21 to present, using measured power and gas prior to gas meter failure. See Appendix – Gas Calc for details.

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Range Checks

Table 3 Range Checks

Data Point	Units	Database Lower Range	Database Upper Range	Notes
DER Electricity Generated	kWh/hour	-10	230	
DER Fuel Consumed	cfh	0	3000	
DER Heat Used	MBtu/hour	0	1600	
Ambient Temperature	°F	-20	130	NOAA Airport Code - KSWF

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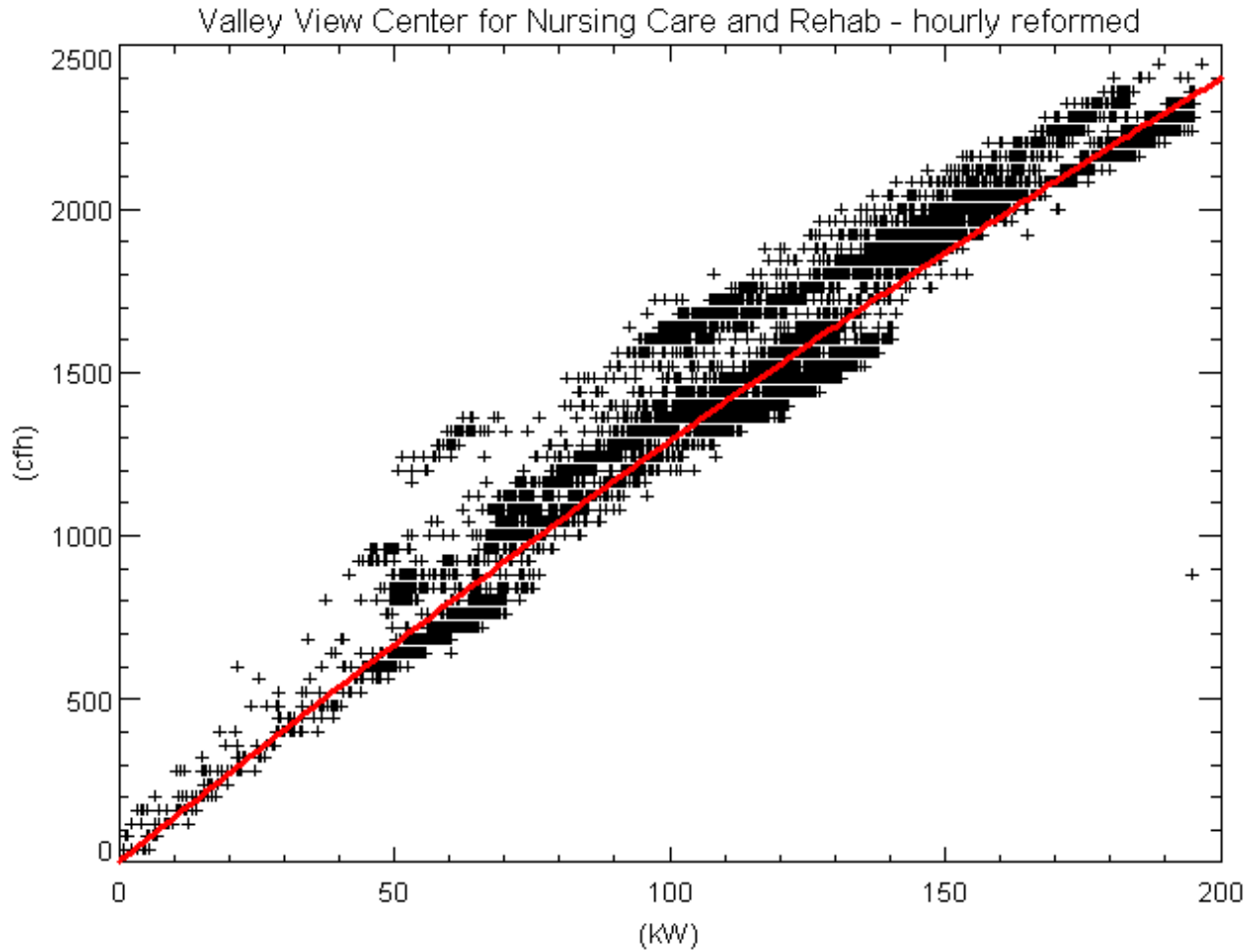
Relational Checks

Table 4 Relational Checks

Evaluated Point(s)	Criteria	Result
Electricity Generated Fuel Consumed	Daily Electric Efficiency < 0% HHV and > 100% HHV	Electricity Generated = invalid Fuel Consumed = invalid Heat Used = invalid Heat Rejected = invalid

VALLEY VIEW CENTER FOR NURSING CARE AND REHAB – APPENDIX A

Gas data is calculated from power generation by using gas curve developed from the measured power and gas data, prior to the gas meter failure on 9/27/21, for the three Aegen PowerSync 75 units.



Power generation (WT_KW), gas consumption (FG):

$$FG = -0.00897(WT_KW)^2 + 13.78873(WT_KW) - 0.85748$$