

Verizon – Forest Ave – Database Notes

Table 1 Database Notes

Data Collection	<u>Data Logger:</u> <u>Data Collection Interval:</u> <u>Collection Method:</u>	Obvius AcquiSuite (Site) 1 Min Obvius Upload Manager to CDH Servers
Site Information	<u>Cogeneration Units:</u> <u>Nameplate Capacity:</u> <u>Heat Recovery Medium:</u> <u>Heat Recovery Uses:</u> <u>Excess Heat:</u>	ClearEdge Power PureCell® Model 400 Fuel Cell 400 kW None
DG/CHP Generator Electrical Output	<u>Engineering Units:</u> <u>Energy Measurement (net/gross):</u> <u>Measurement Type:</u>	kWh Gross Accumulated kWh
DG/CHP Generator Electrical Output Demand	<u>Engineering Units:</u> <u>Measurement Type:</u>	kW Instantaneous kW Output
DG/CHP Generator Fuel Input	<u>Engineering Units:</u> <u>Measurement type:</u>	cf Instantaneous Fuel Input, converted from kg/h to cf/interval (lhv, 48,667 kJ/kg). Fuel Cell internal meter.
DG/CHP Useful Heat Recovery	<u>Engineering Units:</u> <u>Heat Measurement Type:</u>	
DG/CHP Unused Heat Recovery	<u>Engineering Units:</u> <u>Heat Measurement Type:</u>	
DG/CHP Status/Runtime	<u>Engineering Units:</u> <u>Measurement Type:</u>	

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Facility Purchased Energy	<u>Engineering Units:</u> <u>Measurement Type:</u>	
Facility Purchased Demand	<u>Engineering Units:</u> <u>Measurement Type:</u>	
Other Facility Gas Use	<u>Engineering Units:</u> <u>Measurement Type:</u>	

Table 2 Event Timeline

Date	Event
5/8/2014	Data uploaded to NYSERDA website. Begin daily upload.

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Range Checks

Table 3. Range Checks

Data Point	Units	Hourly Data Calculation Method	Database Lower Range	Database Upper Range	Notes
DG/CHP Generator Output (WG_d)	kWh/int	Sum	0	10	
DG/CHP Generator Output Demand (WG_KW_d)	kW	Max	0	500	
DG/CHP Generator Gas Use (FG_d)	cf/int	Sum	0	100	<i>kg/h → cf/int (lhv, 48,667 kJ/kg)</i>
Total Facility Purchased Energy (WT_d)	kWh/int	-			
Total Facility Purchased Demand (WT_KW_d)	kW	-			
Other Facility Gas Use (FT_d)	cf/int	-			
Useful Heat Recovery (QHR_d)	MBtu/int	-			
Unused Heat Recovery (QD_d)	MBtu/int	-			
Status/Runtime of DG/CHP Generator (SG_d)	hr	-			
Ambient Temperature (TAO)	°F	Avg	-20	130	

Notes:

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

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Relational Checks

Table 4. Relational Checks

Evaluated Point	Criteria	Result

Notes:

1. This table contains values from *relational_checks.pro*