

# Avalon Fort Greene– Database Notes

Table 1 Database Notes

<b>Data Collection</b>	<u>Data Logger:</u> <u>Data Collection Interval:</u> <u>Collection Method:</u>	Obvius AcquiSuite A8812 1 – Minute Obvius Upload Manager to CDH Servers
<b>Site Information</b>	<u>Cogeneration Units:</u> <u>Nameplate Capacity:</u> <u>Heat Recovery Medium:</u> <u>Heat Recovery Uses:</u> <u>Excess Heat:</u>	Two (2) Aegen Aegis PowerVerter PV-100 100 kW Hot Water Domestic hot water and snow melt Rejected to atmosphere by dump radiator
<b>DG/CHP Generator Electrical Output</b>	<u>Engineering Units:</u> <u>Energy Measurement (net/gross):</u> <u>Measurement Type:</u>	kWh Net Power (calculated from gross and parasitic measurements) Accumulated kWh
<b>DG/CHP Generator Electrical Output Demand</b>	<u>Engineering Units:</u> <u>Measurement Type:</u>	kW Calculated : accumulated kWh/int * # intervals
<b>DG/CHP Generator Fuel Input</b>	<u>Engineering Units:</u> <u>Measurement type:</u>	CF Accumulated cubic feet
<b>DG/CHP Useful Heat Recovery</b>	<u>Engineering Units:</u> <u>Heat Measurement Type:</u>	MBtu/hr Calculated from 1 minute analog flow and temperature data
<b>DG/CHP Unused Heat Recovery</b>	<u>Engineering Units:</u> <u>Heat Measurement Type:</u>	MBtu/hr Calculated from 1 minute analog flow and temperature data
<b>DG/CHP Status/Runtime</b>	<u>Engineering Units:</u> <u>Measurement Type:</u>	Hours Calculated based on generator output

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<b>Facility Purchased Energy</b>	<u>Engineering Units:</u> <u>Measurement Type:</u>	kWh Accumulated kWh
<b>Facility Purchased Demand</b>	<u>Engineering Units:</u> <u>Measurement Type:</u>	kW Calculated : accumulated kWh/int * # intervals
<b>Other Facility Gas Use</b>	<u>Engineering Units:</u> <u>Measurement Type:</u>	- -

**Table 2 Event Timeline**

<b>Date</b>	<b>Event</b>
January 11, 2017	On site to install datalogger, terminate meter wiring, install temperature sensors, setup communications, and verify sensor readings. Data collection begins.
January 16, 2017	Added to NYSERDA website

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### *Range Checks*

**Table 3. Range Checks**

<b>Data Point</b>	<b>Units</b>	<b>Hourly Data Calculation Method</b>	<b>Database Lower Range</b>	<b>Database Upper Range</b>	<b>Notes</b>
DG/CHP Generator Output (WG_d)	kWh/int	Sum	-10	210	
DG/CHP Generator Output Demand (WG_KW_d)	kW	Max	-10	210	$WG\_KW\_d = WG\_d * \# \text{ Intervals}$
DG/CHP Generator Gas Use (FG_d)	cf/int	Sum	0	6500	
Total Facility Purchased Energy (WT_d)	kWh/int	Sum	0	400	
Total Facility Purchased Demand (WT_KW_d)	kW	Max	0	400	$WT\_KW\_d = WT\_d * \# \text{ Intervals}$
Other Facility Gas Use (FT_d)	cf/int	-	-	-	
Useful Heat Recovery (QHR_d)	MBtu/hr	Avg	0	2700	
Unused Heat Recovery (QD_d)	MBtu/hr	Avg	0	2700	
Status/Runtime of DG/CHP Generator (SG_d)	hr	-	0	1	System Off/System On
Ambient Temperature (TAO)	°F	Avg	-20	130	<i>WUG Airport Code - LGA</i>

Notes:

1. This table contains values from *avalon\_fort.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*