Archstone Chelsea – Database Notes

Table 1 Database Notes

Data Collection	Data Logger: Data Collection Interval: Collection Method:	Obvius Aqusuite supplied by Constellation Energy 1 minute sftp
Site Information	Cogeneration Units: Nameplate Capacity: Heat Recovery Medium: Heat Recovery Uses: Excess Heat:	1 – 75kW Aegis AGEN engine generators 75 kW Hot water Domestic hot water Rejected from dump radiator connected to cooling tower
DG/CHP Generator Electrical Output	Engineering Units: Energy Measurement (net/gross): Measurement Type: Parasitic Power Measurements:	kWh Gross Accumulated energy per interval One for single engine One time parasitic measurement
DG/CHP Generator Electrical Output Demand	Engineering Units: Measurement Type:	kW From energy measurement, based on peak -1 min power
DG/CHP Generator Fuel Input	Engineering Units: Measurement type:	CF Pulse
DG/CHP Useful Heat Recovery	Engineering Units: Heat Measurement Type:	MBtu One thermal loop with common flowmeter and temperature measurements across useful loads
DG/CHP Unused Heat Recovery	Engineering Units: Heat Measurement Type:	MBtu Common flowmeter and temperature measurements across useful loads

Archstone Chelsea – Database Notes

DG/CHP Status/Runtime	Engineering Units: Measurement Type:	0 – 1, System On/System Off
Facility Purchased Energy	Engineering Units: Measurement Type:	
Facility Purchased Demand	Engineering Units: Measurement Type:	
Other Facility Gas Use	Engineering Units: Measurement Type:	

Table 2 Event Timeline

Date	Event

Archstone Midtown – Database Notes

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	2	
DG/CHP Generator Output Demand (WG_KW_d)	kW	Max	0	80	
DG/CHP Generator Gas Use (FG_d)	cf/int	Sum	0	1000	
Total Facility Purchased Energy (WT_d)	kWh/int	-	0	20	
Total Facility Purchased Demand (WT_KW_d)	kW	-	0	1000	
Other Facility Gas Use (FT_d)	cf/int	-	-	-	Not collected
Useful Heat Recovery (QHR_d)	MBtu/int	-	-10	1200	Calculated
Unused Heat Recovery (QD_d)	MBtu/int	-	-10	1200	Calculated
Status/Runtime of DG/CHP Generator (SG_d)	hr	-	0	1	0 – 1, System On/System Off
Ambient Temperature (TAO)	°F	Avg	-30	130	WUG Airport Code - LGA

Notes:

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

Archstone Midtown – Database Notes

Relational Checks

Table 4. Relational Checks

Evaluated Point	Criteria	Result

Notes:

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