220 Madison – Database Notes

Table 1 Database Notes

Data Collection	Data Logger: Data Collection Interval: Collection Method: Timestamp Reference:	Aegis Data Collection Platform 15-minute Nightly FTP upload to CDH Energy servers Eastern Standard Time
Site Information	Cogeneration Units: Nameplate Capacity: Heat Recovery Medium: Heat Recovery Uses: Excess Heat Use:	Aegen Aegis PowerVerter PV-75 75 kW Hot water Domestic Hot Water Rejected to atmosphere by dump radiator
DG/CHP Generator Electrical Output	Engineering Units: Energy Measurement (net/gross): Measurement Type:	kWh Net Power: (calculated from gross and parasitic measurements) Accumulated kWh
DG/CHP Generator Electrical Output Demand	Engineering Units: Measurement Type:	kW Net Power: (calculated from gross and parasitic measurements) Measured kW
DG/CHP Generator Fuel Input	Engineering Units: Measurement Type:	CF Accumulated cubic feet
DG/CHP Useful Heat Recovery	Engineering Units: Heat Measurement Type:	MBtu /hr Calculated from 15 minute flow and temperature data
DG/CHP Unused Heat Recovery	Engineering Units:	MBtu Accumulated MBtu from integrating BTU meter
DG/CHP Status/Runtime	Engineering Units:	0 – 1, System ON/System Off
Facility Purchased Energy	Engineering Units: Measurement Type:	kWh Accumulated kWh

Facility Purchased Demand	Engineering Units: Measurement Type:	kW Measured kW
Other Facility Gas Use	Engineering Units:	Not collected

Table 2 Event Timeline

Date	Event
November 27, 2017	Data collection begins.
December 20, 2017	Added to NYSERDA website.

Range Checks

Table 3. Range Checks

Data Point	Hourly Data Method	Units	Database Lower Range	Database Upper Range	Notes
DG/CHP Generator Output (WG_d)	Sum	kWh/int	-10	80	
DG/CHP Generator Output Demand (WG_KW_d)	Max	kW	-10	80	
DG/CHP Generator Gas Use (FG_d)	Sum	Cfh	0	1200	
Total Facility Purchased Energy (WT_d)	Sum	kWh/int	0	400	
Total Facility Purchased Demand (WT_KW_d)	Max	kW	0	400	
Other Facility Gas Use (FT_d)	Sum	Cfh	-	-	Not Installed
Useful Heat Recovery (QHR_d)	Avg	MBtu/h	0	1000	
Unused Heat Recovery (QD_d)	Avg	MBtu/h	0	1000	
Status/Runtime of DG/CHP Generator (SG_d)	On/Off	On/Off	0	1	0 – 1, System On/System Off
Ambient Temperature (TAO)	Avg	°F	-30	120	WUG Airport Code - LGA

Notes:

1. This table contains values from 220_*madison.csv*

Relational Checks

Table 4. Relational Checks

Evaluated Point	Criteria	Result