Brevoort East – Database Notes

Table 1 Database Notes

Data Collection	Data Logger: Data Collection Interval: Collection Method:	Obvius AcquiSuite A8812 1 Minute Obvius Upload Manager to CDH servers
Site Information	Cogeneration Units: Nameplate Capacity: Heat Recovery Medium: Heat Recovery Uses: Excess Heat:	3 Tecogen Inverde INV-100 reciprocating generators 100 kW Hot water Domestic hot water and either space heating or an absorption chiller Rejected to atmosphere by dump radiator
DG/CHP Generator Electrical Output	Engineering Units: Energy Measurement (net/gross): Measurement Type:	kW/kWh Net energy measured directly Accumulated kWh
DG/CHP Generator Electrical Output Demand	Engineering Units: Measurement Type:	kW Calculated from net energy measurement
DG/CHP Generator Fuel Input	Engineering Units: Measurement type:	CF Rotary gas meter with pulse output
DG/CHP Useful Heat Recovery	Engineering Units: Heat Measurement Type:	MBtu (calculated value) Two thermal loops – flowmeter and two temperature measurements across all useful loads
DG/CHP Unused Heat Recovery	Engineering Units: Heat Measurement Type:	MBtu (calculated value) Flowmeter and two temperature measurements across CHP dump radiator
DG/CHP Status/Runtime	Engineering Units: Measurement Type:	Hour When generator power greater than 25 kW

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

Table 2 Event Timeline

Date	Event
April 1, 2015	Logging Begins
April 8, 2015	Data posted to NYSERDA DG/CHP website
July 9, 2015	Gas meter pulse output installed, gas data available on the DG/CHP website
July 23, 2020	New Flow Meter was installed, heat recovery now calculated with data from new meter

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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	-25	400	Database lower range less than zero to account for parasitic loads
DG/CHP Generator Output Demand (WG_KW_d)	kW	Max	-25	400	Database lower range less than zero to account for parasitic loads
DG/CHP Generator Gas Use (FG_d)	cf/int	Sum	0	120000	
Total Facility Purchased Energy (WT_d)	kWh/int	Sum			Not installed
Total Facility Purchased Demand (WT_KW_d)	kW	-			Not installed
Other Facility Gas Use (FT_d)	cf/int	-			Not installed
Useful Heat Recovery (QHR_d)	MBtu/int	Sum	0	1200	Calculated value
Unused Heat Recovery (QD_d)	MBtu/int	Sum	0	1200	Calculated value
Status/Runtime of DG/CHP Generator (SG_d)	hr	Avg	0	1	Calculated value
Ambient Temperature (TAO)	°F	Avg	-20	130	WUG Airport code LGA

Notes:

1. This table contains values from *brevoort_east.csv adjusted for hourly data*

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Relational Checks

Table 4. Relational Checks

Evaluated Point	Criteria	Result
FG	WG > 10 and FG ≤ 0	DQ Level for FG set to 2
WG	FG > 100 and WG ≤ 0	DQ Level for WG set to 2
QHR	WG ≤ 10 and QHR > 10	DQ Level for QHR set to 2

Notes:

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