Van Blarcom Closures – Database Notes

Table 1 Database Notes

Data Collection	Data Logger: Data Collection Interval: Collection Method:	ALC Control System 15 – Minute Nightly email to CDH.
Site Information	Cogeneration Units: Nameplate Capacity: Heat Recovery Medium: Heat Recovery Uses: Excess Heat:	Twelve (12) Tecogen InVerde CM - 100 1200 kW (100 kW each) Hot Water Space Cooling and Process Hot Water Rejected to atmosphere using dump radiator
DG/CHP Generator Electrical Output	Engineering Units: Energy Measurement (net/gross): Measurement Type:	kWh Net generator power Calculated from generator electrical output demand; max kW / # intervals
DG/CHP Generator Electrical Output Demand	Engineering Units: Measurement Type:	kW Calculated as the sum of kW measurements from the 2x Eaton IQ 250/260 power meters (one for each group of generators), and 1x parasitic power meter.
DG/CHP Generator Fuel Input	Engineering Units: Measurement type:	CF Flow measured by gas meter.
Other Fuel Input	Engineering Units: Heat Measurement Type:	- -
Utility Energy Import	Engineering Units: Measurement Type:	kWh Calculated from utility energy import demand; max kW / # intervals

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Utility Energy Import Demand	Engineering Units: Measurement Type:	kW Calculated as sum of 2x measured utility services meters (Square D Powerlogic circuit monitors).
DG/CHP Useful Heat Recovery	Engineering Units: Measurement Type:	MBtu/hr Calculated using 15-minute flow and temperature measurements
DG/CHP Rejected Heat Recovery	Engineering Units: Heat Measurement Type:	MBtu/hr Calculated using 15-minute flow and temperature data.
Generator Status	Engineering Units: Measurement Type:	Hours 0 to 1, system on / system off. Generator output must be above 30 kW to be considered on.
Ambient Temperature	Engineering Units: Measurement Type:	Deg. F Weather Underground airport code JFK.

Table 2 Event Timeline

Date	Event
January 21, 2017	Data collection begins.
February 13, 2017	Added to NYSERDA website.

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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	-1	1500	
DG/CHP Generator Output Demand (WG_KW_d)	kW	Max	-10	1500	*WG_KW_d = WG_d * # Intervals*
DG/CHP Generator Gas Use (FG_d)	Cfh/int	Sum	0	20000	
Total Facility Purchased Energy (WT_d)	kWh/int	-	0	2500	
Total Facility Purchased Demand (WT_KW_d)	kW	-	0	2500	
Other Facility Gas Use (FT_d)	cf/int	-	-	-	
Useful Heat Recovery (QHR_d)	MBtu	-	0	10000	
Unused Heat Recovery (QD_d)	MBtu	-	0	10000	
Status/Runtime of DG/CHP Generator (SG_d)	hr	-	0	1	0-1, System On/System Off
Ambient Temperature (TAO)	°F	Avg	-20	130	WUG Airport Code: JFK

Notes:

1. This table contains values from *vbc.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*