Dorado – Database Notes

Table 1 Database Notes

Data Collection	Data Logger: Data Collection Interval: Collection Method:	Obvius AcquiSuite A8812 1 – Minute Nightly Obvius Building Manager Online upload to CDH servers.
Site Information	Cogeneration Units: Nameplate Capacity: Heat Recovery Medium: Heat Recovery Uses: Excess Heat:	One (1) Aegen Powerverter 75 Unit 75 kW Hot Water Space Heating Rejected to atmosphere using dump radiator
DG/CHP Generator Electrical Output	Engineering Units: Energy Measurement (net/gross): Measurement Type:	kWh Net generator power Gross power and parasitic loads each measured with Veris H8035 power meter.
DG/CHP Generator Electrical Output Demand	Engineering Units: Measurement Type:	kW Calculated from generator electrical output; max kW / int * # intervals
DG/CHP Generator Fuel Input	Engineering Units: Measurement type:	CF Pulse output from gas meter (10 cf/pulse) – No pulse output yet (4/18/16)
Other Fuel Input	Engineering Units: Heat Measurement Type:	- -
Utility Energy Import	Engineering Units: Measurement Type:	kWh Calculated as sum of the two installed facility import power meters (Veris E50 and E51).
Utility Energy Import Demand	Engineering Units: Measurement Type:	kW Calculated from utility energy import; max kW / int * # intervals

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DG/CHP Useful Heat Recovery	Engineering Units: Measurement Type:	MBtu/hr Calculated using 1-minute flow and temperature measurements from BTU meter.
DG/CHP Rejected Heat Recovery	Engineering Units: Heat Measurement Type:	MBtu/hr Calculated using 1-minute flow and temperature data from combination of BTU meter and CDH installed temperature sensor.
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 NYC.

Table 2 Event Timeline

Date	Event

Dorado – 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	-2	2	
DG/CHP Generator Output Demand (WG_KW_d)	kW	Max	-10	100	*WG_KW_d = WG_d * # Intervals*
DG/CHP Generator Gas Use (FG_d)	Cfh/int	Sum	0	20	
Total Facility Purchased Energy (WT_d)	kWh/int	-	0	10	
Total Facility Purchased Demand (WT_KW_d)	kW	-	0	600	
Other Facility Gas Use (FT_d)	cf/int	-	-	-	
Useful Heat Recovery (QHR_d)	MBtu	-	0	650	
Unused Heat Recovery (QD_d)	MBtu	-	0	650	
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: NYC

Notes:

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

Dorado – Database Notes

Relational Checks

Table 4. Relational Checks

Evaluated Point	Criteria	Result

Notes:

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