

Plaza Residences 250 – 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:	Two (2) Yanmar CP35D1 Cogen Units 35 kW each (70 kW system) Hot water Domestic Hot Water Rejected to atmosphere using dump radiator
DG/CHP Generator Electrical Output	Engineering Units: Energy Measurement (net/gross): Measurement Type:	kWh Net calculated: Gross minus parasitic Calculated using kW measurements from 1x cogen power meters and 1x parasitic power meter
DG/CHP Generator Electrical Output Demand	Engineering Units: Measurement Type:	kW Average power measurement, based on peak 15-minute power
DG/CHP Generator Fuel Input	Engineering Units: Measurement Type:	CF Pulse
DG/CHP Useful Heat Recovery	Engineering Units: Heat Measurement Type:	MBtu (calculated value) Calculated using 15-minute flow and temperature measurements
DG/CHP Unused Heat Recovery	Engineering Units: Heat Measurement Type:	MBtu (calculated value) Calculated using 15-minute flow and temperature measurements
DG/CHP Status/Runtime	Engineering Units:	0 – 1, System ON/System Off

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

Table 2 Event Timeline

Date	Event
May 1, 2017	Data collection begins.
May 1, 2017	Added to NYSERDA website.
August 22, 2017	The parasitic power meter onsite read inaccurately from 7/27/2017 – 8/21/2017. A stipulated parasitic load was used to calculate net generation during this time period. Reference: Plaza Residence 250 – Substituted Parasitic (8/22/2017).pdf
August 23, 2017	Temperature sensor (THW2) onsite read inaccurately from 8/9/2017 – 8/22/2017. Total system heat recovery was set to useful system heat recovery during this time period. Reference: Plaza Residence 250 – Heat Recovery (8/9/2017 – 8/22/2017).pdf

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Range Checks

Table 3. Range Checks

Data Point	Hourly Data Method	Units	Database Lower Range	Database Upper Range	Notes
DG/CHP Generator Output	Sum	kWh/int	-20	80	
DG/CHP Generator Output Demand	Max	kW	-20	80	
DG/CHP Generator Gas Use	Sum	Cfh	0	1000	
Total Facility Purchased Energy	Sum	kWh/int	0	300	
Total Facility Purchased Demand	Max	kW	0	300	
Other Facility Gas Use	Sum	Cfh	-	-	Not installed
Useful Heat Recovery	Sum	MBtu/h	0	500	Calculated Value
Unused Heat Recovery	Sum	MBtu/h	0	500	Calculated Value
Status/Runtime of DG/CHP Generator	On/Off	On/Off	0	1	0 – 1, System On/System Off
Ambient Temperature	Avg	°F	-20	130	WUG Airport Code - RME

Notes:

1. This table contains values from *plaza_250.csv*

Relational Checks

Table 4. Relational Checks

Evaluated Point	Criteria	Result