

## 180 WEST END – DATABASE NOTES

**Table 1 Database Notes**

<b>Data Collection</b>	Data Logger: Data Collection Interval: Collection Method:	Aegis Data Collection Platform 15 – Minute Nightly FTP upload to Frontier Energy (FE) servers
<b>Site Information</b>	DER Unit (make & model): Nameplate Capacity: Heat Recovery Medium: Heat Recovery Uses: Excess Heat:	Two (2) Aegen PowerVerter 100 200 kW Hot Water Domestic Hot Water (DHW) and space heating Rejected by dump radiator
<b>DER Electricity Generated (WG)</b>	Engineering Units: Energy Measurement (net/gross): Measurement Type:	kWh/hour Net Power Calculated using accumulated kWh values for gross and parasitic power measurements from installed Veris H-8035 power meters)
<b>Electric Utility Import (WI)</b>	Engineering Units: Measurement Type:	kWh/hour Calculated using accumulated kWh values from installed Veris E51C2A power meter
<b>DER Fuel Consumed (FG)</b>	Engineering Units: Measurement type:	cfh Calculated using accumulated cf values from Romet RM-2000 gas meter
<b>DER Heat Used (QU)</b>	Engineering Units: Heat Measurement Type:	MBtu/hour Calculated by FE using average 15-min flow and temperature data
<b>DER Heat Rejected (QD)</b>	Engineering Units: Heat Measurement Type:	MBtu/hour Calculated from accumulated BTU values from installed Badger 380 BTU meter

## 180 WEST END – DATABASE NOTES

**Table 2 Event Timeline**

<b>Date</b>	<b>Event</b>
November 11, 2019	FTP server setup for automated data collection.
January 29, 2020	Data files uploaded to FTP server dating back to November 11, 2019.
February 7, 2020	Site and data added to NYSERDA website.
August 10, 2020	Heat recovery loop temperature shift May 26th, 2020, resulting in thermal efficiencies above rated performance. Heat recovery is flagged and is now only visible with the data quality flag off.
April 28, 2021	Heat recovery loop temperature shift back to normal on October 18, 2021. Heat recovery is no longer flagged after 8/18/21 and is now visible with the data quality flag on.

## 180 WEST END – DATABASE NOTES

### *Range Checks*

Table 3 Range Checks

<b>Data Point</b>	<b>Units</b>	<b>Database Lower Range</b>	<b>Database Upper Range</b>	<b>Notes</b>
<b>DER Electricity Generated</b>	kWh/hour	0	250	
<b>Electric Utility Import</b>	kWh/hour	0	250	
<b>DER Fuel Consumed</b>	cfh	0	5,000	
<b>DER Heat Used</b>	MBtu/hour	0	1,600	
<b>DER Heat Rejected</b>	MBtu/hour	0	1,600	
<b>Ambient Temperature</b>	°F	-20	130	NOAA Airport Code - KLGA

## 180 WEST END – DATABASE NOTES

### ***Relational Checks***

**Table 4 Relational Checks**

<b>Evaluated Point(s)</b>	<b>Criteria</b>	<b>Result</b>
Electricity Generated Fuel Consumed	Daily Electric Efficiency < 0% HHV and > 100% HHV	Electricity Generated = invalid Fuel Consumed = invalid Heat Used = invalid Heat Rejected = invalid