

## CENTERS TRIBORO – DATABASE NOTES

**Table 1 Database Notes**

<b>Data Collection</b>	Data Logger: Data Collection Interval: Collection Method:	Aegis Data Collection Platform 15 – Minute Nightly sFTP upload to Frontier Energy (FE) servers
<b>Project Information</b>	DER Unit (make & model): Nameplate Capacity: Heat Recovery Medium: Heat Recovery Uses: Excess Heat:	Four (4) Aegenco PowerVerter 100 Cogen Units 100 kW Hot water Domestic Hot Water (DWH), Space Heating, Chiller Rejected to atmosphere via Heat Dissipation Unit
<b>DER Electricity Generated (WG)</b>	Engineering Units: Energy Measurement (net/gross): Measurement Type:	kWh Net Power Calculated using the kW measurements power meters installed on the four units
<b>DER Fuel Consumed (FG)</b>	Engineering Units: Measurement type:	cfh Calculated using measured gross power output and manufacturer’s fuel input ratings from NYSERDA CHP Acceleration Catalogue.
<b>DER Heat Used (QU)</b>	Engineering Units: Heat Measurement Type:	MBtu/hr MBtu/hr from installed Badger Series 380 BTU Meter

**Table 2 Event Timeline**

Date	Event
2/21/2024	Data Collection Begins
4/10/2024	Added to NYSERDA website
4/10/2024	Gas data stipulated for all time using measured power and manufacturer rating, see Appendix - Gas Calc for details.

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### *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	-20	420	
<b>DER Fuel Consumed</b>	cfh	0	5000	
<b>Hot Water Heat Used</b>	MBtu/hour	0	2600	
<b>Ambient Temperature</b>	°F	-20	130	NOAA Airport Code - KLGA

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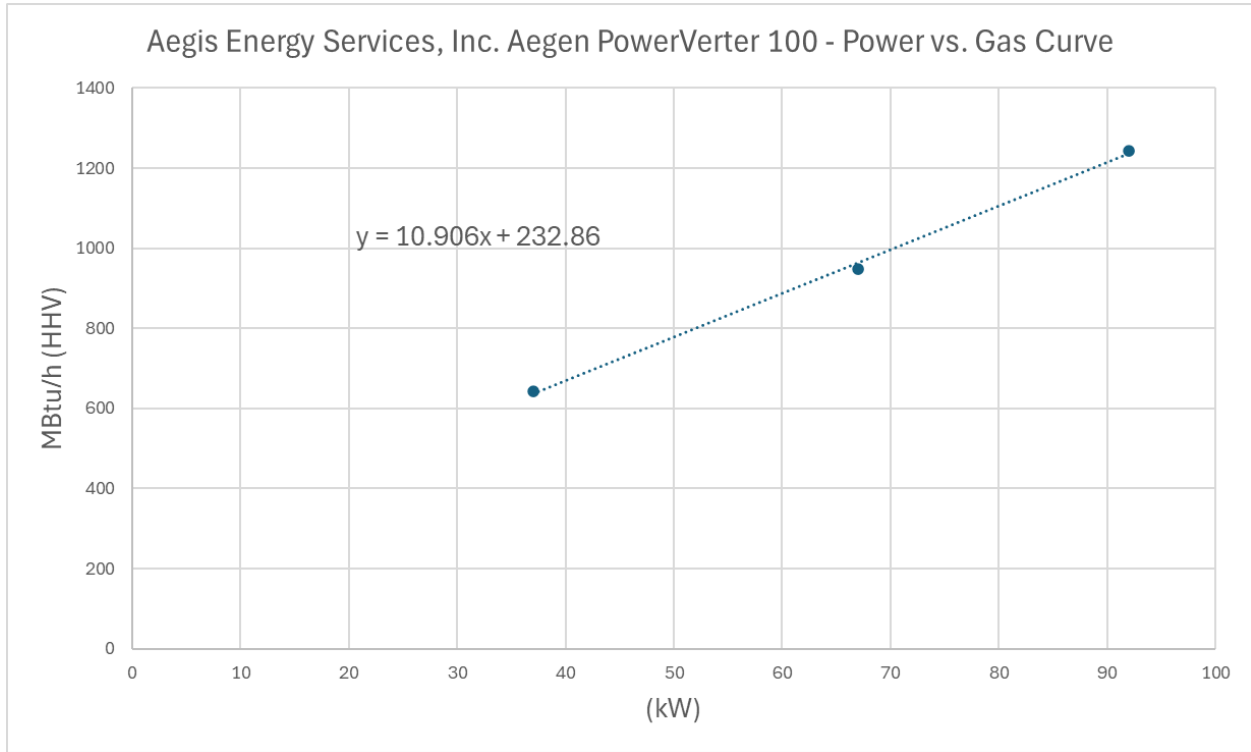
## ***Relational Checks***

**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

## CENTERS TRIBORO – APPENDIX A

Gas data is calculated from power generation by using gas curve developed from the NYSERDA CHP Acceleration performance values for the four (4) Aegis Energy Services, Inc. Aegen PowerVerter 100 units.



Power generation (**WT\_KW**), gas consumption (**FG**):

$$FGx = 10.906(WTx\_KW) + 232.86$$

$$FG = FG1 + FG2 + FG3 + FG4$$