BALLSTON SPA – DATABASE NOTES

Table 1 Database Notes

Data Collection	Data Logger: Data Collection Interval: Collection Method:	Tecogen control system 15 – Minute Emailed nightly to Frontier Energy's data collection email
Project Information (CHP)	DER Unit (make & model): Nameplate Capacity: Heat Recovery Medium: Heat Recovery Uses:	Seven (7) Tecogen INV-125 e+ Unit 125 kW Hot Water Domestic Hot Water (DHW) and Space Heating
DER Electricity Generated (WG)	Engineering Units: Energy Measurement (net/gross): Measurement Type:	kWh Net Power (calculated from combined gross and parasitic measurements) Calculated using kW measurements from Veris E50C2.
Electric Utility Import (WI)	Engineering Units: Measurement Type:	- -
DER Fuel Consumed (FG)	Engineering Units: Measurement type:	CFh Cubic feet per hour
DER Heat Used (QU)	Engineering Units: Heat Measurement Type:	MBtu/hr Calculated using flow and temperature data from Onicon F-1200 System
DER Heat Rejected (QD)	Engineering Units: Heat Measurement Type:	- -

Table 2 Event Timeline

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Date	Event
August 27, 2021	Data collection begins. No gas data.
September 10, 2021	Added to NYSERDA website. Flow has been zeroed out till corrections are made. Heat recovery zeroed out till flow corrections are made.
December 2, 2021	Flow was corrected on 12/2. Flow values have been zeroed for all days prior to 12/2. BTU meter is still providing invalid heat recovery data. Heat recovery is calculated from flow and temperature data.

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Range Checks

Table 3 Range Checks

Data Point	Units	Database Lower Range	Database Upper Range	Notes
DER Electricity Generated	kWh/hour	-5	900	
DER Fuel Consumed	cfh	0	12000	
DER Heat Used	MBtu/hour	0	6000	
Ambient Temperature	°F	-20	130	NOAA Airport Code - KALB

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Relational Checks

Table 4 Relational Checks

Evaluated Point(s)	Criteria	Result
Electricity Generated Fuel Consumed	Fuel Consumed > 0 and Electricity Generated Invalid Electricity Generated > 0 and Fuel Consumed Invalid	Fuel Consumed = invalid Electricity Generated = invalid