### **Table 1 Database Notes**

| Data Collection                              | Data Logger: Data Collection Interval: Collection Method: Timestamp Reference:                     | Obvius Aquisuite (CDH)  1-minute  Nightly Obvius Building Manager Online upload to CDH Servers  Eastern Standard Time   |
|--|--|---|
| Site Information                             | Cogeneration Units: Nameplate Capacity: Heat Recovery Medium: Heat Recovery Uses: Excess Heat Use: | One (1) Aegen TP75-LE Cogen Unit 75 kW Hot water Domestic Hot Water, Boiler Rejected to atmosphere using dump radiator  |
| DG/CHP Generator<br>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 (Veris H8035) and 1x parasitic power calculated from current going to CCP |
| DG/CHP Generator<br>Electrical Output Demand | Engineering Units: Measurement Type:   | kW Average power measurement, based on peak 1-minute power  |
| DG/CHP Generator<br>Fuel Input               | Engineering Units: Measurement Type:   | CF<br>Pulse   |
| DG/CHP Useful Heat<br>Recovery               | Engineering Units: Heat Measurement Type:  | MBtu (calculated value) Calculated using 1-minute flow and temperature measurements   |
| DG/CHP Unused Heat<br>Recovery               | Engineering Units: Heat Measurement Type:  | MBtu Calculated using 1-minute flow and temperature measurements  |
| DG/CHP Status/Runtime                        | Engineering Units:   | 0 – 1, System ON/System Off   |

# Oneida County Corrections Facility – Database Notes

| Facility Purchased Energy    | Engineering Units: | Not collected |
|------------------------------|--------------------|---------------|
| Facility Purchased<br>Demand | Engineering Units: | Not collected |
| Other Facility Gas Use       | Engineering Units: | Not collected |

Note: See addendum for further details

### **Table 2 Event Timeline**

| Date              | Event   |
|-------------------|---|
| February 23, 2016 | Logging begins.   |
| February 23, 2016 | CDH on site to verify flow and temperature sensor measurements. Collect instantaneous DG/CHP measurements for meter verification. Installed strap on temperature sensor and terminate gas meter wiring. |
|                   |   |
|                   |   |
|                   |   |

## Range Checks

Table 3. Range Checks

| Data Point                         | Hourly<br>Data | Units    | Database<br>Lower | Database<br>Upper | Notes                                      |
|------------------------------------|----------------|----------|-------------------|-------------------|--|
|                                    | Method         |          | Range             | Range             |  |
| DG/CHP Generator Output            | Sum            | kWh/int  | -1                | 2                 | Database range account for parasitic loads |
| DG/CHP Generator Output Demand     | Max            | kW       | -10               | 100               |  |
| DG/CHP Generator Gas Use           | Sum            | cf/int   | 0                 | 20                |  |
| Total Facility Purchased Energy    | Sum            | kWh/int  | -                 | -                 | Not installed                              |
| Total Facility Purchased Demand    | Max            | kW       | -                 | -                 | Not installed                              |
| Other Facility Gas Use             | Sum            | cf/int   | -                 | -                 | Not installed                              |
| Useful Heat Recovery               | Sum            | MBtu/int | 0                 | 800               | Calculated Value                           |
| Unused Heat Recovery               | Sum            | MBtu/int | 0                 | 800               | 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:

 $1. \quad \text{This table contains values from } \textit{oneida\_cc.csv}$ 

### Relational Checks

**Table 4. Relational Checks** 

| Evaluated Point | Criteria | Result |
|-----------------|----------|--------|
|                 |          |        |
|                 |          |        |