

# Burgess BioPower, NH

## Facility Information

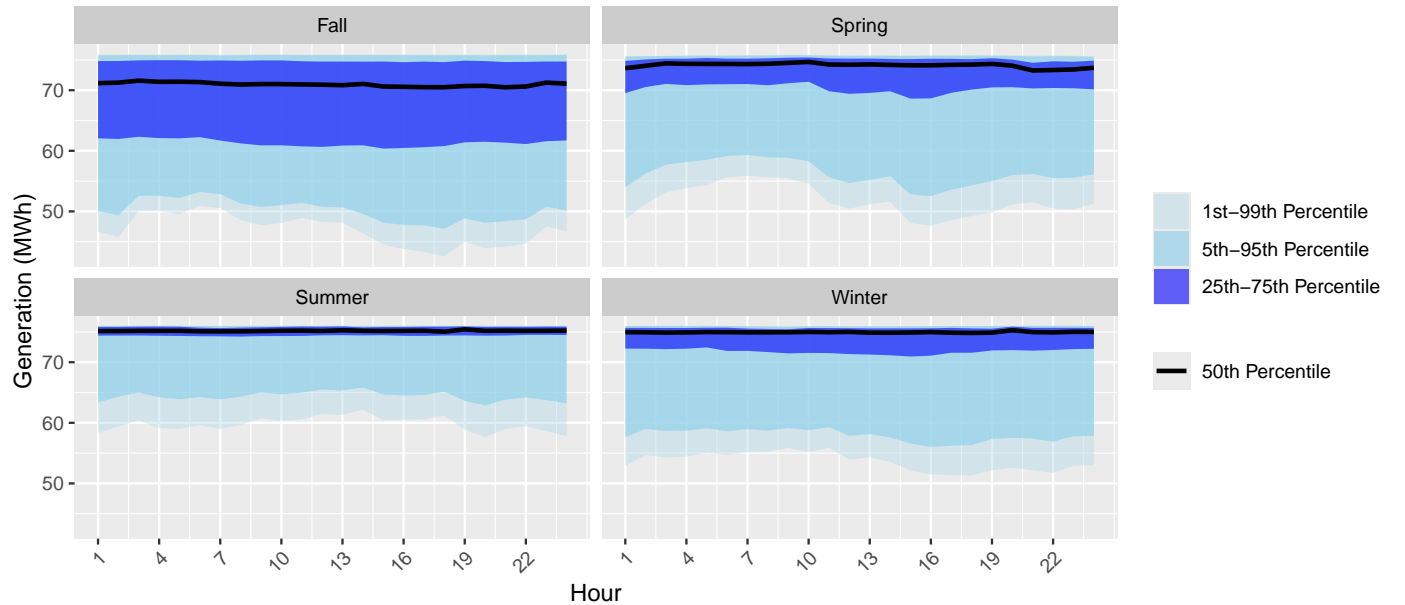
Facility ID: **58054**  
Unit ID: **ST01**  
State: **New Hampshire**  
County: **Coos County**  
Operating Status: **Operating**  
Primary fuel type: **Wood**  
Associated generators - nameplate capacity (MW): **ST01 (75)**  
Historical hourly generation (MWh): **71 [0-77]**  
Historical data availability: **High**

**Table 1:** Simulated probabilistic estimation of annual generation and emissions for Burgess BioPower power plant, NH (Unit ID: ST01).

| Metric                                    | P01     | P05     | P10     | P25     | P50     | P75     | P90      | P95      | P99      |
|-------------------------------------------|---------|---------|---------|---------|---------|---------|----------|----------|----------|
| Electricity generation (GWh)              | 465.74  | 502.26  | 547.90  | 610.01  | 648.30  | 661.83  | 665.70   | 666.27   | 666.72   |
| CO <sub>2</sub> emissions (thousand tons) | 586.56  | 647.17  | 726.17  | 855.18  | 955.81  | 1021.41 | 1035.80  | 1178.63  | 1292.95  |
| NO <sub>x</sub> emissions (thousand lbs)  | 334.33  | 371.88  | 421.42  | 494.78  | 554.99  | 600.62  | 662.68   | 867.22   | 1030.93  |
| SO <sub>2</sub> emissions (thousand lbs)  | 23.64   | 26.06   | 29.21   | 34.23   | 38.46   | 41.60   | 48.66    | 72.90    | 92.31    |
| Heat input (thousand mmBtu)               | 6593.07 | 6999.28 | 7507.05 | 8228.80 | 8937.43 | 9452.83 | 10280.48 | 11218.49 | 11968.90 |

**Table 2:** Simulated probabilistic estimation of annual emission ratios for Burgess BioPower power plant, NH (Unit ID: ST01) compared to simulated probabilistic estimation of annual emissions in the state.

| Metric                        | P01   | P05   | P10   | P25   | P50   | P75   | P90   | P95   | P99   |
|-------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| CO <sub>2</sub> emissions (%) | 10.66 | 11.18 | 11.78 | 12.12 | 11.76 | 11.33 | 10.72 | 11.61 | 12.24 |
| NO <sub>x</sub> emissions (%) | 5.24  | 5.58  | 5.99  | 6.07  | 5.65  | 5.03  | 4.49  | 5.30  | 5.82  |
| SO <sub>2</sub> emissions (%) | 0.46  | 0.48  | 0.51  | 0.50  | 0.45  | 0.43  | 0.46  | 0.66  | 0.81  |



**Figure 1:** Simulated probabilistic hourly electricity generation distribution across seasons, showing mean percentile ranges per hour for this facility unit.

Note: The emissions and generation tables and plot only include hours where EPA CAMD data was available for simulation; hours with missing data are excluded from calculations and plotting.