

Wind Colebrook South

First Year Operating Report

January 1, 2016 to December 31, 2016

Summary

Wind Colebrook South completed its first full year of operations at the end of 2016. Wind turbine availability averaged 95%. Wind speeds at hub height ranged from zero to more than fifty miles per hour and averaged 15.44 miles per hour over the course of the year. The wind project had a capacity factor of 29.1% and produced 12,741,050 kWh in 2016, which is enough electricity to power 1,453 homes on an annual basis more than double the amount of households in the entire Town of Colebrook.

Number of Hours of Operations

Availability Turbine 1: 95.86%

Availability Turbine 2: 94.31%

Average Availability: 95.09%

Number of Hours of Operations: 8,330 out of 8,760

Factors that Affected Availability: Utility Grid Repairs and Turbine Repairs

Wind Speeds at Hub Height

Wind Speeds Range: 0 to 22.5 meters per second or 0 to 50.33 miles per hour

Average Annual Wind Speed: 6.9 meters per second or 15.44 miles per hour

Renewable Electricity Production

Electricity Generated: 12,741,917 kWh

Renewable Energy Credits Produced: 12,741

Capacity Factor: 29.1%

Average Annual Connecticut Household Electricity Consumption (EIA 2015): 8,772 kWh

Number of Household Units in Colebrook (2010 Census): 722

Number of Households Served by Wind Colebrook South: 1,453