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Data Update for Marion: Great Hill Dairy
August, 2009

Prepared for
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Monthly Data Summary for August, 2009

Site Description

This update summarizes the monthly data results for the Great Hill Dairy monitoring site in Marion, MA, at 41° 42' 33.95" N, 70° 43' 20.96" W. More information on the sensors and site can be found at http://www.ceere.org/rerl/rerl_resourcedata.html.

Tower and Sensors

The 50 meter meteorological tower is instrumented at heights of 38 and 50 meters above ground level. Two cup anemometers and a wind direction vane are located at each height.

Data Summary Statistics

Height	Wind Speed			Prevailing Wind Direction
	Mean [m/s]	Max [m/s]	Mean Turbulence Intensity at 10 m/s	
50 m	5.12	11.27	0.15	SSW
38 m	4.64	10.37	0.19	SSW

The data can be found at the Renewable Energy Research Laboratory web site: http://www.ceere.org/rerl/rerl_resourcedata.html.

Data Recovery

All raw wind data are subjected to a series of tests and filters to identify data that are faulty or corrupted. The gross percentage of data recovered (ratio of the number of raw data points received to data points expected) and net data recovered (ratio of raw data points which passed all QA control tests to data points expected) are shown below.

Gross Data Recovered [%]	100
Net Data Recovered [%]	99.664

Information on the tests and filters used can be found at the Renewable Energy Research Laboratory web site: http://www.ceere.org/rerl/rerl_resourcedata.html.

Maintenance Issues and Changes to Site Configuration

There were no maintenance issues or changes to site configuration during the reporting period.

Monthly Data Time Series

Below is a graph of wind speeds observed at the site for the month of August 2009.