



# An Introduction to NRG Systems

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*Laura Goodfellow – US Sales account manager*

*Evan Osler – US Sales account manager*



# NRG Systems – Company Facts

- Located in Hinesburg, VT. USA
  - Manufacturing, Engineering, R&D, Sales, and Operations.
- 26 Years of servicing the wind power industry!
- 96 Employees.
- 46,000 sq-ft “Green” manufacturing facility.
- Products include: towers, sensors, loggers, turbine control sensors, software.



# NRG Systems Manufacturing Facility

- LEED Gold certified.

- One of only four industrial facilities in the world to receive this designation.
- 90% of building's energy is from renewable sources.
- Wind and solar used for electricity generation.





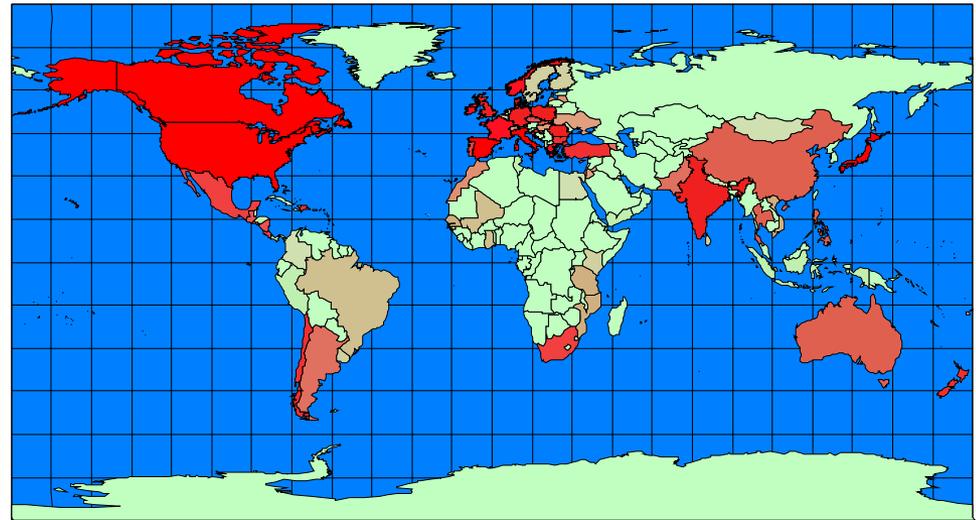
# NRG Systems Manufacturing Facility





# NRG Product Distribution

- Shipping to over 120 countries
- Experienced logistics team
- Two sailings/week out of Port of Montreal
- Free surface freight to major ports around the globe



**NRG... since 1982!**





# NRG TallTowers

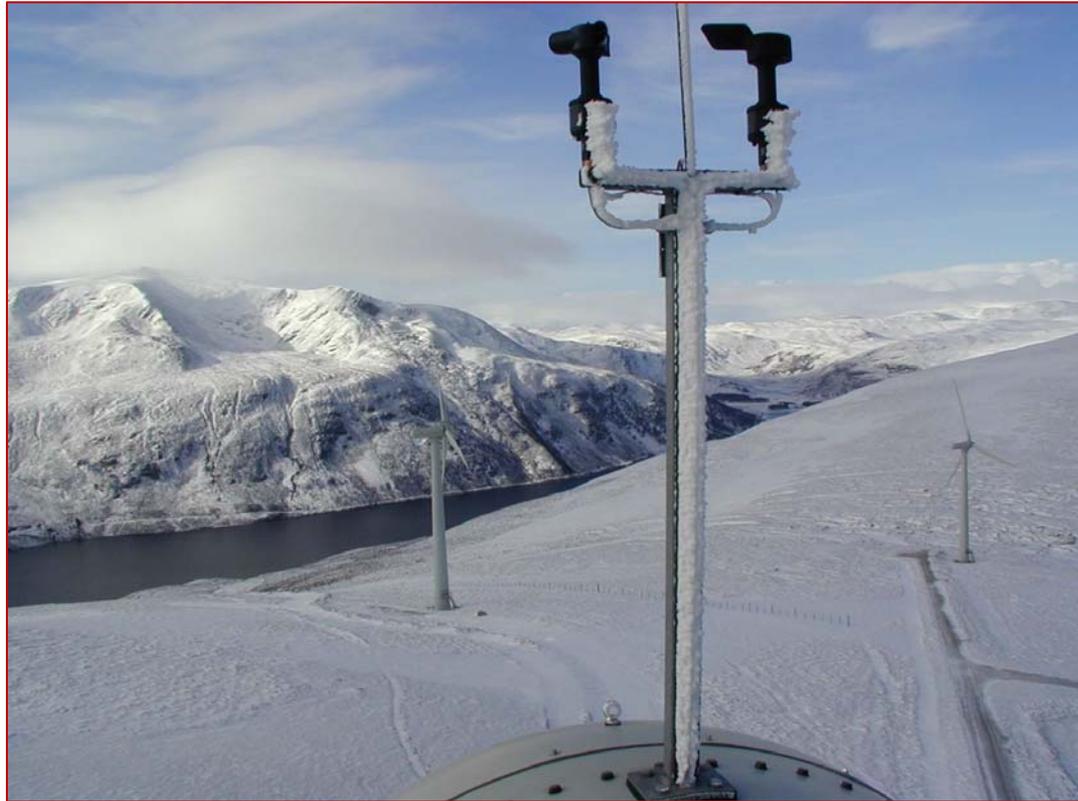
- Complete 50m and 60m XHD NOW Systems





# Wind Turbine Control: Heated Sensors

- IceFree and Hybrid Turbine Control Sensors





# Hybrid Turbine Control Sensor

- Testing on top of Mount Mansfield.





# NRG Planning Goals

## • Prepare for Rapid Industry Growth

- Physical plant
- Human Resources
- Lean and sustainable approach

## • Set Higher Standard of Precise, Reliable Meteorological Data



## Preparing for Rapid Industry Growth

- Expanding facility - +31,000 sq-ft online by May, 2008; total ~77,000 sq-ft





# Preparing for Rapid Industry Growth

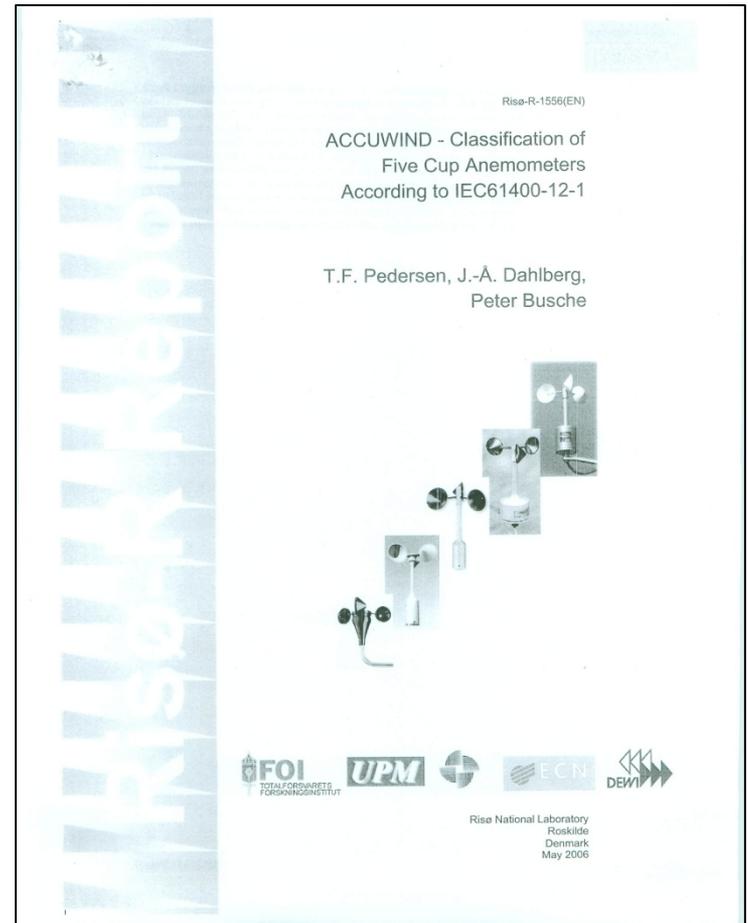
Lean approach ....

- Complete review of product plan
  - Focus on NRG wind industry niche
  - Standardize approach to wind measurement
  - Minimize packaging
  - Maximize efficiencies

# Setting Higher Measurement Standards

• Industry demand for higher quality resource data

- Project uncertainty/risk
- Lack of wind assessment standard
- Misapplication of power performance standards (IEC61400-12-1) to met study





## NRG... Setting Higher Standards

- August, 2007 - offering only NRG #40C calibrated anemometers





## Summary

- We are preparing for rapid industry growth
- We are addressing challenges with investments in:
  - Plant capacity
  - Human resources
  - Lean and sustainable measurement solutions



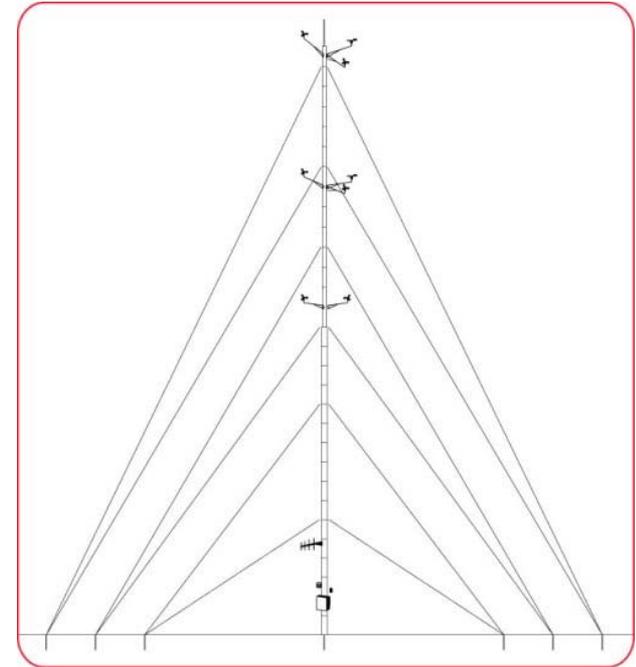
## Recent Products and Updates

- Extra Heavy Duty (XHD) TallTowers
- New Side Mount Boom – 95” in length
- Calibration Report Retriever – online!
- Improved wind vane channels
- Website overhaul – [www.nrgsystems.com](http://www.nrgsystems.com)



# Extra Heavy Duty (XHD) TallTowers

- The beginning of a new tilt-up tower era
- Increased diameter and strength
- Improved anchoring and footprint options
- Convertible between 50m and 60m





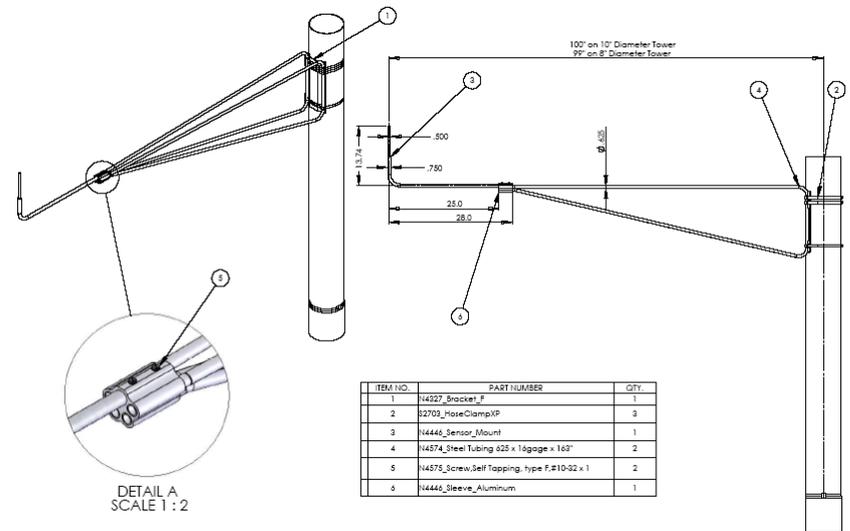
# Side Mount Boom Specifications

100" centerline to centerline on 10" diameter (10 D)

99" centerline to centerline on 8" diameter (12.38 D)

15" vertical offset at cup centerline (20 D)

*Currently released*





# Calibration Report Retriever

NRG #40C Calibration Report Retriever - Mozilla Firefox

File Edit View History Bookmarks Tools Help

## NRG #40C Calibration Report Retriever

**Step 1 : Build your report batch**

Retrieve the following list of calibration reports (please separate serial numbers with a comma or semicolon; do not include leading 0's):

serial number(s)

-OR-

Retrieve the following range of calibration reports (do not include leading 0's):

from serial number  to serial number

**Step 2 : Download your report batch**

Once you are satisfied with your batch, **enter a valid e-mail address in the field below** and click {Download batch}. Reports are in Adobe PDF format and will be returned as a ZIPfile.

e-mail address

**Reports Found (limited to 15):** \_\_\_\_\_

**Reports Not Found :** \_\_\_\_\_

**Identifying Serial Numbers**

NRG #40C -  + 1795-00032522

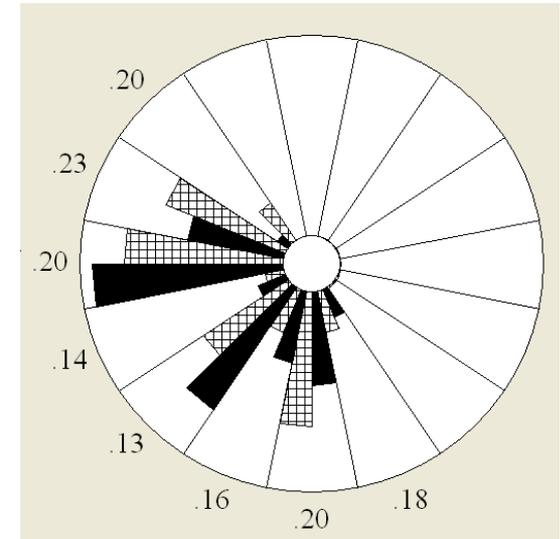
The above graphic depicts the label found on your new #40C. Note: enter only the rightmost digits as shown in the example (32522). Older 40C anemometers may have the serial number etched into the sensor body.

Done



## Improved wind vane channels

- Dead band compensation
- Symphonie Loggers shipping with this improvement – beginning October 2007
- Older data can be re-imported to SDR v. 51001 or higher for compensation





[www.nrgsystems.com](http://www.nrgsystems.com)  
802-482-2255

