

Acoustic Study of Vestas V82 Wind Turbines Fairhaven, Massachusetts

Supplemental Information – Audibility

May 11, 2007

From: Peter Guldberg [mailto:pguldberg@techenv.com]
Sent: Friday, May 11, 2007 9:25 AM
To: Nils Bolgen
Subject: Wind rose and audibility

Nils-

Since you may get asked how often residents near the site might be able to hear the wind turbines outdoors, I created a wind rose from 5 years of New Bedford Airport data (attached) and analyzed the frequency of winds that would provide either a wind shadow effect or would be too weak to support project operation.

For the residents of Little Bay Road, they would definitely not be able to hear the project 50% of the time. The remaining 50% of the time audibility is possible if the background sound levels were low and weather conditions were right. Actual audibility frequency will be less than the maximum possible of 50% because weather conditions will not always be ideal for maximum sound propagation, background levels will not always be low and people will not always be home and outdoors.

For the residents of Pierces Point Road, they would definitely not be able to hear the project 40% of the time. The remaining 60% of the time audibility is possible if the background sound levels were low and weather conditions were right. Actual audibility frequency will be less than the maximum possible of 60% because weather conditions will not always be ideal for maximum sound propagation, background levels will not always be low and people will not always be home and outdoors.

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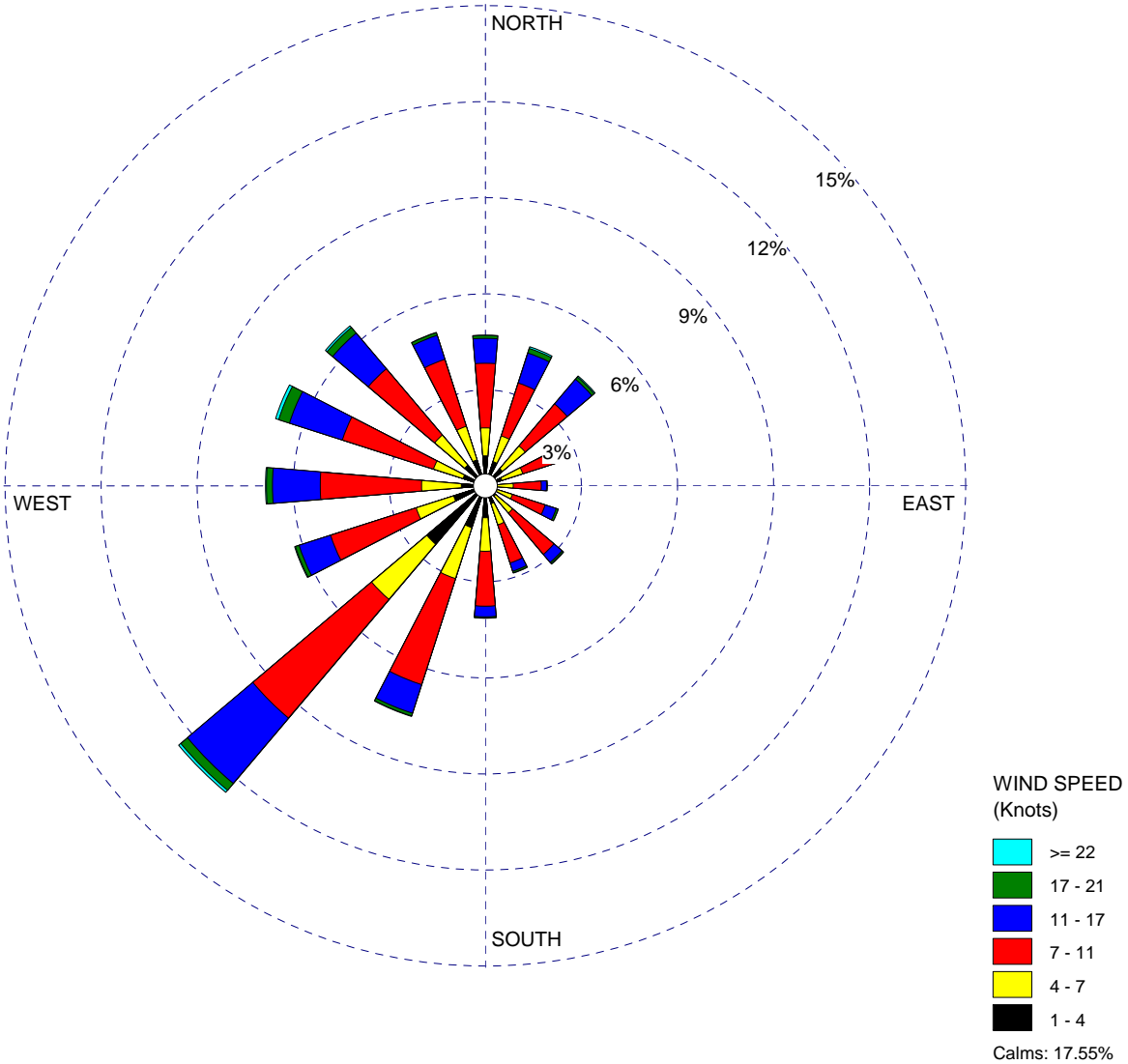
<<Wind Rose.pdf>>

WIND ROSE PLOT:

Station #94726 - New Bedford Regional Airport, MA

DISPLAY:

**Wind Speed
Direction (blowing from)**



COMMENTS:

1998 - 2002

DATA PERIOD:

**1998 1999 2000 2001 2002
Jan 1 - Dec 31
00:00 - 23:00**

COMPANY NAME:

Tech Environmental, Inc.

CALM WINDS:

17.55%

AVG. WIND SPEED:

6.97 Knots

DATE:

5/11/2007

PROJECT NO.: