

“The Bloomberg of Wind”

Information On Wind
Is More Valuable
Than Wind Power



WINDPOLE

Steve Kropper
WindPole Ventures, LLC
Lexington, MA
617-306-9312
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The “*Bloomberg of Wind*”

PROBLEM 300 MW wind needs backup. Storage far off.

SOLUTION Good data/forecast (like other energy markets)

PRODUCT Real time, hub height, national, subscription data

CUSTOMER Invenergy #5 in US. 6 states. Prepay 3 years

PORTFOLIO 6,000 towers 580 will cover 85% US

Picks & shovels- Bloomberg of Wind

Broad Endorsements



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
 Office of Oceanic and Atmospheric Research
 Earth System Research Laboratory
 325 Broadway - David Skaggs Research Center
 Boulder, Colorado 80305-3337

Steve Kropper, CEO & Co-Founder
 WindPole Ventures, LLC
 48 Pleasant Street,
 Lexington, MA, USA

To whom it may concern:

This letter is provided in support of the assistance to develop a national, hub-height wind resource monitoring network. This data at the approximate hub-height of 80 meters will be used to provide the nation with enhanced if data collected is available to NOAA. The development of wind data users beyond NOAA is a key goal of the wind resource analyst.

NOAA's mission is to provide the nation with weather forecasts for the protection of life and property. NOAA's mission is to provide the nation with weather forecasts for the protection of life and property. NOAA's mission is to provide the nation with weather forecasts for the protection of life and property.

Because more than 60% of the nation's wind power is generated in the western United States, it is critical to have accurate data on wind resources in this region. WindPole's proposal to instrument 500 towers to accelerate wind power development by providing data to the nation's wind resource analyst.

Sincerely,

 John P. Schneider
 ESRL, Deputy Director



NREL
 National Renewable Energy Laboratory
 Innovative for Our Energy Future

March 4, 2009

Steve Kropper
 CEO & Co-Founder
 WindPole Ventures, LLC
 48 Pleasant Street
 Lexington, MA, USA 02421

RE: 20% Wind by 2030
 Funding Opportunity
 Topic Area 1: Support
 Real-Time, National

Dear Mr. Kropper:

I am writing to confirm our support for your National, Hub Height Wind 1: Supporting Wind Turbine Based on preliminary design Field Work Proposal and performance period. Of course, we are pleased to see your successful award and with

NREL looks forward to working with you in this area of research.

Sincerely Yours,

Michael C. Robinson
 Acting Center Director
 NREL's National Wind Technology Center

cc: Sandy Butterfield, NREL
 OMS #10597

1617 Cole Blvd. • Golden, CO 80401
 Office of Energy Efficiency & Renewable Energy



COMMONWEALTH OF MASSACHUSETTS
 EXECUTIVE OFFICE OF
 ENERGY AND ENVIRONMENTAL AFFAIRS
DEPARTMENT OF ENERGY RESOURCES
 100 CAMBRIDGE ST., SUITE 1020
 BOSTON, MA 02142



Deval L. Patrick
 Governor

Timothy F. Murray
 Lieutenant Governor

Ian A. Bowles
 Secretary, Executive Office of Energy and Environmental Affairs

Philip Glozier
 Commissioner

Patrick Liles, Grants and Agreements
 Department of Energy Resources
 1617 Cole Blvd.
 Golden, CO 80401-3305

Re: Letter of Support for WindPole
 PS36-09G099009, Entitled "20% Wind by 2030"

On behalf of the Department of Energy Resources, we are pleased to provide support for WindPole Ventures' proposed high wind speed and direction monitoring network.

WindPole Ventures' proposed power development stakeholder power developers/operators, wind resource analysis firms, and power traders.

Massachusetts is committed to promoting job growth through greater access to information services provider, 3TIER's advanced forecasting skill - which will be integrated into the grid.

WindPole is uniquely positioned to provide the only existing portfolio of tall tower data at the hub height of today's commercial wind power directly bolster the Commonwealth's wind power development.

SENATOR
 EDWARD J. MARKEY

United States Senate
 WASHINGTON, DC 20540-4078

July 10, 2009

Honorable Steven Chu
 Secretary
 Department of Energy
 1000 Independence Avenue, SW
 Washington, DC 20585

RE: WindPole Ventures
 Tall Tower Wind Data

Dear Secretary Chu:

COMMITTEE
 ENERGY AND COMMERCE
 SUBCOMMITTEE ON
 ENERGY AND ENVIRONMENT
 CHAIRMAN
 SELECT COMMITTEE ON
 ENERGY INDEPENDENCE AND
 GLOBAL WARMING
 CHAIRMAN
 NATURAL RESOURCES

EDWARD J. MARKEY
 7TH DISTRICT, MASSACHUSETTS

Congress of the United States
 House of Representatives
 Washington, DC 20515-2107
 September 30, 2009

The Honorable Steven Chu
 Secretary
 Department of Energy
 1000 Independence
 Washington, DC

SECONDWIND

Second Wind Inc. 366 Summer Street, Somerville, MA
 www.secondwind.com

To whom it may concern:

This letter is to support the application for grant assistance to build out a real-time, national, hub-height wind resource monitoring network.



Steve Kropper, CEO & Co-Founder
 WindPole Ventures, LLC
 48 Pleasant Street
 Lexington, MA 02421

Greetings:

This letter is provided in support of the assistance to develop a national, wind resource monitoring network. This data at the approximate hub-height of 80 meters will be used to provide the nation with enhanced if data collected is available to NOAA. The development of wind data users beyond NOAA is a key goal of the wind resource analyst.

It is our understanding that WindPole Ventures' proposed power development stakeholder power developers/operators, wind resource analysis firms, and power traders.

The work proposed by WindPole Ventures will promote job growth through greater access to information services provider, 3TIER's advanced forecasting skill - which will be integrated into the grid.

Sincerely,



WindLogics Inc.
 1021 Bandana Blvd. East
 Suite 111
 St. Paul, MN 55108 USA

May 27, 2009

Steven Chu, PhD, Secretary
 Department of Energy
 1000 Independence Ave., SW
 Washington, DC 20585

Dear Secretary Chu:

This letter is to support the application of WindPole Ventures (WPV) for grant assistance to build out a real-time, national, hub-height wind resource monitoring network. We have been briefed on the plans for the monitoring network and, based on our extensive experience with wind analysis and wind forecasting, we believe that better hub-height data will accelerate development of the wind power industry.

WPV proposes to instrument 500 towers at a height of 80 meters that will provide raw data feeds to six stakeholders in the wind power development process: ISO (grid operators), Federal and State agencies, research labs, wind power developers and operators, power traders, and wind meteorology firms such as WindLogics.

Bad Data Slows Wind

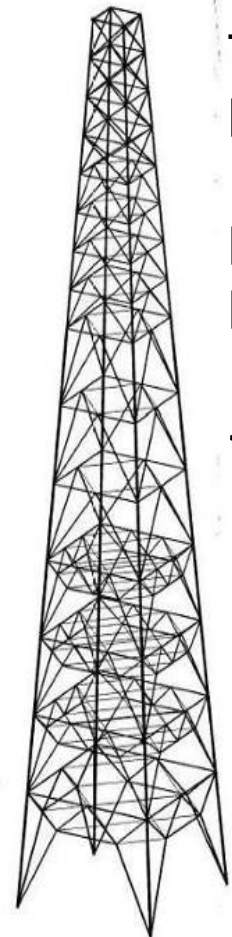
300 MW wind needs backup: ready, idle, expensive
No grid level storage now, nor next year...
Better forecasts the only solution to intermittency

Today: 10m airport tower in valley
Power rise at speed³. Speed rises at 7th root height
>50% power above 80m

Extrapolate & guesstimate magnify errors = Investor pain
Experts: *"Need tall towers, repurposed data inadequate"*

<2% penetration, *nice to have*. Critical above 3% in 10 states

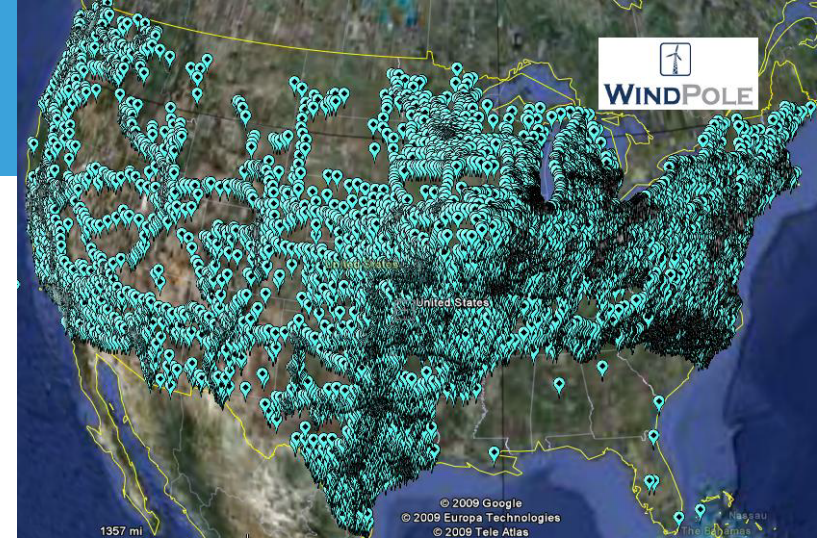
"If could see wind, analysts driven out of business"



'Bloomberg of Wind'

Recurring revenue data biz.
Real-time, hub-height, IEC std.
Simple 6 anemometers, vanes
Sell the same data repeatedly

WindPole: great data + thin model = superior forecast



Leveraging access to 6,000 towers (ATT & TV)

- ✓ Sole national tall tower portfolio
- ✓ Just 580 *very* tall towers cover 85% all wind
- ✓ 22 year license
- ✓ Ownership/control over data
- ✓ \$15k capex per tower (new tower cost \$65k+)

Competitors? Govt., local towers. Others endorse us

Why will they buy?

Customer insight from 80 deep interviews.



Developer – investors demand adjacent and confirming data.

- WindPole has 6,000 towers – everywhere you need.
- Cost savings, 90 day launch are motivation.
- \$10k/yr subscription vs \$65k one time DIY.
- Historic data accelerates development.



Invenergy

ISO/RTO - Supply side intermittency is new *and* hostile.

- Windward tower gives hour warning (Invenergy)
- Real time data cuts backup, eases generation schedule
- Market hungry for real time operational forecasts/raw data.
- Need predictive accuracy. On site data too late



Trader - *Market must clear every second.* Meet collar commitments. Trade ahead.



Subscription Data Model

Single Tower unit analysis

\$25k revenue

-\$11k lease, maintenance, comms.

= \$14k ~60% margin.

capex \$15k per tower (\$8k hardware + \$7k labor)

Annual revenue

\$20m from 580 towers 2.5 clients/tower in 3-4 years

Non-dilutive financing from customer prepay

\$80m potential upside: proprietary data drives forecasts

Closing Headlines

Other fuels have thriving data biz. Wind is next.

Tower assets in hand. No construction. No tech risk.

Big economic advantage \$15k vs \$65k.

Invenergy, #5 in wind asset. 6 states prepaid 3 years

\$500k equity unlocks \$500k from CEC = \$1m working capital

Subscription data Capital efficient 60% margin

UPSIDE – drive forecasts with our proprietary data set

Picks & shovels- Bloomberg of Wind

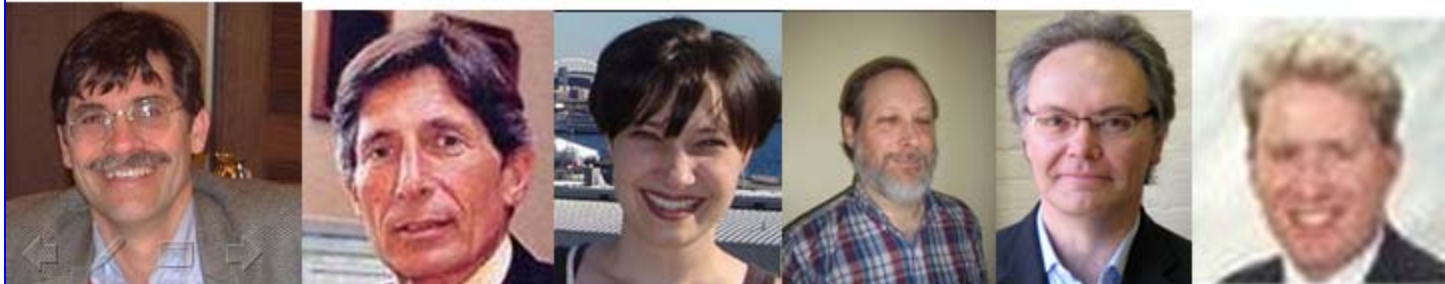
WindPole - Bloomberg of Wind



WINDPOLE
A NEW GENERATION OF POWER

TEAM:

Power finance & regs, on-line data, ex-CERA
COO, Sw development, Domania founder.



Steve Kropper
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617-306-9312
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