Vertical Power Systems LLC announces a service to estimate the wind potential at a prospective wind turbine location. It works like this:

- 1. Client selects a potential wind turbine site, and orders our service.
- 2. We deliver a package which contains a **VPS-Recorder** unit, and a **VPS-Receiver**.
- 3. Client buys 2 standard 1 3/8" x 11.5' chain link fence poles, slides them together, and slides on our recorder unit, securing it with a set screw. Poles are available at Home Depot, or anywhere chain link fence materials are sold.
- 4. The pole is placed in a hole near the site, and concrete is poured to secure it.
- 5. Sometime later (an hour, a month, a year) the client brings a laptop within 100m of the site, puts the **VPS-Receiver** into a USB port, and the data is downloaded.
- 6. This data is uploaded to **VPS** over the Internet and **VPS** delivers the report.

What is this **VPS-Recorder?** It is first a scientificly calibrated cup anemometer. Next, it is a self-contained computer system which measures instantaneous wind speed and temperature, and records this information every few seconds. It is a radio transmitter and receiver which communicates these records to a receiver when requested. It also maintains power indefinitely with an internal lithium-ion battery bank, and solar-charging system. It is capable of storing years of wind data without intervention.

What is this **VPS-Receiver?** It is a small radio device which attaches to a laptop computer via USB. It automatically initiates communication with the **VPS-Recorder** unit when it is within 100m of it, and provides for the transfer of the data files.

What is the **VPS-Report?** This is a thorough analysis and <u>synthesis</u> of the wind data which was recorded. It translates all of the wind data numbers into something that is human-readable, valuable, and meaningful. It answers the fundamental question "If I put a wind turbine at this site, what performance should I expect?" It compensates for air density changes brought on by altitude and temperature variations. It predicts performance differences for various tower heights. It extrapolates for seasonal changes. **See the Sample Report** included with this announcement.

The pole can be replanted, to get another site's potential, or can be returned for credit.

Cost:

Equipment rental + report \$650.

Anemometer

Computer w/storage Solar charging system Communication radio

Base radio

1st Month Report

Additional month equipment + report \$50.

Return of equipment -\$200.