



Wind Power - Project Management, System Selection, Design and Installation

Soup-to-Nuts Project Support

PROFESSIONAL RELIABLE EXPERIENCED

Seventh Generation Systems Integration is a renewable energy engineering firm that partners with you to design and build integrated energy systems that work in concert with your aspirations, community, environment, and financial priorities.

With a decade of boots-on-the-ground experience in renewable and energy efficiency technologies, the staff at Seventh Generation tailors your solution to fit the needs of your project.



Our expertise across multiple disciplines ensures that your goals are realized in the most reliable and economical means.

WIND POWER PROJECTS

Our team of experienced professionals will guide your project from soup to nuts, from the first course to the last. We oversee each stage, from system selection and design, through commissioning and maintenance, ensuring the smoothest process possible.

Wind power has its own set of complexities that our staff is uniquely qualified to navigate. We are skilled in resource assessment with years of practice with clients from across the spectrum, from homes, farms and schools to communities, tribes and wind farm developers. Our combination of skills and expertise spans the range that you will need for a successful project with years of reliable energy production. Contact our

knowledgeable staff regarding any of the services we provide to serve Small and Community Wind :

- Wind resource monitoring and analysis
- Site assessment and selection
- Financial analysis, incentives, tariffs and grant-writing
- Project permitting and zoning support
- Utility-interconnection and transmission access
- System selection and equipment procurement
- Engineering and electrical design
- Installation, commissioning and maintenance

Seventh Generation maintains on-going relationships with manufacturers, wind power advocates, utility representatives, and financing agents, to support the growth of Small and Community Wind power.

CUSTOMER DRIVEN INNOVATION

Our commitment to excellence has fostered a diverse group of customers across the U.S. including schools, colleges, home-owners, farmers, wind developers, Native American Tribes, community groups and electric utilities.

Community power is locally-owned on-site generation. We believe this is the key to tomorrow's integrated energy future. Our qualifications cover the customers'



Seventh Wind Performance Calculator

www.seventhwindsoftware.com

The Seventh Wind calculator is a reliable and accurate means of predicting energy production at a specific site for small and mid-sized wind turbines, based on wind speed at hub height. Our software is a standard in the small wind industry for calculating turbine performance.

Whether you are a site assessor or a prospective turbine owner, an investment in The Seventh Wind calculator will be worth the price, providing a tool to determine an optimum turbine model for the scope of your project.

- More than 50 3rd party certified wind turbine production curves
- Clear and easy interface for comparing and contrasting systems
- Frequent updates of systems and production curves
- Multi-user licenses for site assessor certification programs

SeventhWind - Mary Dale*

File Help

Project settings

Name: Annual energy use (kWh): Client:

Mary's Hill Add Site Remove Site

Site description | **Site performance factors**

Site name: Average wind speed: mph | Alt height: feet

Location: Site elevation: feet | Wind shear exponent:

Latitude (DD): Webull K factor: Turbulence intensity:

Longitude (DD):

Turbine selection and performance

Grid | Graph | Default tower height (ft): | Export Results...

	ARE442	Endurance G-3120 1ph	Gaia	Jac 311
► Tower height (ft)	110	110	110	110
Manufacturer	Abunda...	Endurance Win...	Gaia-Wind	Win
Model	442	G-3120	11kW	312
Manufacturer's rated output (kW)	10	35	11	20
Rated output at 11m/s (kW)	10	35	14	17
Output voltage	48, 240	240	415	240
Phase	1	1	3	1
Rotor diameter (ft)	23.6	63	42.7	31
Total structure height AGL (ft)	121.8	141.5	131.3	125
Wind speed at hub height (mph)	12.402	12.402	12.402	12.4
Annual energy output (kWh)	20115	93215	32434	242
Monthly energy output (kWh)	1676	7768	2703	201
Proportion of project energy use	402.29 %	1,864.29 %	648.69 %	484
Excess energy production (kWh/yr)	15115	88215	27434	192
Capacity factor at rated output	22.96 %	30.40 %	33.66 %	13.1
Capacity factor at 11m/s output	24.11 %	31.11 %	28.66 %	20.1

needs including thorough feasibility studies, site specific wind resource assessment and rigorous financial analysis for larger projects to power businesses, tribes, and communities.

SYSTEM SIZES AND STANDARDS

Seventh Generation is a national leader, trail-blazing small wind system design and installation. One of the first companies to take on this challenge, we have installed more than 1000 kW of small wind capacity throughout Wisconsin and maintain a fleet of nearly 30 small wind systems.



Seventh Generation specializes in systems from 10kW to 1000kW. We work with reputable manufacturers and are always researching new systems and technologies as we work to meet the needs of customers across the Midwest. SGSI installs equipment with third-party certified production data and proven reliability in the field, because the strength of your project is only as strong as the manufacturer standing behind the equipment.

AN ESSENTIAL PART OF YOUR ENERGY SOLUTION

Small and Community Wind power is set to be an integral part of tomorrow's energy future. Seventh Generation is at the leading edge of this technology, partnering with you to develop locally-owned on-site wind energy to stabilize the cost of energy for the life of your system.



Funded in Part by:
focus on energy
The power is within you.