



Distributed Wind 2024

A 15 kW Behind-the Meter Turbine Project for FTS Enterprises in Juniata, Nebraska







Who is American Windpower?

Our founders began installing wind turbines in 1983 and have installed 100's of turbines throughout the Midwest.

As a result we've seen first hand what works and what doesn't. We offer an unparalleled level of experience that is necessary to deliver a successful solution.

Today, we are one of the Largest Small Wind Turbine Dealers in North America.

With staff in Oklahoma, Kansas, Nebraska, Colorado, Iowa and Texas we can provide prompt, professional service for our clients.

In 1983 we installed our first Bergey Excel 10 kW. That turbine along with a dozen others is still operational. We are currently Bergey's largest dealer and have an installation backlog of nearly 75 turbines.





CASE STUDY:

FTS Enterprises – Juniata, NE

FTS Enterprises is a family-owned small farm in South Central Nebraska. Merle Hoffman has been farming for over 50 years. They raise irrigated corn and soybeans on 3,000 acres.

Merle fits our typical customer profile, an older successful farmer with a large annual tax burden.

He was awarded a USDA REAP grant for **25%** or \$23,625 (**since increased to 50%**). In addition, by utilizing the **26%** Federal Tax Credit (**since increased to 40%**) and Section 179 depreciation he saved \$47,864 on his taxes.





CASE STUDY:

FTS Enterprises – Juniata, NE

Installed March 31, 2022

Turbine: Bergey Excel 15

Rated Power: 15 kW

Peak Power: 22.6 kW

Tower: 100' Rohn Self-Supporting Tower

Best Month: 5,465 kWh's / 182 per day

Best 24 hr: 360 kWh's / 15 kWh's per hour

Best Peak Power: 22,679 watts



Performance Tools

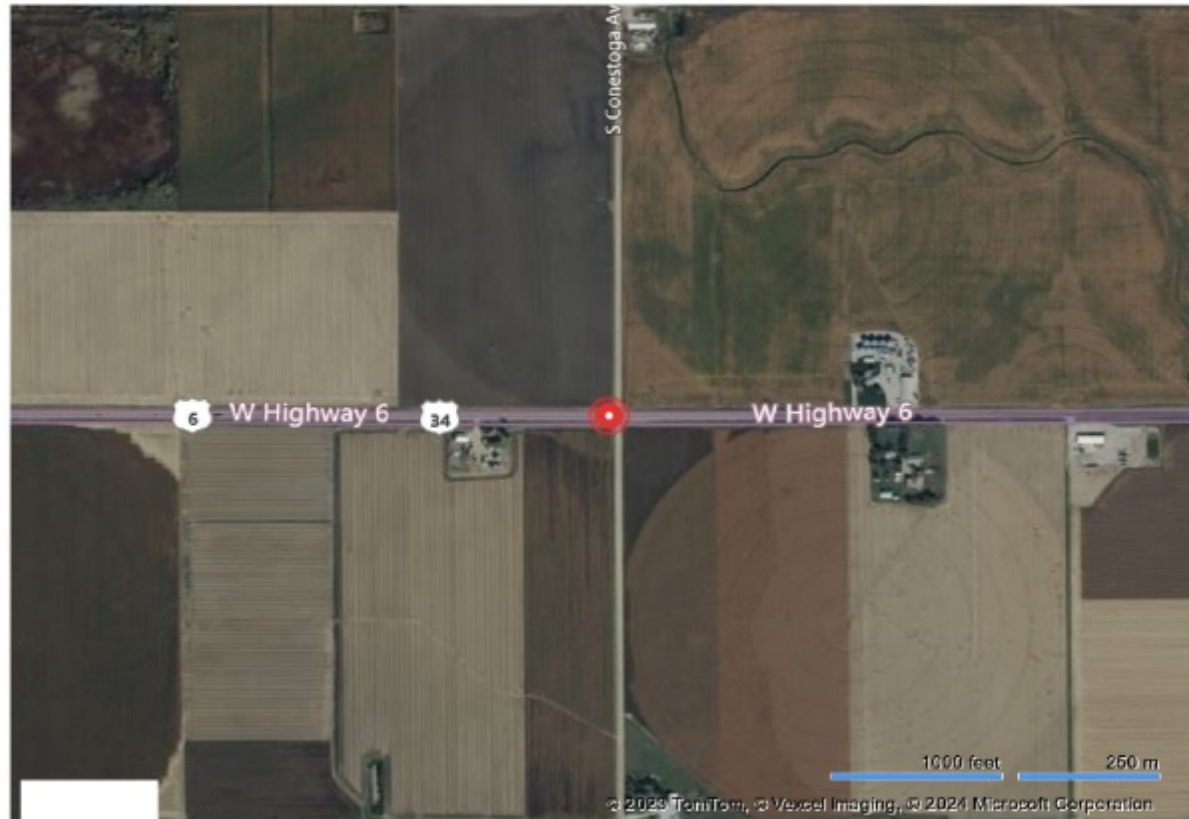
FTS Enterprises – Juniata, NE

Turbine Production & Financial Modeling - Tools for the Renewable Energy In...

<http://windreport.newrootsenergy.com>

WindReport by Bergey Windpower Co.
Bergey Windpower Co. | 2200 Industrial Blvd. Norman, OK 73069 USA

Turbine Production:



Turbine Selection	Bergey Excel 15
Nameplate Capacity [kW]	15.0
Rotor Diameter [m]	9.6

Site Location:
10600 W 6th
Juniata, Nebraska
40.568° latitude
-98.535° longitude

Average Wind Speed [mph]	12.91
Tower Height [ft]	100.0
Altitude [ft]	1,988.0
Weibull K	2.0
Wind Shear	0.18
Turbulence Factor [%]	10.0

Average Output Power [kW]	3.9
Daily Energy Output [kWh]	94.5
Monthly Energy Output [kWh]	2,873.5
Annual Energy Output [kWh]	34,482.1
Hub Average Wind Speed [mph]	12.9
Air Density Coefficient	0.9
Operating Time [%]	99.5



CASE STUDY:

FTS Enterprises – Juniata, NE

Installed March 31, 2022

Projected Average Annual Wind Speed: 12.9/mph

Projected KWh's: 34,482 Average of 2,873 kWh's/mo.

2022 (9 mths.): 28,186 kWh's Average of 3,131 kWh's

2023 (full year): 34,739 kWh's Average of 2,894 kWh's

Availability:

Operated approximately 680 days
Available all but 6 days or 674
Availability = 99.11%





Wind Energy Incentive #1

40% or 50% Federal Tax Credit*

- A **'Dollar-for-Dollar Credit'** against any current or future income taxes.
40% of the Installed Cost qualifies for the Tax Credit

For Example: You owe \$45,800 in Federal Income Taxes, if you invest in a Wind Turbine, you would owe \$0!

- **Plus**, you can **go back 1 year** and recapture any taxes you paid last year!
- **AND** – you can **'carry the credit forward'** for up to **20 years** against any taxes you may owe in the future!

*30% Tax Credit is combined with a 10% Domestic Content Credit and/or the 10% Community Tax Credit for total of either 40% or 50%



Wind Energy Incentive #2



REAP Program

- **USDA Rural Energy for America Program** provides for a **CASH Payment** for up to **50%** of the installed cost of your project!

This results in a FIRST YEAR CASH PAYMENT of \$57,250!

For Example: American Windpower will prepare and file your **USDA REAP Grant application*** for you and while not guaranteed we have had nearly **100%** approval the past 4 cycles!

* American Windpower files your grant application for \$200 and refunds this amount upon purchase



IT ALL ADDS UP!!!

An Outstanding Investment Opportunity!

(Based on a 'turn-key' installed cost of \$114,500 for an Excel 15/22 kW with a 100' Tilt-Up Tower)

- 40% Federal Energy Tax Credit =	\$45,800
- USDA REAP Grant CASH Payment =	\$57,250
- <u>Depreciation (1st Year, 32% Federal, 5% State)</u>	<u>Depends</u>
Total 1st Year Incentives and Savings =	\$103,050
Cost at the end of the 1st Year =	\$11,450

In this example, the System **pays for itself in 24 months and over the next 40 years may save **YOU approximately \$565,705** on electrical/fuel costs!**









***Questions?
Thank You!***

