

Status of Iowa Wind Generation

1. Iowa has approximately 422.7 MW of wind generating capacity. According to the American Wind Energy Association (AWEA), this ranks Iowa 3rd in the nation:

1) California	1,832.2 MW	
2) Texas	1,095.5 MW	
3) IOWA	422.7 MW	9.0% of U.S. Total
4) Minnesota	360.6 MW	
5) Washington	228.8 MW	
6) Oregon	218.4 MW	
7) Wyoming	140.6 MW	
8) Kansas	113.7 MW	
9) West Virginia	66.0 MW	
10) Colorado	<u>61.2 MW</u>	
TOTAL	4,539.1 MW	96.2% of U.S. Total

2. Taking into account state populations, Iowa would rank 2nd on a per capita basis:

	Installed MW Wind Capacity	2000 Population	Installed Watts Per Capita
1) Wyoming	140.6 MW	493,782	284.7
2) IOWA	422.7 MW	2,926,324	144.4
3) Minnesota	360.6 MW	4,919,479	73.3
4) Oregon	218.4 MW	3,421,399	63.8
5) California	1,832.2 MW	33,871,648	54.1
6) Texas	1,095.5 MW	20,851,820	52.5
7) Kansas	113.7 MW	2,688,418	42.3
8) Washington	228.8 MW	5,894,121	38.7
9) West Virginia	66.0 MW	1,808,344	36.5
10) Colorado	61.2 MW	4,301,261	14.2

3. AWEA ranks Iowa 10th in wind development potential behind: 1) North Dakota, 2) Texas, 3) Kansas, 4) South Dakota, 5) Montana, 6) Nebraska, 7) Wyoming, 8) Oklahoma, and 9) Minnesota.

Iowa Wind Farms

Most of Iowa's current wind generation capacity (98 percent) comes from four large-scale wind farms located in Iowa's northwest and north-central counties: 552 wind turbines totaling **414 MW** of generating capacity.

1. **Location:** Buena Vista County (1997-98)
No. of Turbines: 259 Turbines @ 750 kW each
Total Capacity: 194.25 MW
Contracted to: MidAmerican Energy (112.50 MW), Interstate Power & Light (80.25 MW), and Waverly Light & Power (1.50 MW)
2. **Location:** Cerro Gordo County (1997-98)
No. of Turbines: 56 Turbines @ 750 kW each
Total Capacity: 42 MW
Contracted to: Interstate Power & Light
3. **Location:** Worth County (2001)
No. of Turbines: 89 Turbines @ 900 kW each
Total Capacity: 80.10 MW
Contracted to: Interstate Power & Light (used to meet Wisconsin renewable energy requirements)
4. **Location:** Hancock County (2002)
No. of Turbines: 148 Turbines @ 660 kW each
Total Capacity: 97.68 MW
Contracted to: Interstate Power & Light (56.76 MW) and two other purchasers (40.92 MW)

Two additional wind farms are under construction or in the planning stage: 200-plus wind turbines totaling approximately **353.5 MW** of generating capacity.

1. **Location:** Dickinson County (2003)
No. of Turbines: 29 Turbines @ 1.5 MW each
Total Capacity: 43.50 MW
Contracted to: Interstate Power & Light
2. **Location:** Northwest or North-Central Iowa (2004-2006)
No. of Turbines: 180 to 200 Turbines @ 1.5 to 1.65 MW each
Total Capacity: Approximately 310 MW
To be Owned by: MidAmerican Energy (currently seeking advance ratemaking principles under HF 577 (2001) and HF 659 (2003) – in **Docket No. RPU-03-1**)

Current Wind Generation Incentives

FEDERAL INCENTIVES

- **Accelerated Depreciation** (10-years) for federal income taxes.
- **Production Tax Credit (PTC)** for federal income taxes. Current PTC is 1.8 cents per kWh (indexed for inflation); applies to first 10 years of wind generation, for facilities completed before 2004. PTC legislation sunsets after 2003, but will probably be extended.
- **Renewable Energy Production Incentive (REPI)**. Counterpart to the PTC for non-profit organizations, involving direct payments of 1.8 cents per kWh rather than tax credits. Funded annually through appropriations.
- **USDA Rural Development Grants** for renewable energy systems and energy efficiency improvements. Over \$1.2 million of the \$21 million total was recently awarded to nine Iowa recipients.

STATE MANDATES & INCENTIVES

- **Alternate Energy Production (AEP) 105 MW Purchase Obligation** for rate-regulated utilities (Iowa Code 476.41 – 476.45). Recent change allows utility to meet its obligation through AEP ownership (HF 659).
- **Advance Ratemaking Principles** for utility-owned AEP facilities (Iowa Code 474.53).
- **Alternate Energy Revolving Loan Program** administered by the Iowa Energy Center (Iowa Code 476.46).
- **Alternate Energy Purchase Programs** (beginning 2004) allowing utility customers to contribute to AEP development (Iowa Code 476.47).
- **Net Metering** for small AEP facilities served by rate-regulated utilities (199 IAC 15.11(5)).
- **Tax Incentives:**

Sales tax exemption (Iowa Code 422.45(48)).

Generation replacement tax (i.e., property tax) exemption (Iowa Code 437A.6).