

DEPARTMENT OF PUBLIC SERVICE REGULATION  
BEFORE THE PUBLIC SERVICE COMMISSION  
OF THE STATE OF MONTANA

\* \* \* \* \*

IN THE MATTER OF the Application of ) REGULATORY DIVISION  
Montana Dakota Utilities Company for )  
Authority to Establish Increased Rates for ) DOCKET NO. D2015.6.51  
Electric Service in the State of Montana )

**DATA RESPONSES OF THE MONTANA CONSUMER COUNSEL  
TO THE MONTANA PUBLIC SERVICE COMMISSION**

PSC-094

Regarding: Depreciation

Witness: Pous

- a. Please describe your definition of a trend as it relates to your testimony.

**RESPONSE:**

- a. A broad definition of a trend is a general tendency. Mr. Pous employs the term to mean general movement of numerical values or change in direction of actions or numerical values. For example, at page 54 of Mr. Pous' testimony he uses the term trend to identify the change being witnessed of regulators as it relates to the acceptance of the limited quality of presentation by utilities in support of a large depreciation revenue requirement. Mr. Pous uses the term trend at page 80 for Account 369.20 Underground Services to address the change in the directional movement of the most recent 3 three-year moving net salvage values relied on by MDU.

Montana-Dakota Utilities  
Docket No. D2015.6.51  
Data Responses of the Montana Consumer Counsel  
to the Montana Public Service Commission  
(PSC-094 through PSC-101)

PSC-095

Regarding: Depreciation

Witness: Pous

- a. Please explain your familiarity with the PowerPlan depreciation software.

**RESPONSE:**

- a. Mr. Pous has been in numerous proceedings where the utility has converted to and utilizes the PowerPlan software system. Mr. Pous has also been granted access through a utility to have real time interaction with a portion of the depreciation module of the PowerPlan. Mr. Pous has had numerous verbal and/or written interactions with utility personnel regarding their use of PowerPlan. Mr. Pous is aware that the PowerPlan software affords a utility the options of turning on or off certain “keys” or pathways within the software or to establish allocations or assignments of costs. The asset management software allows a utility the opportunity to make various selections for the treatment of assets from installation through retirement.

PSC-096

Regarding: Production Plant Adjustments

Witness: Pous

- a. Please explain in general how a depreciation analyst unfamiliar with a company's physical plant and its overall condition is able to breakdown different depreciation accounts to accurately account for physical condition as it relates to survivor curves.
- b. Please indicate any and all site inspections you or employees of DUCI performed during your analysis to verify plant condition.
- c. If no physical inspections were performed please indicate why.

**RESPONSE:**

- a. Over the past 40 years, Mr. Pous has inspected numerous utility assets from a visual standpoint and has also performed non destructive field testing of various assets. Mr. Pous has observed that visual inspection of limited mass property assets or entire generating assets represents a minor, and potentially misleading, component of the determination of the overall appropriate life related portion of the assets' mortality characteristics. As noted in the FERC definition of depreciation, wear and tear or the observable physical deterioration of assets is but one of the retirement forces at issue. A visual inspection of an asset cannot normally address the probability of failure or replacement of an asset, absent unreasonable neglect. Mr. Pous has not observed situations of unreasonable neglect when performing prior inspections of utility property. The investigation of historical data through actuarial analyses provides a component for life estimation of mass property assets based on Iowa Survivor curves. The combination of statistical analyses of historical data and meaningful information external to the statistical analyses assists in the interpretation of the overall life estimation that incorporates the utility's maintenance of its physical plant if identified as an area of concern due to non-standard practices.

Montana-Dakota Utilities  
Docket No. D2015.6.51  
Data Responses of the Montana Consumer Counsel  
to the Montana Public Service Commission  
(PSC-094 through PSC-101)

PSC-096 continued.

- b. There have been no site inspections as part of this proceeding. Please see the response to subpart (a).
- c. Please see the response to subpart (a).

PSC-097

Regarding: Production Plant Adjustments

Witness: Pous

- a. Regarding your testimony beginning on Page 27, you elude that wind farm technologies have improved and therefore can offer increased lives. Are you able to provide a breakdown of the varied technologies MDU has used in the company's wind farms turbines?
- b. You mention the company Siemen's in your testimony, is it possible that reliability and product support can vary greatly by makers of turbines? Is Siemen's an outlier for exceptional products?
- c. Product quality and support can increase or decrease the useful life of plant. Is it possible that MDU purchased less reliable plant and therefore should be allowed to recover the plant at a shorter life span?
- d. If MDU has not provided an acceptable amount of information to support the life spans of its windfarms please provide additional information to justify your ability to recommend an initial step to 25 years without the full information you need to provide such a recommendation.

**RESPONSE:**

- a. Mr. Pous has reviewed various articles regarding the life expectancy of wind farms over the past few decades. The following web sites are recent examples for life indications referenced by the industry.

<http://nccleantech.ncsu.edu/technology/renewable-energy/wind-energy/guide-to-wind-energy-in-north-carolina/guide-to-wind-energy-in-north-carolina/>

<http://thinkprogress.org/climate/2014/02/25/3325551/wind-turbines-durable/>.

Also, please see the U.S. Energy Information Administration listing of wind farm generators as attached and identified as Attachment 97-1.

PSC-097 continued

- b. Variations are possible not only between vendors but for products and/or services from the same vendor. Mr. Pous does not know what constitutes a variation that would vary “greatly” between vendors, but vendors that provide poor products or support often cease to exist. Mr. Pous cannot opine on whether Siemen’s is an outlier as he has not ranked potential vendors.
- c. Mr. Pous has not investigated the prudence of MDU’s purchase standards, nor is he aware that MDU has made any such admission, which could have a bearing on life and recovery matters if the Commission were to find that MDU purchased inferior assets.
- d. In addition to the references in subpart (a), Mr. Pous has observed a continuous underestimation of initial life expectations by utilities for production facilities over the past 40-plus years of review and testimony on this matter. This situation is applicable to nuclear, coal, gas and hydro generating units. The industry has generally not recognized the longer life spans for generating facilities until empirical data forces the issue. Given the EIA information noted in subpart (a) above, the situation of underestimation of life spans appears to be repeating itself for wind units.

**Attachment**

**Data Response**

**PSC-097**

**D2015.6.51**

**Montana-Dakota Utilities**

**December 21, 2015**

Year	State Code	Producer Type	Fuel Source	Generators	Facilities	Nameplate Capacity (Megawatts)	Summer Capacity (Megawatts)
1990	CA	Electric Generators, Independent Power Producers	Wind		78	1,774.9	1,774.9
1990	CA	Total Electric Power Industry	Wind		78	1,774.9	1,774.9
1990	HI	Electric Generators, Independent Power Producers	Wind		3	23.2	23.2
1990	HI	Total Electric Power Industry	Wind		3	23.2	23.2
1990	OR	Electric Generators, Independent Power Producers	Wind		1	1.0	1.0
1990	OR	Total Electric Power Industry	Wind		1	1.0	1.0
1990	US	Electric Generators, Independent Power Producers	Wind		82	1,799.0	1,799.0
1990	US	Total Electric Power Industry	Wind		88	1,799.7	1,799.4
1991	CA	Electric Generators, Independent Power Producers	Wind		78	1,861.4	1,861.4
1991	CA	Total Electric Power Industry	Wind		78	1,861.4	1,861.4
1991	HI	Electric Generators, Independent Power Producers	Wind		3	22.6	22.6
1991	HI	Total Electric Power Industry	Wind		3	22.6	22.6
1991	OR	Electric Generators, Independent Power Producers	Wind		1	1.0	1.0
1991	OR	Total Electric Power Industry	Wind		1	1.0	1.0
1991	US	Electric Generators, Independent Power Producers	Wind		82	1,885.0	1,885.0
1991	US	Total Electric Power Industry	Wind		88	1,885.6	1,885.4
1992	CA	Electric Generators, Independent Power Producers	Wind		77	1,798.6	1,798.6
1992	CA	Total Electric Power Industry	Wind		77	1,798.6	1,798.6
1992	HI	Electric Generators, Independent Power Producers	Wind		3	22.6	22.6
1992	HI	Total Electric Power Industry	Wind		3	22.6	22.6
1992	OR	Electric Generators, Independent Power Producers	Wind		1	1.0	1.0
1992	OR	Total Electric Power Industry	Wind		1	1.0	1.0
1992	US	Electric Generators, Independent Power Producers	Wind		81	1,822.2	1,822.2
1992	US	Total Electric Power Industry	Wind		86	1,822.7	1,822.5
1993	CA	Electric Generators, Independent Power Producers	Wind		77	1,773.1	1,773.1
1993	CA	Total Electric Power Industry	Wind		77	1,773.1	1,773.1
1993	HI	Electric Generators, Independent Power Producers	Wind		3	22.6	22.6
1993	HI	Total Electric Power Industry	Wind		3	22.6	22.6
1993	US	Electric Generators, Electric Utilities	Wind		7	.8	.7
1993	US	Electric Generators, Independent Power Producers	Wind		80	1,795.6	1,795.6
1993	US	Total Electric Power Industry	Wind		87	1,796.4	1,796.3
1994	CA	Electric Generators, Electric Utilities	Wind		1	6.8	6.8
1994	CA	Electric Generators, Independent Power Producers	Wind		76	1,692.5	1,692.5
1994	CA	Total Electric Power Industry	Wind		77	1,699.3	1,699.3
1994	HI	Electric Generators, Independent Power Producers	Wind		3	22.6	22.6
1994	HI	Total Electric Power Industry	Wind		3	22.6	22.6
1994	MN	Electric Generators, Independent Power Producers	Wind		1	21.9	21.9
1994	MN	Total Electric Power Industry	Wind		2	22.1	21.9
1994	US	Electric Generators, Electric Utilities	Wind		8	7.7	7.7
1994	US	Electric Generators, Independent Power Producers	Wind		80	1,737.0	1,737.0
1994	US	Total Electric Power Industry	Wind		88	1,744.7	1,744.7
1995	CA	Electric Generators, Electric Utilities	Wind		1	6.8	6.8
1995	CA	Electric Generators, Independent Power Producers	Wind		74	1,679.8	1,679.8
1995	CA	Total Electric Power Industry	Wind		75	1,686.6	1,686.6
1995	HI	Electric Generators, Independent Power Producers	Wind		3	21.8	21.8
1995	HI	Total Electric Power Industry	Wind		3	21.8	21.8
1995	MN	Electric Generators, Independent Power Producers	Wind		1	21.9	21.9
1995	MN	Total Electric Power Industry	Wind		2	22.1	21.9
1995	US	Electric Generators, Electric Utilities	Wind		6	7.6	7.6
1995	US	Electric Generators, Independent Power Producers	Wind		78	1,723.5	1,723.5
1995	US	Total Electric Power Industry	Wind		84	1,731.1	1,731.1
1996	CA	Electric Generators, Electric Utilities	Wind		1	6.8	6.8
1996	CA	Electric Generators, Independent Power Producers	Wind		72	1,592.5	1,592.5
1996	CA	Total Electric Power Industry	Wind		73	1,599.3	1,599.3
1996	HI	Electric Generators, Independent Power Producers	Wind		3	22.0	22.0
1996	HI	Total Electric Power Industry	Wind		3	22.0	22.0
1996	MN	Electric Generators, Independent Power Producers	Wind		1	21.9	21.9
1996	MN	Total Electric Power Industry	Wind		2	22.1	21.9
1996	TX	Electric Generators, Independent Power Producers	Wind		1	33.6	33.6
1996	TX	Total Electric Power Industry	Wind		1	33.6	33.6
1996	US	Electric Generators, Electric Utilities	Wind		6	7.6	7.6
1996	US	Electric Generators, Independent Power Producers	Wind		77	1,670.0	1,670.0
1996	US	Total Electric Power Industry	Wind		83	1,677.6	1,677.6

Year	State Code	Producer Type	Fuel Source	Generators	Facilities	Nameplate Capacity (Megawatts)	Summer Capacity (Megawatts)
1997	CA	Electric Generators, Electric Utilities	Wind		1	6.8	6.8
1997	CA	Electric Generators, Independent Power Producers	Wind		65	1,512.3	1,512.3
1997	CA	Total Electric Power Industry	Wind		66	1,519.1	1,519.1
1997	HI	Electric Generators, Independent Power Producers	Wind		2	20.3	20.3
1997	HI	Total Electric Power Industry	Wind		2	20.3	20.3
1997	MN	Electric Generators, Independent Power Producers	Wind		1	29.9	29.9
1997	MN	Total Electric Power Industry	Wind		2	30.1	30.0
1997	TX	Electric Generators, Independent Power Producers	Wind		1	33.6	33.6
1997	TX	Total Electric Power Industry	Wind		1	33.6	33.6
1997	US	Electric Generators, Electric Utilities	Wind		7	13.7	13.7
1997	US	Electric Generators, Independent Power Producers	Wind		69	1,596.0	1,596.0
1997	US	Total Electric Power Industry	Wind		76	1,609.7	1,609.7
1997	VT	Electric Generators, Electric Utilities	Wind		2	6.3	6.3
1997	VT	Total Electric Power Industry	Wind		2	6.3	6.3
1998	CA	Electric Generators, Electric Utilities	Wind		1	6.8	6.8
1998	CA	Electric Generators, Independent Power Producers	Wind		63	1,502.5	1,502.5
1998	CA	Total Electric Power Industry	Wind		64	1,509.3	1,509.3
1998	HI	Electric Generators, Independent Power Producers	Wind		2	20.3	20.3
1998	HI	Total Electric Power Industry	Wind		2	20.3	20.3
1998	MN	Electric Generators, Independent Power Producers	Wind		2	129.2	129.2
1998	MN	Total Electric Power Industry	Wind		2	129.2	129.2
1998	OR	Electric Generators, Independent Power Producers	Wind		1	25.1	25.1
1998	OR	Total Electric Power Industry	Wind		1	25.1	25.1
1998	TX	Electric Generators, Independent Power Producers	Wind		1	33.6	33.6
1998	TX	Total Electric Power Industry	Wind		1	33.6	33.6
1998	US	Electric Generators, Electric Utilities	Wind		8	15.6	8.7
1998	US	Electric Generators, Independent Power Producers	Wind		70	1,711.3	1,711.3
1998	US	Total Electric Power Industry	Wind		78	1,726.9	1,720.0
1998	VT	Electric Generators, Electric Utilities	Wind		2	6.3	.7
1998	VT	Total Electric Power Industry	Wind		2	6.3	.7
1998	WY	Electric Generators, Independent Power Producers	Wind		1	.8	.8
1998	WY	Total Electric Power Industry	Wind		1	.8	.8
1999	CA	Electric Generators, Electric Utilities	Wind		1	6.8	6.8
1999	CA	Electric Generators, Independent Power Producers	Wind		63	1,551.2	1,551.2
1999	CA	Total Electric Power Industry	Wind		64	1,558.0	1,558.0
1999	HI	Electric Generators, Independent Power Producers	Wind		1	9.3	9.3
1999	HI	Total Electric Power Industry	Wind		1	9.3	9.3
1999	IA	Electric Generators, Electric Utilities	Wind		2	1.6	1.6
1999	IA	Electric Generators, Independent Power Producers	Wind		2	192.8	192.8
1999	IA	Total Electric Power Industry	Wind		4	194.3	194.3
1999	MN	Electric Generators, Electric Utilities	Wind		1	.8	.8
1999	MN	Electric Generators, Independent Power Producers	Wind		6	266.0	266.0
1999	MN	Total Electric Power Industry	Wind		7	266.7	266.7
1999	NE	Electric Generators, Electric Utilities	Wind		1	1.5	1.5
1999	NE	Total Electric Power Industry	Wind		1	1.5	1.5
1999	OR	Electric Generators, Independent Power Producers	Wind		1	25.1	25.1
1999	OR	Total Electric Power Industry	Wind		1	25.1	25.1
1999	TX	Electric Generators, Independent Power Producers	Wind		4	172.9	172.9
1999	TX	Total Electric Power Industry	Wind		4	172.9	172.9
1999	US	Electric Generators, Electric Utilities	Wind		14	43.8	29.4
1999	US	Electric Generators, Independent Power Producers	Wind		78	2,222.4	2,222.4
1999	US	Total Electric Power Industry	Wind		92	2,266.2	2,251.8
1999	VT	Electric Generators, Electric Utilities	Wind		2	6.3	.7
1999	VT	Total Electric Power Industry	Wind		2	6.3	.7
1999	WI	Electric Generators, Electric Utilities	Wind		3	21.4	12.4
1999	WI	Total Electric Power Industry	Wind		3	21.4	12.4
1999	WY	Electric Generators, Electric Utilities	Wind		1	4.6	4.6
1999	WY	Electric Generators, Independent Power Producers	Wind		1	5.3	5.3
1999	WY	Total Electric Power Industry	Wind		2	9.8	9.8
2000	CA	Electric Generators, Electric Utilities	Wind		1	7.0	7.0
2000	CA	Electric Generators, Independent Power Producers	Wind		60	1,534.0	1,534.0
2000	CA	Total Electric Power Industry	Wind		61	1,541.0	1,541.0
2000	CO	Electric Generators, Electric Utilities	Wind		1	17.0	15.0

Year	State Code	Producer Type	Fuel Source	Generators	Facilities	Nameplate Capacity (Megawatts)	Summer Capacity (Megawatts)
2000	CO	Total Electric Power Industry	Wind		1	17.0	15.0
2000	HI	Electric Generators, Electric Utilities	Wind		1	2.0	2.0
2000	HI	Electric Generators, Independent Power Producers	Wind		1	9.0	9.0
2000	HI	Total Electric Power Industry	Wind		2	12.0	12.0
2000	IA	Electric Generators, Electric Utilities	Wind		3	4.0	4.0
2000	IA	Electric Generators, Independent Power Producers	Wind		2	193.0	193.0
2000	IA	Total Electric Power Industry	Wind		5	197.0	197.0
2000	MI	Electric Generators, Electric Utilities	Wind		1	1.0	1.0
2000	MI	Total Electric Power Industry	Wind		1	1.0	1.0
2000	MN	Electric Generators, Electric Utilities	Wind		1	1.0	1.0
2000	MN	Electric Generators, Independent Power Producers	Wind		8	270.0	270.0
2000	MN	Total Electric Power Industry	Wind		9	271.0	271.0
2000	NE	Electric Generators, Electric Utilities	Wind		2	3.0	3.0
2000	NE	Total Electric Power Industry	Wind		2	3.0	3.0
2000	NY	Electric Generators, Independent Power Producers	Wind		2	18.0	18.0
2000	NY	Total Electric Power Industry	Wind		2	18.0	18.0
2000	OR	Electric Generators, Independent Power Producers	Wind		1	25.0	25.0
2000	OR	Total Electric Power Industry	Wind		1	25.0	25.0
2000	PA	Electric Generators, Independent Power Producers	Wind		1	10.0	10.0
2000	PA	Total Electric Power Industry	Wind		1	10.0	10.0
2000	TN	Electric Generators, Electric Utilities	Wind		1	2.0	2.0
2000	TN	Total Electric Power Industry	Wind		1	2.0	2.0
2000	TX	Electric Generators, Independent Power Producers	Wind		4	173.0	173.0
2000	TX	Total Electric Power Industry	Wind		4	173.0	173.0
2000	US	Electric Generators, Electric Utilities	Wind		20	71.0	54.0
2000	US	Electric Generators, Independent Power Producers	Wind		84	2,323.0	2,323.0
2000	US	Total Electric Power Industry	Wind		104	2,394.0	2,377.0
2000	VT	Electric Generators, Electric Utilities	Wind		2	6.0	1.0
2000	VT	Total Electric Power Industry	Wind		2	6.0	1.0
2000	WI	Electric Generators, Electric Utilities	Wind		4	23.0	12.0
2000	WI	Total Electric Power Industry	Wind		4	23.0	12.0
2000	WY	Electric Generators, Electric Utilities	Wind		1	6.0	6.0
2000	WY	Electric Generators, Independent Power Producers	Wind		5	90.0	90.0
2000	WY	Total Electric Power Industry	Wind		6	96.0	96.0
2001	CA	Electric Generators, Electric Utilities	Wind		1	7.0	7.0
2001	CA	Electric Generators, Independent Power Producers	Wind		62	1,590.0	1,551.0
2001	CA	Total Electric Power Industry	Wind		63	1,597.0	1,558.0
2001	CO	Electric Generators, Electric Utilities	Wind		1	16.0	16.0
2001	CO	Electric Generators, Independent Power Producers	Wind		2	35.0	35.0
2001	CO	Total Electric Power Industry	Wind		3	51.0	51.0
2001	HI	Electric Generators, Electric Utilities	Wind		1	2.0	2.0
2001	HI	Electric Generators, Independent Power Producers	Wind		1	9.0	9.0
2001	HI	Total Electric Power Industry	Wind		2	11.0	11.0
2001	IA	Electric Generators, Electric Utilities	Wind		2	4.0	4.0
2001	IA	Electric Generators, Independent Power Producers	Wind		4	315.0	315.0
2001	IA	Total Electric Power Industry	Wind		6	318.0	318.0
2001	KS	Electric Generators, Independent Power Producers	Wind		1	112.0	112.0
2001	KS	Total Electric Power Industry	Wind		1	112.0	112.0
2001	MI	Electric Generators, Independent Power Producers	Wind		1	2.0	1.0
2001	MI	Total Electric Power Industry	Wind		1	2.0	1.0
2001	MN	Electric Generators, Electric Utilities	Wind		1	1.0	1.0
2001	MN	Electric Generators, Independent Power Producers	Wind		25	301.0	301.0
2001	MN	Total Electric Power Industry	Wind		26	303.0	303.0
2001	NE	Electric Generators, Electric Utilities	Wind		3	4.0	4.0
2001	NE	Total Electric Power Industry	Wind		3	4.0	4.0
2001	NY	Electric Generators, Independent Power Producers	Wind		2	18.0	18.0
2001	NY	Total Electric Power Industry	Wind		2	18.0	18.0
2001	OR	Electric Generators, Independent Power Producers	Wind		4	158.0	158.0
2001	OR	Total Electric Power Industry	Wind		4	158.0	158.0
2001	PA	Electric Generators, Independent Power Producers	Wind		3	34.0	34.0
2001	PA	Total Electric Power Industry	Wind		3	34.0	34.0
2001	SD	Electric Generators, Electric Utilities	Wind		1	3.0	3.0
2001	SD	Total Electric Power Industry	Wind		1	3.0	3.0

Year	State Code	Producer Type	Fuel Source	Generators	Facilities	Nameplate Capacity (Megawatts)	Summer Capacity (Megawatts)
2001	TN	Electric Generators, Electric Utilities	Wind		1	2.0	2.0
2001	TN	Total Electric Power Industry	Wind		1	2.0	2.0
2001	TX	Electric Generators, Electric Utilities	Wind		1	1.0	1.0
2001	TX	Electric Generators, Independent Power Producers	Wind		10	923.0	923.0
2001	TX	Total Electric Power Industry	Wind		11	925.0	925.0
2001	US	Electric Generators, Electric Utilities	Wind		18	74.0	60.0
2001	US	Electric Generators, Independent Power Producers	Wind		123	3,844.0	3,804.0
2001	US	Total Electric Power Industry	Wind		141	3,918.0	3,864.0
2001	WA	Electric Generators, Independent Power Producers	Wind		1	180.0	180.0
2001	WA	Total Electric Power Industry	Wind		1	180.0	180.0
2001	WI	Electric Generators, Electric Utilities	Wind		4	23.0	14.0
2001	WI	Electric Generators, Independent Power Producers	Wind		2	32.0	32.0
2001	WI	Total Electric Power Industry	Wind		6	54.0	45.0
2001	WY	Electric Generators, Electric Utilities	Wind		1	6.0	6.0
2001	WY	Electric Generators, Independent Power Producers	Wind		5	135.0	135.0
2001	WY	Total Electric Power Industry	Wind		6	141.0	141.0
2002	CA	Electric Generators, Electric Utilities	Wind		1	13.0	13.0
2002	CA	Electric Generators, Independent Power Producers	Wind		65	1,728.0	1,688.0
2002	CA	Total Electric Power Industry	Wind		66	1,741.0	1,701.0
2002	CO	Electric Generators, Electric Utilities	Wind		1	24.0	24.0
2002	CO	Electric Generators, Independent Power Producers	Wind		2	35.0	13.0
2002	CO	Total Electric Power Industry	Wind		3	59.0	37.0
2002	HI	Electric Generators, Electric Utilities	Wind		1	2.0	2.0
2002	HI	Electric Generators, Independent Power Producers	Wind		1	9.0	9.0
2002	HI	Total Electric Power Industry	Wind		2	11.0	11.0
2002	IA	Electric Generators, Electric Utilities	Wind		2	4.0	4.0
2002	IA	Electric Generators, Independent Power Producers	Wind		5	413.0	413.0
2002	IA	Total Electric Power Industry	Wind		7	416.0	416.0
2002	KS	Electric Generators, Independent Power Producers	Wind		1	112.0	112.0
2002	KS	Total Electric Power Industry	Wind		1	112.0	112.0
2002	MI	Electric Generators, Independent Power Producers	Wind		1	2.0	1.0
2002	MI	Total Electric Power Industry	Wind		1	2.0	1.0
2002	MN	Electric Generators, Electric Utilities	Wind		1	1.0	1.0
2002	MN	Electric Generators, Independent Power Producers	Wind		28	337.0	311.0
2002	MN	Total Electric Power Industry	Wind		29	338.0	312.0
2002	NE	Electric Generators, Electric Utilities	Wind		2	3.0	3.0
2002	NE	Total Electric Power Industry	Wind		2	3.0	3.0
2002	NY	Electric Generators, Independent Power Producers	Wind		3	48.0	48.0
2002	NY	Total Electric Power Industry	Wind		3	48.0	48.0
2002	OR	Electric Generators, Independent Power Producers	Wind		4	183.0	182.0
2002	OR	Total Electric Power Industry	Wind		4	183.0	182.0
2002	PA	Electric Generators, Independent Power Producers	Wind		3	34.0	34.0
2002	PA	Total Electric Power Industry	Wind		3	34.0	34.0
2002	SD	Electric Generators, Electric Utilities	Wind		1	3.0	3.0
2002	SD	Total Electric Power Industry	Wind		1	3.0	3.0
2002	TN	Electric Generators, Electric Utilities	Wind		1	2.0	2.0
2002	TN	Total Electric Power Industry	Wind		1	2.0	2.0
2002	TX	Electric Generators, Electric Utilities	Wind		1	1.0	1.0
2002	TX	Electric Generators, Independent Power Producers	Wind		11	1,084.0	1,084.0
2002	TX	Total Electric Power Industry	Wind		12	1,085.0	1,085.0
2002	US	Electric Generators, Electric Utilities	Wind		18	136.0	111.0
2002	US	Electric Generators, Independent Power Producers	Wind		132	4,395.0	4,305.0
2002	US	Total Electric Power Industry	Wind		150	4,531.0	4,417.0
2002	VT	Electric Generators, Electric Utilities	Wind		1	6.0	1.0
2002	VT	Total Electric Power Industry	Wind		1	6.0	1.0
2002	WA	Electric Generators, Electric Utilities	Wind		1	48.0	45.0
2002	WA	Electric Generators, Independent Power Producers	Wind		1	180.0	180.0
2002	WA	Total Electric Power Industry	Wind		2	228.0	225.0
2002	WI	Electric Generators, Electric Utilities	Wind		4	23.0	6.0
2002	WI	Electric Generators, Independent Power Producers	Wind		1	30.0	30.0
2002	WI	Total Electric Power Industry	Wind		5	53.0	36.0
2002	WV	Electric Generators, Independent Power Producers	Wind		1	66.0	66.0
2002	WV	Total Electric Power Industry	Wind		1	66.0	66.0

Year	State Code	Producer Type	Fuel Source	Generators	Facilities	Nameplate Capacity (Megawatts)	Summer Capacity (Megawatts)
2002	WY	Electric Generators, Electric Utilities	Wind		1	6.0	6.0
2002	WY	Electric Generators, Independent Power Producers	Wind		5	135.0	135.0
2002	WY	Total Electric Power Industry	Wind		6	141.0	141.0
2003	AK	Electric Generators, Electric Utilities	Wind		1	1.0	1.0
2003	AK	Total Electric Power Industry	Wind		1	1.0	1.0
2003	CA	Electric Generators, Electric Utilities	Wind		1	13.0	13.0
2003	CA	Electric Generators, Independent Power Producers	Wind		69	1,930.0	1,897.0
2003	CA	Total Electric Power Industry	Wind		70	1,943.0	1,910.0
2003	CO	Electric Generators, Electric Utilities	Wind		1	24.0	24.0
2003	CO	Electric Generators, Independent Power Producers	Wind		3	197.0	175.0
2003	CO	Total Electric Power Industry	Wind		4	221.0	199.0
2003	HI	Electric Generators, Electric Utilities	Wind		1	2.0	2.0
2003	HI	Electric Generators, Independent Power Producers	Wind		1	9.0	9.0
2003	HI	Total Electric Power Industry	Wind		2	11.0	11.0
2003	IA	Electric Generators, Electric Utilities	Wind		3	6.0	4.0
2003	IA	Electric Generators, Independent Power Producers	Wind		6	456.0	456.0
2003	IA	Total Electric Power Industry	Wind		9	462.0	460.0
2003	IL	Electric Generators, Independent Power Producers	Wind		1	50.0	50.0
2003	IL	Total Electric Power Industry	Wind		1	50.0	50.0
2003	KS	Electric Generators, Electric Utilities	Wind		1	1.0	2.0
2003	KS	Electric Generators, Independent Power Producers	Wind		1	112.0	112.0
2003	KS	Total Electric Power Industry	Wind		2	113.0	114.0
2003	MI	Electric Generators, Independent Power Producers	Wind		1	2.0	1.0
2003	MI	Total Electric Power Industry	Wind		1	2.0	1.0
2003	MN	Electric Generators, Electric Utilities	Wind		2	3.0	3.0
2003	MN	Electric Generators, Independent Power Producers	Wind		45	465.0	431.0
2003	MN	Total Electric Power Industry	Wind		47	468.0	434.0
2003	ND	Electric Generators, Electric Utilities	Wind		1	3.0	3.0
2003	ND	Electric Generators, Independent Power Producers	Wind		1	62.0	62.0
2003	ND	Total Electric Power Industry	Wind		2	64.0	64.0
2003	NE	Electric Generators, Electric Utilities	Wind		3	13.0	13.0
2003	NE	Total Electric Power Industry	Wind		3	13.0	13.0
2003	NM	Electric Generators, Independent Power Producers	Wind		1	204.0	204.0
2003	NM	Total Electric Power Industry	Wind		1	204.0	204.0
2003	NY	Electric Generators, Independent Power Producers	Wind		3	48.0	48.0
2003	NY	Total Electric Power Industry	Wind		3	48.0	48.0
2003	OH	Electric Generators, Electric Utilities	Wind		1	4.0	4.0
2003	OH	Total Electric Power Industry	Wind		1	4.0	4.0
2003	OK	Electric Generators, Independent Power Producers	Wind		2	176.0	176.0
2003	OK	Total Electric Power Industry	Wind		2	176.0	176.0
2003	OR	Electric Generators, Independent Power Producers	Wind		5	224.0	223.0
2003	OR	Total Electric Power Industry	Wind		5	224.0	223.0
2003	PA	Electric Generators, Independent Power Producers	Wind		5	132.0	132.0
2003	PA	Total Electric Power Industry	Wind		5	132.0	132.0
2003	SD	Electric Generators, Electric Utilities	Wind		1	3.0	3.0
2003	SD	Electric Generators, Independent Power Producers	Wind		1	41.0	41.0
2003	SD	Total Electric Power Industry	Wind		2	43.0	43.0
2003	TN	Electric Generators, Electric Utilities	Wind		1	2.0	2.0
2003	TN	Total Electric Power Industry	Wind		1	2.0	2.0
2003	TX	Electric Generators, Electric Utilities	Wind		1	1.0	1.0
2003	TX	Electric Generators, Independent Power Producers	Wind		14	1,284.0	1,284.0
2003	TX	Total Electric Power Industry	Wind		15	1,286.0	1,286.0
2003	US	Electric Generators, Electric Utilities	Wind		25	175.0	140.0
2003	US	Electric Generators, Independent Power Producers	Wind		168	5,947.0	5,855.0
2003	US	Total Electric Power Industry	Wind		193	6,121.0	5,995.0
2003	VT	Electric Generators, Electric Utilities	Wind		1	6.0	5.0
2003	VT	Total Electric Power Industry	Wind		1	6.0	5.0
2003	WA	Electric Generators, Electric Utilities	Wind		1	64.0	48.0
2003	WA	Electric Generators, Independent Power Producers	Wind		1	180.0	180.0
2003	WA	Total Electric Power Industry	Wind		2	244.0	228.0
2003	WI	Electric Generators, Electric Utilities	Wind		4	23.0	6.0
2003	WI	Electric Generators, Independent Power Producers	Wind		1	30.0	30.0
2003	WI	Total Electric Power Industry	Wind		5	53.0	36.0

Year	State Code	Producer Type	Fuel Source	Generators	Facilities	Nameplate Capacity (Megawatts)	Summer Capacity (Megawatts)
2003	WV	Electric Generators, Independent Power Producers	Wind		1	66.0	66.0
2003	WV	Total Electric Power Industry	Wind		1	66.0	66.0
2003	WY	Electric Generators, Electric Utilities	Wind		1	6.0	6.0
2003	WY	Electric Generators, Independent Power Producers	Wind		6	279.0	279.0
2003	WY	Total Electric Power Industry	Wind		7	285.0	285.0
2004	AK	Electric Generators, Electric Utilities	Wind		1	1.0	1.0
2004	AK	Total Electric Power Industry	Wind		1	1.0	1.0
2004	CA	Electric Generators, Electric Utilities	Wind		1	13.0	13.0
2004	CA	Electric Generators, Independent Power Producers	Wind		71	2,024.0	2,010.0
2004	CA	Total Electric Power Industry	Wind		72	2,037.0	2,023.0
2004	CO	Electric Generators, Electric Utilities	Wind		2	30.0	30.0
2004	CO	Electric Generators, Independent Power Producers	Wind		3	197.0	197.0
2004	CO	Total Electric Power Industry	Wind		5	227.0	227.0
2004	HI	Electric Generators, Electric Utilities	Wind		1	2.0	2.0
2004	HI	Electric Generators, Independent Power Producers	Wind		1	9.0	9.0
2004	HI	Total Electric Power Industry	Wind		2	11.0	11.0
2004	IA	Electric Generators, Electric Utilities	Wind		4	166.0	165.0
2004	IA	Electric Generators, Independent Power Producers	Wind		6	456.0	456.0
2004	IA	Total Electric Power Industry	Wind		10	623.0	621.0
2004	IL	Electric Generators, Independent Power Producers	Wind		1	50.0	50.0
2004	IL	Total Electric Power Industry	Wind		1	50.0	50.0
2004	KS	Electric Generators, Electric Utilities	Wind		1	1.0	1.0
2004	KS	Electric Generators, Independent Power Producers	Wind		1	112.0	112.0
2004	KS	Total Electric Power Industry	Wind		2	113.0	113.0
2004	MI	Electric Generators, Independent Power Producers	Wind		1	2.0	1.0
2004	MI	Total Electric Power Industry	Wind		1	2.0	1.0
2004	MN	Electric Generators, Electric Utilities	Wind		3	7.0	7.0
2004	MN	Electric Generators, Independent Power Producers	Wind		47	512.0	481.0
2004	MN	Total Electric Power Industry	Wind		50	518.0	487.0
2004	ND	Electric Generators, Electric Utilities	Wind		1	3.0	3.0
2004	ND	Electric Generators, Independent Power Producers	Wind		1	62.0	62.0
2004	ND	Total Electric Power Industry	Wind		2	64.0	64.0
2004	NE	Electric Generators, Electric Utilities	Wind		3	13.0	13.0
2004	NE	Total Electric Power Industry	Wind		3	13.0	13.0
2004	NM	Electric Generators, Independent Power Producers	Wind		2	264.0	264.0
2004	NM	Total Electric Power Industry	Wind		2	264.0	264.0
2004	NY	Electric Generators, Independent Power Producers	Wind		3	48.0	48.0
2004	NY	Total Electric Power Industry	Wind		3	48.0	48.0
2004	OH	Electric Generators, Electric Utilities	Wind		1	7.0	7.0
2004	OH	Total Electric Power Industry	Wind		1	7.0	7.0
2004	OK	Electric Generators, Independent Power Producers	Wind		2	176.0	176.0
2004	OK	Total Electric Power Industry	Wind		2	176.0	176.0
2004	OR	Electric Generators, Independent Power Producers	Wind		5	224.0	223.0
2004	OR	Total Electric Power Industry	Wind		5	224.0	223.0
2004	PA	Electric Generators, Independent Power Producers	Wind		5	132.0	132.0
2004	PA	Total Electric Power Industry	Wind		5	132.0	132.0
2004	SD	Electric Generators, Electric Utilities	Wind		1	3.0	3.0
2004	SD	Electric Generators, Independent Power Producers	Wind		1	41.0	41.0
2004	SD	Total Electric Power Industry	Wind		2	43.0	43.0
2004	TN	Electric Generators, Independent Power Producers	Wind		1	29.0	29.0
2004	TN	Total Electric Power Industry	Wind		1	29.0	29.0
2004	TX	Electric Generators, Electric Utilities	Wind		1	1.0	1.0
2004	TX	Electric Generators, Independent Power Producers	Wind		14	1,284.0	1,284.0
2004	TX	Total Electric Power Industry	Wind		15	1,286.0	1,286.0
2004	US	Electric Generators, Electric Utilities	Wind		27	346.0	326.0
2004	US	Electric Generators, Independent Power Producers	Wind		174	6,176.0	6,130.0
2004	US	Total Electric Power Industry	Wind		201	6,522.0	6,456.0
2004	VT	Electric Generators, Electric Utilities	Wind		1	6.0	5.0
2004	VT	Total Electric Power Industry	Wind		1	6.0	5.0
2004	WA	Electric Generators, Electric Utilities	Wind		1	64.0	63.0
2004	WA	Electric Generators, Independent Power Producers	Wind		1	180.0	180.0
2004	WA	Total Electric Power Industry	Wind		2	244.0	243.0
2004	WI	Electric Generators, Electric Utilities	Wind		4	23.0	6.0

Year	State Code	Producer Type	Fuel Source	Generators	Facilities	Nameplate Capacity (Megawatts)	Summer Capacity (Megawatts)
2004	WI	Electric Generators, Independent Power Producers	Wind		1	30.0	30.0
2004	WI	Total Electric Power Industry	Wind		5	53.0	36.0
2004	WV	Electric Generators, Independent Power Producers	Wind		1	66.0	66.0
2004	WV	Total Electric Power Industry	Wind		1	66.0	66.0
2004	WY	Electric Generators, Electric Utilities	Wind		1	6.0	6.0
2004	WY	Electric Generators, Independent Power Producers	Wind		6	279.0	279.0
2004	WY	Total Electric Power Industry	Wind		7	285.0	285.0
2005	AK	Electric Generators, Electric Utilities	Wind		1	10.0	10.0
2005	AK	Total Electric Power Industry	Wind		1	10.0	10.0
2005	CA	Electric Generators, Electric Utilities	Wind		1	13.0	13.0
2005	CA	Electric Generators, Independent Power Producers	Wind		72	2,053.0	2,039.0
2005	CA	Total Electric Power Industry	Wind		73	2,066.0	2,052.0
2005	CO	Electric Generators, Electric Utilities	Wind		2	32.0	31.0
2005	CO	Electric Generators, Independent Power Producers	Wind		3	197.0	197.0
2005	CO	Total Electric Power Industry	Wind		5	229.0	228.0
2005	HI	Electric Generators, Electric Utilities	Wind		1	2.0	2.0
2005	HI	Electric Generators, Independent Power Producers	Wind		1	9.0	9.0
2005	HI	Total Electric Power Industry	Wind		2	11.0	11.0
2005	IA	Electric Generators, Electric Utilities	Wind		3	363.0	363.0
2005	IA	Electric Generators, Independent Power Producers	Wind		7	458.0	458.0
2005	IA	Total Electric Power Industry	Wind		10	820.0	820.0
2005	ID	Electric Generators, Independent Power Producers	Wind		1	11.0	11.0
2005	ID	Total Electric Power Industry	Wind		1	11.0	11.0
2005	IL	Electric Generators, Electric Utilities	Wind		1	2.0	2.0
2005	IL	Electric Generators, Independent Power Producers	Wind		2	103.0	103.0
2005	IL	Total Electric Power Industry	Wind		3	105.0	105.0
2005	KS	Electric Generators, Electric Utilities	Wind		1	1.0	1.0
2005	KS	Electric Generators, Independent Power Producers	Wind		2	262.0	262.0
2005	KS	Total Electric Power Industry	Wind		3	263.0	263.0
2005	MI	Electric Generators, Independent Power Producers	Wind		1	2.0	1.0
2005	MI	Total Electric Power Industry	Wind		1	2.0	1.0
2005	MN	Electric Generators, Electric Utilities	Wind		4	16.0	15.0
2005	MN	Electric Generators, Independent Power Producers	Wind		54	672.0	671.0
2005	MN	Total Electric Power Industry	Wind		58	687.0	687.0
2005	MT	Electric Generators, Independent Power Producers	Wind		1	135.0	135.0
2005	MT	Total Electric Power Industry	Wind		1	135.0	135.0
2005	ND	Electric Generators, Electric Utilities	Wind		1	3.0	3.0
2005	ND	Electric Generators, Independent Power Producers	Wind		2	93.0	93.0
2005	ND	Total Electric Power Industry	Wind		3	96.0	96.0
2005	NE	Electric Generators, Electric Utilities	Wind		4	73.0	73.0
2005	NE	Total Electric Power Industry	Wind		4	73.0	73.0
2005	NM	Electric Generators, Independent Power Producers	Wind		3	404.0	404.0
2005	NM	Total Electric Power Industry	Wind		3	404.0	404.0
2005	NY	Electric Generators, Independent Power Producers	Wind		4	185.0	185.0
2005	NY	Total Electric Power Industry	Wind		4	185.0	185.0
2005	OH	Electric Generators, Electric Utilities	Wind		1	7.0	7.0
2005	OH	Total Electric Power Industry	Wind		1	7.0	7.0
2005	OK	Electric Generators, Independent Power Producers	Wind		4	474.0	474.0
2005	OK	Total Electric Power Industry	Wind		4	474.0	474.0
2005	OR	Electric Generators, Independent Power Producers	Wind		6	299.0	298.0
2005	OR	Total Electric Power Industry	Wind		6	299.0	298.0
2005	PA	Electric Generators, Independent Power Producers	Wind		6	223.0	223.0
2005	PA	Total Electric Power Industry	Wind		6	223.0	223.0
2005	SD	Electric Generators, Electric Utilities	Wind		1	3.0	3.0
2005	SD	Electric Generators, Independent Power Producers	Wind		1	41.0	41.0
2005	SD	Total Electric Power Industry	Wind		2	43.0	43.0
2005	TN	Electric Generators, Independent Power Producers	Wind		1	29.0	29.0
2005	TN	Total Electric Power Industry	Wind		1	29.0	29.0
2005	TX	Electric Generators, Electric Utilities	Wind		1	1.0	1.0
2005	TX	Electric Generators, Independent Power Producers	Wind		18	1,753.0	1,753.0
2005	TX	Total Electric Power Industry	Wind		19	1,755.0	1,755.0
2005	US	Electric Generators, Electric Utilities	Wind		30	776.0	765.0
2005	US	Electric Generators, Independent Power Producers	Wind		198	7,957.0	7,941.0

Year	State Code	Producer Type	Fuel Source	Generators	Facilities	Nameplate Capacity (Megawatts)	Summer Capacity (Megawatts)
2005	US	Total Electric Power Industry	Wind		228	8,733.0	8,706.0
2005	VT	Electric Generators, Electric Utilities	Wind		1	6.0	5.0
2005	VT	Total Electric Power Industry	Wind		1	6.0	5.0
2005	WA	Electric Generators, Electric Utilities	Wind		2	214.0	213.0
2005	WA	Electric Generators, Independent Power Producers	Wind		1	180.0	180.0
2005	WA	Total Electric Power Industry	Wind		3	394.0	393.0
2005	WI	Electric Generators, Electric Utilities	Wind		4	23.0	15.0
2005	WI	Electric Generators, Independent Power Producers	Wind		1	30.0	30.0
2005	WI	Total Electric Power Industry	Wind		5	53.0	45.0
2005	WV	Electric Generators, Independent Power Producers	Wind		1	66.0	66.0
2005	WV	Total Electric Power Industry	Wind		1	66.0	66.0
2005	WY	Electric Generators, Electric Utilities	Wind		1	9.0	9.0
2005	WY	Electric Generators, Independent Power Producers	Wind		6	279.0	279.0
2005	WY	Total Electric Power Industry	Wind		7	287.0	287.0
2006	AK	Electric Generators, Electric Utilities	Wind		1	3.0	3.0
2006	AK	Total Electric Power Industry	Wind		1	3.0	3.0
2006	CA	Electric Generators, Electric Utilities	Wind		1	37.0	37.0
2006	CA	Electric Generators, Independent Power Producers	Wind		73	2,220.0	2,218.0
2006	CA	Total Electric Power Industry	Wind		74	2,257.0	2,255.0
2006	CO	Electric Generators, Electric Utilities	Wind		2	32.0	32.0
2006	CO	Electric Generators, Independent Power Producers	Wind		4	257.0	257.0
2006	CO	Total Electric Power Industry	Wind		6	289.0	289.0
2006	HI	Electric Generators, Electric Utilities	Wind		1	2.0	2.0
2006	HI	Electric Generators, Independent Power Producers	Wind		2	41.0	41.0
2006	HI	Total Electric Power Industry	Wind		3	43.0	43.0
2006	IA	Electric Generators, Electric Utilities	Wind		4	462.0	462.0
2006	IA	Electric Generators, Independent Power Producers	Wind		8	459.0	459.0
2006	IA	Total Electric Power Industry	Wind		12	921.0	921.0
2006	ID	Electric Generators, Independent Power Producers	Wind		2	75.0	75.0
2006	ID	Total Electric Power Industry	Wind		2	75.0	75.0
2006	IL	Electric Generators, Electric Utilities	Wind		1	2.0	2.0
2006	IL	Electric Generators, Independent Power Producers	Wind		2	103.0	103.0
2006	IL	Total Electric Power Industry	Wind		3	105.0	105.0
2006	KS	Electric Generators, Electric Utilities	Wind		2	101.0	101.0
2006	KS	Electric Generators, Independent Power Producers	Wind		2	262.0	262.0
2006	KS	Total Electric Power Industry	Wind		4	363.0	363.0
2006	MI	Electric Generators, Independent Power Producers	Wind		1	2.0	2.0
2006	MI	Total Electric Power Industry	Wind		1	2.0	2.0
2006	MN	Electric Generators, Electric Utilities	Wind		4	16.0	15.0
2006	MN	Electric Generators, Independent Power Producers	Wind		71	813.0	812.0
2006	MN	Total Electric Power Industry	Wind		75	829.0	827.0
2006	MT	Electric Generators, Independent Power Producers	Wind		2	145.0	145.0
2006	MT	Total Electric Power Industry	Wind		2	145.0	145.0
2006	ND	Electric Generators, Electric Utilities	Wind		1	3.0	3.0
2006	ND	Electric Generators, Independent Power Producers	Wind		3	162.0	162.0
2006	ND	Total Electric Power Industry	Wind		4	164.0	164.0
2006	NE	Electric Generators, Electric Utilities	Wind		4	73.0	73.0
2006	NE	Total Electric Power Industry	Wind		4	73.0	73.0
2006	NJ	Electric Generators, Independent Power Producers	Wind		1	8.0	8.0
2006	NJ	Total Electric Power Industry	Wind		1	8.0	8.0
2006	NM	Electric Generators, Independent Power Producers	Wind		4	494.0	494.0
2006	NM	Total Electric Power Industry	Wind		4	494.0	494.0
2006	NY	Electric Generators, Independent Power Producers	Wind		4	370.0	370.0
2006	NY	Total Electric Power Industry	Wind		4	370.0	370.0
2006	OH	Electric Generators, Electric Utilities	Wind		1	7.0	7.0
2006	OH	Total Electric Power Industry	Wind		1	7.0	7.0
2006	OK	Electric Generators, Electric Utilities	Wind		1	120.0	120.0
2006	OK	Electric Generators, Independent Power Producers	Wind		4	474.0	474.0
2006	OK	Total Electric Power Industry	Wind		5	594.0	594.0
2006	OR	Electric Generators, Electric Utilities	Wind		1	101.0	101.0
2006	OR	Electric Generators, Independent Power Producers	Wind		6	299.0	298.0
2006	OR	Total Electric Power Industry	Wind		7	399.0	399.0
2006	PA	Electric Generators, Independent Power Producers	Wind		6	150.0	150.0

Year	State Code	Producer Type	Fuel Source	Generators	Facilities	Nameplate Capacity (Megawatts)	Summer Capacity (Megawatts)
2006	PA	Total Electric Power Industry	Wind		6	150.0	150.0
2006	SD	Electric Generators, Electric Utilities	Wind		1	3.0	3.0
2006	SD	Electric Generators, Independent Power Producers	Wind		1	41.0	41.0
2006	SD	Total Electric Power Industry	Wind		2	43.0	43.0
2006	TN	Electric Generators, Electric Utilities	Wind		1	2.0	2.0
2006	TN	Electric Generators, Independent Power Producers	Wind		1	27.0	27.0
2006	TN	Total Electric Power Industry	Wind		2	29.0	29.0
2006	TX	Electric Generators, Electric Utilities	Wind		1	1.0	1.0
2006	TX	Electric Generators, Independent Power Producers	Wind		26	2,736.0	2,736.0
2006	TX	Total Electric Power Industry	Wind		27	2,738.0	2,738.0
2006	US	Electric Generators, Electric Utilities	Wind		36	1,443.0	1,441.0
2006	US	Electric Generators, Independent Power Producers	Wind		233	9,891.0	9,888.0
2006	US	Total Electric Power Industry	Wind		269	11,334.0	11,329.0
2006	VT	Electric Generators, Electric Utilities	Wind		1	6.0	5.0
2006	VT	Total Electric Power Industry	Wind		1	6.0	5.0
2006	WA	Electric Generators, Electric Utilities	Wind		3	442.0	442.0
2006	WA	Electric Generators, Independent Power Producers	Wind		2	379.0	379.0
2006	WA	Total Electric Power Industry	Wind		5	822.0	821.0
2006	WI	Electric Generators, Electric Utilities	Wind		4	23.0	23.0
2006	WI	Electric Generators, Independent Power Producers	Wind		1	30.0	30.0
2006	WI	Total Electric Power Industry	Wind		5	53.0	53.0
2006	WV	Electric Generators, Independent Power Producers	Wind		1	66.0	66.0
2006	WV	Total Electric Power Industry	Wind		1	66.0	66.0
2006	WY	Electric Generators, Electric Utilities	Wind		1	9.0	9.0
2006	WY	Electric Generators, Independent Power Producers	Wind		6	279.0	279.0
2006	WY	Total Electric Power Industry	Wind		7	287.0	287.0
2007	AK	Electric Generators, Electric Utilities	Wind		1	3.0	3.0
2007	AK	Total Electric Power Industry	Wind		1	3.0	3.0
2007	CA	Electric Generators, Electric Utilities	Wind		1	100.0	100.0
2007	CA	Electric Generators, Independent Power Producers	Wind		71	2,218.0	2,212.0
2007	CA	Total Electric Power Industry	Wind		72	2,318.0	2,312.0
2007	CO	Electric Generators, Electric Utilities	Wind		2	32.0	31.0
2007	CO	Electric Generators, Independent Power Producers	Wind		8	1,033.0	1,032.0
2007	CO	Total Electric Power Industry	Wind		10	1,065.0	1,063.0
2007	HI	Electric Generators, Electric Utilities	Wind		1	2.0	2.0
2007	HI	Electric Generators, Independent Power Producers	Wind		3	62.0	62.0
2007	HI	Total Electric Power Industry	Wind		4	64.0	64.0
2007	IA	Electric Generators, Electric Utilities	Wind		5	675.0	675.0
2007	IA	Electric Generators, Independent Power Producers	Wind		9	495.0	495.0
2007	IA	Total Electric Power Industry	Wind		14	1,170.0	1,170.0
2007	ID	Electric Generators, Independent Power Producers	Wind		2	75.0	75.0
2007	ID	Total Electric Power Industry	Wind		2	75.0	75.0
2007	IL	Electric Generators, Electric Utilities	Wind		1	2.0	2.0
2007	IL	Electric Generators, Independent Power Producers	Wind		7	738.0	738.0
2007	IL	Total Electric Power Industry	Wind		8	740.0	740.0
2007	KS	Electric Generators, Electric Utilities	Wind		2	101.0	101.0
2007	KS	Electric Generators, Independent Power Producers	Wind		2	262.0	262.0
2007	KS	Total Electric Power Industry	Wind		4	363.0	363.0
2007	MA	Electric Generators, Electric Utilities	Wind		1	2.0	2.0
2007	MA	Total Electric Power Industry	Wind		1	2.0	2.0
2007	ME	Electric Generators, Independent Power Producers	Wind		1	42.0	42.0
2007	ME	Total Electric Power Industry	Wind		1	42.0	42.0
2007	MI	Electric Generators, Independent Power Producers	Wind		1	2.0	2.0
2007	MI	Total Electric Power Industry	Wind		1	2.0	2.0
2007	MN	Electric Generators, Electric Utilities	Wind		5	17.0	17.0
2007	MN	Electric Generators, Independent Power Producers	Wind		74	1,122.0	1,122.0
2007	MN	Total Electric Power Industry	Wind		79	1,139.0	1,139.0
2007	MO	Electric Generators, Independent Power Producers	Wind		1	57.0	57.0
2007	MO	Total Electric Power Industry	Wind		1	57.0	57.0
2007	MT	Electric Generators, Independent Power Producers	Wind		3	165.0	149.0
2007	MT	Total Electric Power Industry	Wind		3	165.0	149.0
2007	ND	Electric Generators, Electric Utilities	Wind		1	3.0	3.0
2007	ND	Electric Generators, Independent Power Producers	Wind		6	381.0	381.0

Year	State Code	Producer Type	Fuel Source	Generators	Facilities	Nameplate Capacity (Megawatts)	Summer Capacity (Megawatts)
2007	ND	Total Electric Power Industry	Wind		7	383.0	383.0
2007	NE	Electric Generators, Electric Utilities	Wind		3	71.0	25.0
2007	NE	Total Electric Power Industry	Wind		3	71.0	25.0
2007	NJ	Electric Generators, Independent Power Producers	Wind		1	8.0	8.0
2007	NJ	Total Electric Power Industry	Wind		1	8.0	8.0
2007	NM	Electric Generators, Independent Power Producers	Wind		4	494.0	494.0
2007	NM	Total Electric Power Industry	Wind		4	494.0	494.0
2007	NY	Electric Generators, Independent Power Producers	Wind		6	425.0	425.0
2007	NY	Total Electric Power Industry	Wind		6	425.0	425.0
2007	OH	Electric Generators, Electric Utilities	Wind		1	7.0	7.0
2007	OH	Total Electric Power Industry	Wind		1	7.0	7.0
2007	OK	Electric Generators, Electric Utilities	Wind		1	120.0	120.0
2007	OK	Electric Generators, Independent Power Producers	Wind		5	569.0	569.0
2007	OK	Total Electric Power Industry	Wind		6	689.0	689.0
2007	OR	Electric Generators, Electric Utilities	Wind		2	226.0	226.0
2007	OR	Electric Generators, Independent Power Producers	Wind		8	660.0	659.0
2007	OR	Total Electric Power Industry	Wind		10	886.0	885.0
2007	PA	Electric Generators, Independent Power Producers	Wind		9	293.0	293.0
2007	PA	Total Electric Power Industry	Wind		9	293.0	293.0
2007	SD	Electric Generators, Electric Utilities	Wind		1	3.0	3.0
2007	SD	Electric Generators, Independent Power Producers	Wind		1	41.0	41.0
2007	SD	Total Electric Power Industry	Wind		2	43.0	43.0
2007	TN	Electric Generators, Electric Utilities	Wind		1	2.0	2.0
2007	TN	Electric Generators, Independent Power Producers	Wind		1	27.0	27.0
2007	TN	Total Electric Power Industry	Wind		2	29.0	29.0
2007	TX	Electric Generators, Electric Utilities	Wind		1	1.0	1.0
2007	TX	Electric Generators, Independent Power Producers	Wind		38	4,489.0	4,489.0
2007	TX	Total Electric Power Industry	Wind		39	4,490.0	4,490.0
2007	US	Electric Generators, Electric Utilities	Wind		40	1,987.0	1,928.0
2007	US	Electric Generators, Independent Power Producers	Wind		272	14,609.0	14,587.0
2007	US	Total Electric Power Industry	Wind		312	16,596.0	16,515.0
2007	VT	Electric Generators, Electric Utilities	Wind		1	6.0	5.0
2007	VT	Total Electric Power Industry	Wind		1	6.0	5.0
2007	WA	Electric Generators, Electric Utilities	Wind		4	583.0	582.0
2007	WA	Electric Generators, Independent Power Producers	Wind		3	580.0	580.0
2007	WA	Total Electric Power Industry	Wind		7	1,163.0	1,162.0
2007	WI	Electric Generators, Electric Utilities	Wind		4	23.0	14.0
2007	WI	Electric Generators, Independent Power Producers	Wind		1	30.0	30.0
2007	WI	Total Electric Power Industry	Wind		5	53.0	44.0
2007	WV	Electric Generators, Independent Power Producers	Wind		1	66.0	66.0
2007	WV	Total Electric Power Industry	Wind		1	66.0	66.0
2007	WY	Electric Generators, Electric Utilities	Wind		1	9.0	9.0
2007	WY	Electric Generators, Independent Power Producers	Wind		6	279.0	279.0
2007	WY	Total Electric Power Industry	Wind		7	287.0	287.0
2008	AK	Electric Generators, Electric Utilities	Wind		1	3.0	3.0
2008	AK	Total Electric Power Industry	Wind		1	3.0	3.0
2008	CA	Electric Generators, Electric Utilities	Wind		1	100.0	100.0
2008	CA	Electric Generators, Independent Power Producers	Wind		72	2,271.0	2,268.0
2008	CA	Total Electric Power Industry	Wind		73	2,371.0	2,368.0
2008	CO	Electric Generators, Electric Utilities	Wind		2	32.0	31.0
2008	CO	Electric Generators, Independent Power Producers	Wind		8	1,033.0	1,032.0
2008	CO	Total Electric Power Industry	Wind		10	1,065.0	1,063.0
2008	HI	Electric Generators, Electric Utilities	Wind		1	2.0	2.0
2008	HI	Electric Generators, Independent Power Producers	Wind		3	62.0	62.0
2008	HI	Total Electric Power Industry	Wind		4	64.0	64.0
2008	IA	Electric Generators, Electric Utilities	Wind		10	1,316.0	1,290.0
2008	IA	Electric Generators, Independent Power Producers	Wind		16	1,345.0	1,345.0
2008	IA	Total Electric Power Industry	Wind		26	2,661.0	2,635.0
2008	ID	Electric Generators, Independent Power Producers	Wind		4	117.0	117.0
2008	ID	Total Electric Power Industry	Wind		4	117.0	117.0
2008	IL	Electric Generators, Electric Utilities	Wind		1	2.0	2.0
2008	IL	Electric Generators, Independent Power Producers	Wind		9	960.0	960.0
2008	IL	Total Electric Power Industry	Wind		10	962.0	962.0

Year	State Code	Producer Type	Fuel Source	Generators	Facilities	Nameplate Capacity (Megawatts)	Summer Capacity (Megawatts)
2008	IN	Electric Generators, Independent Power Producers	Wind		1	131.0	131.0
2008	IN	Total Electric Power Industry	Wind		1	131.0	131.0
2008	KS	Electric Generators, Electric Utilities	Wind		1	100.0	100.0
2008	KS	Electric Generators, Independent Power Producers	Wind		5	712.0	712.0
2008	KS	Total Electric Power Industry	Wind		6	812.0	812.0
2008	MA	Electric Generators, Electric Utilities	Wind		1	2.0	2.0
2008	MA	Total Electric Power Industry	Wind		1	2.0	2.0
2008	ME	Electric Generators, Independent Power Producers	Wind		2	47.0	47.0
2008	ME	Total Electric Power Industry	Wind		2	47.0	47.0
2008	MI	Electric Generators, Independent Power Producers	Wind		3	124.0	124.0
2008	MI	Total Electric Power Industry	Wind		3	124.0	124.0
2008	MN	Electric Generators, Electric Utilities	Wind		7	143.0	121.0
2008	MN	Electric Generators, Independent Power Producers	Wind		92	1,339.0	1,339.0
2008	MN	Total Electric Power Industry	Wind		99	1,481.0	1,460.0
2008	MO	Electric Generators, Independent Power Producers	Wind		4	163.0	163.0
2008	MO	Total Electric Power Industry	Wind		4	163.0	163.0
2008	MT	Electric Generators, Electric Utilities	Wind		1	20.0	6.0
2008	MT	Electric Generators, Independent Power Producers	Wind		3	252.0	249.0
2008	MT	Total Electric Power Industry	Wind		4	271.0	255.0
2008	ND	Electric Generators, Electric Utilities	Wind		3	91.0	26.0
2008	ND	Electric Generators, Independent Power Producers	Wind		9	750.0	750.0
2008	ND	Total Electric Power Industry	Wind		12	841.0	776.0
2008	NE	Electric Generators, Electric Utilities	Wind		3	71.0	25.0
2008	NE	Total Electric Power Industry	Wind		3	71.0	25.0
2008	NH	Electric Generators, Independent Power Producers	Wind		1	24.0	24.0
2008	NH	Total Electric Power Industry	Wind		1	24.0	24.0
2008	NJ	Electric Generators, Independent Power Producers	Wind		1	8.0	8.0
2008	NJ	Total Electric Power Industry	Wind		1	8.0	8.0
2008	NM	Electric Generators, Independent Power Producers	Wind		5	496.0	496.0
2008	NM	Total Electric Power Industry	Wind		5	496.0	496.0
2008	NY	Electric Generators, Independent Power Producers	Wind		9	707.0	707.0
2008	NY	Total Electric Power Industry	Wind		9	707.0	707.0
2008	OH	Electric Generators, Electric Utilities	Wind		1	7.0	7.0
2008	OH	Total Electric Power Industry	Wind		1	7.0	7.0
2008	OK	Electric Generators, Electric Utilities	Wind		1	120.0	120.0
2008	OK	Electric Generators, Independent Power Producers	Wind		6	588.0	588.0
2008	OK	Total Electric Power Industry	Wind		7	708.0	708.0
2008	OR	Electric Generators, Electric Utilities	Wind		2	229.0	226.0
2008	OR	Electric Generators, Independent Power Producers	Wind		9	839.0	833.0
2008	OR	Total Electric Power Industry	Wind		11	1,068.0	1,059.0
2008	PA	Electric Generators, Independent Power Producers	Wind		11	361.0	361.0
2008	PA	Total Electric Power Industry	Wind		11	361.0	361.0
2008	SD	Electric Generators, Electric Utilities	Wind		1	3.0	3.0
2008	SD	Electric Generators, Independent Power Producers	Wind		2	191.0	191.0
2008	SD	Total Electric Power Industry	Wind		3	193.0	193.0
2008	TN	Electric Generators, Electric Utilities	Wind		1	2.0	2.0
2008	TN	Electric Generators, Independent Power Producers	Wind		1	27.0	27.0
2008	TN	Total Electric Power Industry	Wind		2	29.0	29.0
2008	TX	Electric Generators, Electric Utilities	Wind		1	1.0	1.0
2008	TX	Electric Generators, Independent Power Producers	Wind		62	7,430.0	7,425.0
2008	TX	Total Electric Power Industry	Wind		63	7,431.0	7,427.0
2008	US	Electric Generators, Electric Utilities	Wind		54	3,502.0	3,190.0
2008	US	Electric Generators, Independent Power Producers	Wind		355	21,478.0	21,461.0
2008	US	Total Electric Power Industry	Wind		409	24,980.0	24,651.0
2008	UT	Electric Generators, Independent Power Producers	Wind		1	19.0	19.0
2008	UT	Total Electric Power Industry	Wind		1	19.0	19.0
2008	VT	Electric Generators, Electric Utilities	Wind		1	6.0	5.0
2008	VT	Total Electric Power Industry	Wind		1	6.0	5.0
2008	WA	Electric Generators, Electric Utilities	Wind		5	786.0	785.0
2008	WA	Electric Generators, Independent Power Producers	Wind		3	580.0	580.0
2008	WA	Total Electric Power Industry	Wind		8	1,366.0	1,365.0
2008	WI	Electric Generators, Electric Utilities	Wind		6	236.0	102.0
2008	WI	Electric Generators, Independent Power Producers	Wind		2	129.0	129.0

Year	State Code	Producer Type	Fuel Source	Generators	Facilities	Nameplate Capacity (Megawatts)	Summer Capacity (Megawatts)
2008	WI	Total Electric Power Industry	Wind		8	365.0	231.0
2008	WV	Electric Generators, Independent Power Producers	Wind		2	330.0	330.0
2008	WV	Total Electric Power Industry	Wind		2	330.0	330.0
2008	WY	Electric Generators, Electric Utilities	Wind		3	231.0	231.0
2008	WY	Electric Generators, Independent Power Producers	Wind		9	449.0	449.0
2008	WY	Total Electric Power Industry	Wind		12	680.0	680.0
2009	AK	Electric Generators, Electric Utilities	Wind		2	7.0	7.0
2009	AK	Total Electric Power Industry	Wind		2	7.0	7.0
2009	AZ	Electric Generators, Independent Power Producers	Wind		1	63.0	63.0
2009	AZ	Total Electric Power Industry	Wind		1	63.0	63.0
2009	CA	Electric Generators, Electric Utilities	Wind		2	220.0	220.0
2009	CA	Electric Generators, Independent Power Producers	Wind		74	2,432.0	2,430.0
2009	CA	Total Electric Power Industry	Wind		76	2,653.0	2,650.0
2009	CO	Electric Generators, Electric Utilities	Wind		2	32.0	31.0
2009	CO	Electric Generators, Independent Power Producers	Wind		9	1,207.0	1,207.0
2009	CO	Total Electric Power Industry	Wind		11	1,240.0	1,238.0
2009	HI	Electric Generators, Electric Utilities	Wind		1	2.0	2.0
2009	HI	Electric Generators, Independent Power Producers	Wind		3	62.0	62.0
2009	HI	Total Electric Power Industry	Wind		4	64.0	64.0
2009	IA	Electric Generators, Electric Utilities	Wind		16	1,639.0	1,543.0
2009	IA	Electric Generators, Independent Power Producers	Wind		22	1,809.0	1,809.0
2009	IA	Total Electric Power Industry	Wind		38	3,448.0	3,352.0
2009	ID	Electric Generators, Independent Power Producers	Wind		6	146.0	146.0
2009	ID	Total Electric Power Industry	Wind		6	146.0	146.0
2009	IL	Electric Generators, Electric Utilities	Wind		2	5.0	5.0
2009	IL	Electric Generators, Independent Power Producers	Wind		13	1,591.0	1,591.0
2009	IL	Total Electric Power Industry	Wind		15	1,596.0	1,596.0
2009	IN	Electric Generators, Independent Power Producers	Wind		4	1,037.0	1,037.0
2009	IN	Total Electric Power Industry	Wind		4	1,037.0	1,037.0
2009	KS	Electric Generators, Electric Utilities	Wind		3	249.0	249.0
2009	KS	Electric Generators, Independent Power Producers	Wind		6	762.0	762.0
2009	KS	Total Electric Power Industry	Wind		9	1,011.0	1,011.0
2009	MA	Combined Heat and Power, Commercial Power	Wind		1	1.0	1.0
2009	MA	Electric Generators, Electric Utilities	Wind		1	2.0	2.0
2009	MA	Electric Generators, Independent Power Producers	Wind		1	2.0	2.0
2009	MA	Total Electric Power Industry	Wind		3	5.0	5.0
2009	ME	Electric Generators, Independent Power Producers	Wind		4	170.0	170.0
2009	ME	Total Electric Power Industry	Wind		4	170.0	170.0
2009	MI	Electric Generators, Independent Power Producers	Wind		4	143.0	143.0
2009	MI	Total Electric Power Industry	Wind		4	143.0	143.0
2009	MN	Electric Generators, Electric Utilities	Wind		8	147.0	125.0
2009	MN	Electric Generators, Independent Power Producers	Wind		94	1,489.0	1,489.0
2009	MN	Total Electric Power Industry	Wind		102	1,636.0	1,615.0
2009	MO	Electric Generators, Independent Power Producers	Wind		5	309.0	309.0
2009	MO	Total Electric Power Industry	Wind		5	309.0	309.0
2009	MT	Electric Generators, Electric Utilities	Wind		1	20.0	20.0
2009	MT	Electric Generators, Independent Power Producers	Wind		4	355.0	349.0
2009	MT	Total Electric Power Industry	Wind		5	375.0	369.0
2009	ND	Electric Generators, Electric Utilities	Wind		5	261.0	134.0
2009	ND	Electric Generators, Independent Power Producers	Wind		12	1,068.0	1,068.0
2009	ND	Total Electric Power Industry	Wind		17	1,329.0	1,202.0
2009	NE	Electric Generators, Electric Utilities	Wind		3	71.0	24.0
2009	NE	Electric Generators, Independent Power Producers	Wind		1	81.0	81.0
2009	NE	Total Electric Power Industry	Wind		4	152.0	105.0
2009	NH	Electric Generators, Independent Power Producers	Wind		1	24.0	24.0
2009	NH	Total Electric Power Industry	Wind		1	24.0	24.0
2009	NJ	Electric Generators, Independent Power Producers	Wind		1	8.0	8.0
2009	NJ	Total Electric Power Industry	Wind		1	8.0	8.0
2009	NM	Electric Generators, Independent Power Producers	Wind		7	597.0	597.0
2009	NM	Total Electric Power Industry	Wind		7	597.0	597.0
2009	NY	Electric Generators, Independent Power Producers	Wind		15	1,274.0	1,274.0
2009	NY	Total Electric Power Industry	Wind		15	1,274.0	1,274.0
2009	OH	Electric Generators, Electric Utilities	Wind		1	7.0	7.0

Year	State Code	Producer Type	Fuel Source	Generators	Facilities	Nameplate Capacity (Megawatts)	Summer Capacity (Megawatts)
2009	OH	Total Electric Power Industry	Wind		1	7.0	7.0
2009	OK	Electric Generators, Electric Utilities	Wind		2	221.0	221.0
2009	OK	Electric Generators, Independent Power Producers	Wind		9	909.0	909.0
2009	OK	Total Electric Power Industry	Wind		11	1,130.0	1,130.0
2009	OR	Electric Generators, Electric Utilities	Wind		2	375.0	375.0
2009	OR	Electric Generators, Independent Power Producers	Wind		23	1,290.0	1,283.0
2009	OR	Total Electric Power Industry	Wind		25	1,665.0	1,659.0
2009	PA	Electric Generators, Independent Power Producers	Wind		16	748.0	696.0
2009	PA	Total Electric Power Industry	Wind		16	748.0	696.0
2009	SD	Electric Generators, Electric Utilities	Wind		1	3.0	3.0
2009	SD	Electric Generators, Independent Power Producers	Wind		5	317.0	317.0
2009	SD	Total Electric Power Industry	Wind		6	320.0	320.0
2009	TN	Electric Generators, Electric Utilities	Wind		1	2.0	2.0
2009	TN	Electric Generators, Independent Power Producers	Wind		1	27.0	27.0
2009	TN	Total Electric Power Industry	Wind		2	29.0	29.0
2009	TX	Electric Generators, Electric Utilities	Wind		1	1.0	1.0
2009	TX	Electric Generators, Independent Power Producers	Wind		75	9,383.0	9,377.0
2009	TX	Total Electric Power Industry	Wind		76	9,384.0	9,378.0
2009	US	Combined Heat and Power, Commercial Power	Wind		1	1.0	1.0
2009	US	Electric Generators, Electric Utilities	Wind		73	4,969.0	4,655.0
2009	US	Electric Generators, Independent Power Producers	Wind		440	29,713.0	29,640.0
2009	US	Total Electric Power Industry	Wind		514	34,683.0	34,296.0
2009	UT	Electric Generators, Independent Power Producers	Wind		2	222.0	222.0
2009	UT	Total Electric Power Industry	Wind		2	222.0	222.0
2009	VT	Electric Generators, Electric Utilities	Wind		1	6.0	5.0
2009	VT	Total Electric Power Industry	Wind		1	6.0	5.0
2009	WA	Electric Generators, Electric Utilities	Wind		6	967.0	966.0
2009	WA	Electric Generators, Independent Power Producers	Wind		5	1,040.0	1,040.0
2009	WA	Total Electric Power Industry	Wind		11	2,007.0	2,006.0
2009	WI	Electric Generators, Electric Utilities	Wind		6	236.0	217.0
2009	WI	Electric Generators, Independent Power Producers	Wind		3	213.0	213.0
2009	WI	Total Electric Power Industry	Wind		9	449.0	430.0
2009	WV	Electric Generators, Independent Power Producers	Wind		2	330.0	330.0
2009	WV	Total Electric Power Industry	Wind		2	330.0	330.0
2009	WY	Electric Generators, Electric Utilities	Wind		6	497.0	497.0
2009	WY	Electric Generators, Independent Power Producers	Wind		12	607.0	607.0
2009	WY	Total Electric Power Industry	Wind		18	1,104.0	1,104.0
2010	AK	Electric Generators, Electric Utilities	Wind		2	7.0	7.0
2010	AK	Total Electric Power Industry	Wind		2	7.0	7.0
2010	AZ	Electric Generators, Independent Power Producers	Wind		2	128.0	128.0
2010	AZ	Total Electric Power Industry	Wind		2	128.0	128.0
2010	CA	Electric Generators, Electric Utilities	Wind		2	235.0	235.0
2010	CA	Electric Generators, Independent Power Producers	Wind		77	2,579.0	2,577.0
2010	CA	Total Electric Power Industry	Wind		79	2,814.0	2,812.0
2010	CO	Combined Heat and Power, Commercial Power	Wind		1	4.0	4.0
2010	CO	Combined Heat and Power, Industrial Power	Wind		1	2.0	2.0
2010	CO	Electric Generators, Electric Utilities	Wind		2	32.0	31.0
2010	CO	Electric Generators, Independent Power Producers	Wind		10	1,258.0	1,258.0
2010	CO	Total Electric Power Industry	Wind		14	1,296.0	1,294.0
2010	DE	Electric Generators, Independent Power Producers	Wind		1	2.0	2.0
2010	DE	Total Electric Power Industry	Wind		1	2.0	2.0
2010	HI	Electric Generators, Independent Power Producers	Wind		3	62.0	62.0
2010	HI	Total Electric Power Industry	Wind		3	62.0	62.0
2010	IA	Electric Generators, Electric Utilities	Wind		16	1,639.0	1,543.0
2010	IA	Electric Generators, Independent Power Producers	Wind		25	2,027.0	2,027.0
2010	IA	Total Electric Power Industry	Wind		41	3,665.0	3,569.0
2010	ID	Electric Generators, Independent Power Producers	Wind		11	352.0	352.0
2010	ID	Total Electric Power Industry	Wind		11	352.0	352.0
2010	IL	Electric Generators, Electric Utilities	Wind		2	5.0	5.0
2010	IL	Electric Generators, Independent Power Producers	Wind		15	1,941.0	1,941.0
2010	IL	Total Electric Power Industry	Wind		17	1,946.0	1,946.0
2010	IN	Combined Heat and Power, Commercial Power	Wind		1	1.0	1.0
2010	IN	Electric Generators, Independent Power Producers	Wind		8	1,339.0	1,339.0

Year	State Code	Producer Type	Fuel Source	Generators	Facilities	Nameplate Capacity (Megawatts)	Summer Capacity (Megawatts)
2010	IN	Total Electric Power Industry	Wind		9	1,340.0	1,340.0
2010	KS	Electric Generators, Electric Utilities	Wind		3	297.0	297.0
2010	KS	Electric Generators, Independent Power Producers	Wind		7	775.0	775.0
2010	KS	Total Electric Power Industry	Wind		10	1,072.0	1,072.0
2010	MA	Combined Heat and Power, Commercial Power	Wind		1	1.0	1.0
2010	MA	Electric Generators, Electric Utilities	Wind		3	7.0	6.0
2010	MA	Electric Generators, Independent Power Producers	Wind		2	3.0	3.0
2010	MA	Total Electric Power Industry	Wind		6	11.0	10.0
2010	MD	Electric Generators, Independent Power Producers	Wind		1	70.0	70.0
2010	MD	Total Electric Power Industry	Wind		1	70.0	70.0
2010	ME	Electric Generators, Independent Power Producers	Wind		6	266.0	263.0
2010	ME	Total Electric Power Industry	Wind		6	266.0	263.0
2010	MI	Electric Generators, Independent Power Producers	Wind		4	164.0	163.0
2010	MI	Total Electric Power Industry	Wind		4	164.0	163.0
2010	MN	Combined Heat and Power, Commercial Power	Wind		1	5.0	5.0
2010	MN	Electric Generators, Electric Utilities	Wind		9	348.0	347.0
2010	MN	Electric Generators, Independent Power Producers	Wind		96	1,657.0	1,657.0
2010	MN	Total Electric Power Industry	Wind		106	2,009.0	2,009.0
2010	MO	Electric Generators, Independent Power Producers	Wind		6	459.0	459.0
2010	MO	Total Electric Power Industry	Wind		6	459.0	459.0
2010	MT	Electric Generators, Electric Utilities	Wind		1	30.0	30.0
2010	MT	Electric Generators, Independent Power Producers	Wind		4	355.0	349.0
2010	MT	Total Electric Power Industry	Wind		5	385.0	379.0
2010	ND	Electric Generators, Electric Utilities	Wind		7	317.0	190.0
2010	ND	Electric Generators, Independent Power Producers	Wind		14	1,233.0	1,233.0
2010	ND	Total Electric Power Industry	Wind		21	1,550.0	1,423.0
2010	NE	Electric Generators, Electric Utilities	Wind		3	71.0	18.0
2010	NE	Electric Generators, Independent Power Producers	Wind		2	141.0	136.0
2010	NE	Total Electric Power Industry	Wind		5	212.0	154.0
2010	NH	Electric Generators, Independent Power Producers	Wind		1	24.0	24.0
2010	NH	Total Electric Power Industry	Wind		1	24.0	24.0
2010	NJ	Electric Generators, Independent Power Producers	Wind		1	8.0	8.0
2010	NJ	Total Electric Power Industry	Wind		1	8.0	8.0
2010	NM	Electric Generators, Independent Power Producers	Wind		8	700.0	700.0
2010	NM	Total Electric Power Industry	Wind		8	700.0	700.0
2010	NY	Electric Generators, Independent Power Producers	Wind		15	1,274.0	1,274.0
2010	NY	Total Electric Power Industry	Wind		15	1,274.0	1,274.0
2010	OH	Electric Generators, Electric Utilities	Wind		1	7.0	7.0
2010	OH	Total Electric Power Industry	Wind		1	7.0	7.0
2010	OK	Electric Generators, Electric Utilities	Wind		2	221.0	221.0
2010	OK	Electric Generators, Independent Power Producers	Wind		11	1,259.0	1,259.0
2010	OK	Total Electric Power Industry	Wind		13	1,480.0	1,480.0
2010	OR	Electric Generators, Electric Utilities	Wind		2	550.0	550.0
2010	OR	Electric Generators, Independent Power Producers	Wind		26	1,460.0	1,454.0
2010	OR	Total Electric Power Industry	Wind		28	2,011.0	2,004.0
2010	PA	Electric Generators, Independent Power Producers	Wind		16	748.0	696.0
2010	PA	Total Electric Power Industry	Wind		16	748.0	696.0
2010	RI	Electric Generators, Independent Power Producers	Wind		1	2.0	2.0
2010	RI	Total Electric Power Industry	Wind		1	2.0	2.0
2010	SD	Electric Generators, Electric Utilities	Wind		1	3.0	3.0
2010	SD	Electric Generators, Independent Power Producers	Wind		7	626.0	626.0
2010	SD	Total Electric Power Industry	Wind		8	629.0	629.0
2010	TN	Electric Generators, Electric Utilities	Wind		1	2.0	2.0
2010	TN	Electric Generators, Independent Power Producers	Wind		1	27.0	27.0
2010	TN	Total Electric Power Industry	Wind		2	29.0	29.0
2010	TX	Electric Generators, Electric Utilities	Wind		1	1.0	1.0
2010	TX	Electric Generators, Independent Power Producers	Wind		81	9,957.0	9,951.0
2010	TX	Total Electric Power Industry	Wind		82	9,958.0	9,952.0
2010	US	Combined Heat and Power, Commercial Power	Wind		4	11.0	11.0
2010	US	Combined Heat and Power, Industrial Power	Wind		1	2.0	2.0
2010	US	Electric Generators, Electric Utilities	Wind		79	5,638.0	5,338.0
2010	US	Electric Generators, Independent Power Producers	Wind		492	33,866.0	33,784.0
2010	US	Total Electric Power Industry	Wind		576	39,516.0	39,135.0

Year	State Code	Producer Type	Fuel Source	Generators	Facilities	Nameplate Capacity (Megawatts)	Summer Capacity (Megawatts)
2010	UT	Electric Generators, Independent Power Producers	Wind		2	222.0	222.0
2010	UT	Total Electric Power Industry	Wind		2	222.0	222.0
2010	VT	Electric Generators, Electric Utilities	Wind		1	6.0	5.0
2010	VT	Total Electric Power Industry	Wind		1	6.0	5.0
2010	WA	Electric Generators, Electric Utilities	Wind		7	1,017.0	1,016.0
2010	WA	Electric Generators, Independent Power Producers	Wind		8	1,281.0	1,281.0
2010	WA	Total Electric Power Industry	Wind		15	2,297.0	2,296.0
2010	WI	Electric Generators, Electric Utilities	Wind		6	236.0	216.0
2010	WI	Electric Generators, Independent Power Producers	Wind		4	233.0	233.0
2010	WI	Total Electric Power Industry	Wind		10	469.0	449.0
2010	WV	Electric Generators, Independent Power Producers	Wind		3	431.0	431.0
2010	WV	Total Electric Power Industry	Wind		3	431.0	431.0
2010	WY	Electric Generators, Electric Utilities	Wind		7	608.0	608.0
2010	WY	Electric Generators, Independent Power Producers	Wind		13	807.0	807.0
2010	WY	Total Electric Power Industry	Wind		20	1,415.0	1,415.0
2011	AK	Electric Generators, Electric Utilities	Wind	18	2	7.4	7.4
2011	AK	Total Electric Power Industry	Wind	18	2	7.4	7.4
2011	AZ	Electric Generators, Independent Power Producers	Wind	3	3	138.1	138.1
2011	AZ	Total Electric Power Industry	Wind	3	3	138.1	138.1
2011	CA	Electric Generators, Electric Utilities	Wind	4	2	235.2	235.1
2011	CA	Electric Generators, Independent Power Producers	Wind	99	88	3,535.5	3,535.0
2011	CA	Total Electric Power Industry	Wind	103	90	3,770.7	3,770.1
2011	CO	Commercial Power	Wind	4	1	8.8	8.8
2011	CO	Electric Generators, Electric Utilities	Wind	4	2	31.3	30.8
2011	CO	Electric Generators, Independent Power Producers	Wind	13	12	1,761.0	1,751.5
2011	CO	Industrial Power	Wind	1	1	1.8	1.8
2011	CO	Total Electric Power Industry	Wind	22	16	1,802.9	1,792.9
2011	DE	Commercial Power	Wind	1	1	2.0	2.0
2011	DE	Total Electric Power Industry	Wind	1	1	2.0	2.0
2011	HI	Electric Generators, Independent Power Producers	Wind	4	4	91.6	91.6
2011	HI	Total Electric Power Industry	Wind	4	4	91.6	91.6
2011	IA	Commercial Power	Wind	1	1	1.0	1.0
2011	IA	Electric Generators, Electric Utilities	Wind	23	18	2,232.3	2,133.9
2011	IA	Electric Generators, Independent Power Producers	Wind	29	26	2,068.3	2,068.3
2011	IA	Total Electric Power Industry	Wind	53	45	4,301.6	4,203.2
2011	ID	Electric Generators, Independent Power Producers	Wind	23	23	611.3	611.3
2011	ID	Total Electric Power Industry	Wind	23	23	611.3	611.3
2011	IL	Electric Generators, Electric Utilities	Wind	4	3	6.2	6.2
2011	IL	Electric Generators, Independent Power Producers	Wind	22	19	2,731.1	2,731.1
2011	IL	Total Electric Power Industry	Wind	26	22	2,737.3	2,737.3
2011	IN	Commercial Power	Wind	1	1	1.0	1.0
2011	IN	Electric Generators, Independent Power Producers	Wind	11	8	1,338.7	1,338.7
2011	IN	Total Electric Power Industry	Wind	12	9	1,339.7	1,339.7
2011	KS	Electric Generators, Electric Utilities	Wind	4	3	297.0	297.0
2011	KS	Electric Generators, Independent Power Producers	Wind	9	8	974.8	974.8
2011	KS	Total Electric Power Industry	Wind	13	11	1,271.8	1,271.8
2011	MA	Commercial Power	Wind	3	2	2.9	2.0
2011	MA	Electric Generators, Electric Utilities	Wind	4	4	21.4	21.4
2011	MA	Electric Generators, Independent Power Producers	Wind	4	2	6.2	6.2
2011	MA	Total Electric Power Industry	Wind	11	8	30.5	29.6
2011	MD	Electric Generators, Independent Power Producers	Wind	3	3	120.0	120.0
2011	MD	Total Electric Power Industry	Wind	3	3	120.0	120.0
2011	ME	Electric Generators, Independent Power Producers	Wind	8	7	325.5	322.5
2011	ME	Total Electric Power Industry	Wind	8	7	325.5	322.5
2011	MI	Electric Generators, Electric Utilities	Wind	1	1	102.0	102.0
2011	MI	Electric Generators, Independent Power Producers	Wind	5	5	273.6	272.6
2011	MI	Total Electric Power Industry	Wind	6	6	375.6	374.6
2011	MN	Commercial Power	Wind	6	3	9.4	8.3
2011	MN	Electric Generators, Electric Utilities	Wind	22	11	592.8	591.3
2011	MN	Electric Generators, Independent Power Producers	Wind	110	105	1,977.9	1,976.7
2011	MN	Total Electric Power Industry	Wind	138	119	2,580.1	2,576.3
2011	MO	Electric Generators, Independent Power Producers	Wind	6	6	458.5	458.5
2011	MO	Total Electric Power Industry	Wind	6	6	458.5	458.5

Year	State Code	Producer Type	Fuel Source	Generators	Facilities	Nameplate Capacity (Megawatts)	Summer Capacity (Megawatts)
2011	MT	Electric Generators, Electric Utilities	Wind	1	1	30.0	30.0
2011	MT	Electric Generators, Independent Power Producers	Wind	4	4	354.0	348.2
2011	MT	Total Electric Power Industry	Wind	5	5	384.0	378.2
2011	ND	Electric Generators, Electric Utilities	Wind	8	7	316.9	190.1
2011	ND	Electric Generators, Independent Power Producers	Wind	16	14	1,232.8	1,232.8
2011	ND	Total Electric Power Industry	Wind	24	21	1,549.7	1,422.9
2011	NE	Electric Generators, Electric Utilities	Wind	4	3	71.1	71.1
2011	NE	Electric Generators, Independent Power Producers	Wind	4	4	261.4	261.4
2011	NE	Total Electric Power Industry	Wind	8	7	332.5	332.5
2011	NH	Electric Generators, Independent Power Producers	Wind	1	1	24.0	24.0
2011	NH	Total Electric Power Industry	Wind	1	1	24.0	24.0
2011	NJ	Electric Generators, Independent Power Producers	Wind	1	1	7.5	7.5
2011	NJ	Total Electric Power Industry	Wind	1	1	7.5	7.5
2011	NM	Commercial Power	Wind	1	1	1.5	1.5
2011	NM	Electric Generators, Independent Power Producers	Wind	9	8	748.7	748.7
2011	NM	Total Electric Power Industry	Wind	10	9	750.2	750.2
2011	NY	Electric Generators, Independent Power Producers	Wind	20	17	1,398.9	1,398.9
2011	NY	Total Electric Power Industry	Wind	20	17	1,398.9	1,398.9
2011	OH	Electric Generators, Electric Utilities	Wind	4	1	7.2	7.2
2011	OH	Electric Generators, Independent Power Producers	Wind	1	1	150.0	150.0
2011	OH	Industrial Power	Wind	1	1	2.5	2.5
2011	OH	Total Electric Power Industry	Wind	6	3	159.7	159.7
2011	OK	Electric Generators, Electric Utilities	Wind	2	2	221.2	221.2
2011	OK	Electric Generators, Independent Power Producers	Wind	17	14	1,589.6	1,589.6
2011	OK	Total Electric Power Industry	Wind	19	16	1,810.8	1,810.8
2011	OR	Electric Generators, Electric Utilities	Wind	4	2	550.2	550.2
2011	OR	Electric Generators, Independent Power Producers	Wind	30	28	1,664.3	1,657.8
2011	OR	Total Electric Power Industry	Wind	34	30	2,214.5	2,208.0
2011	PA	Electric Generators, Independent Power Producers	Wind	18	18	789.3	789.3
2011	PA	Total Electric Power Industry	Wind	18	18	789.3	789.3
2011	RI	Electric Generators, Independent Power Producers	Wind	1	1	1.5	1.5
2011	RI	Total Electric Power Industry	Wind	1	1	1.5	1.5
2011	SD	Electric Generators, Electric Utilities	Wind	3	2	154.1	154.1
2011	SD	Electric Generators, Independent Power Producers	Wind	7	7	625.9	625.9
2011	SD	Total Electric Power Industry	Wind	10	9	780.0	780.0
2011	TN	Electric Generators, Electric Utilities	Wind	3	1	1.8	2.1
2011	TN	Electric Generators, Independent Power Producers	Wind	1	1	27.0	27.0
2011	TN	Total Electric Power Industry	Wind	4	2	28.8	29.1
2011	TX	Electric Generators, Electric Utilities	Wind	2	2	79.5	79.5
2011	TX	Electric Generators, Independent Power Producers	Wind	94	85	10,287.9	10,281.8
2011	TX	Total Electric Power Industry	Wind	96	87	10,367.4	10,361.3
2011	US	Commercial Power	Wind	17	10	26.6	24.6
2011	US	Electric Generators, Electric Utilities	Wind	151	89	7,006.1	6,735.2
2011	US	Electric Generators, Independent Power Producers	Wind	611	558	38,945.4	38,911.8
2011	US	Industrial Power	Wind	2	2	4.3	4.3
2011	US	Total Electric Power Industry	Wind	781	659	45,982.4	45,675.9
2011	UT	Electric Generators, Independent Power Producers	Wind	3	3	324.4	324.4
2011	UT	Total Electric Power Industry	Wind	3	3	324.4	324.4
2011	VT	Electric Generators, Electric Utilities	Wind	1	1	6.0	5.2
2011	VT	Electric Generators, Independent Power Producers	Wind	1	1	40.0	40.0
2011	VT	Total Electric Power Industry	Wind	2	2	46.0	45.2
2011	WA	Electric Generators, Electric Utilities	Wind	10	7	1,020.4	1,015.7
2011	WA	Electric Generators, Independent Power Producers	Wind	11	10	1,437.8	1,437.8
2011	WA	Total Electric Power Industry	Wind	21	17	2,458.2	2,453.5
2011	WI	Electric Generators, Electric Utilities	Wind	8	7	397.5	378.5
2011	WI	Electric Generators, Independent Power Producers	Wind	5	4	233.0	233.0
2011	WI	Total Electric Power Industry	Wind	13	11	630.5	611.5
2011	WV	Electric Generators, Independent Power Producers	Wind	5	4	528.1	528.1
2011	WV	Total Electric Power Industry	Wind	5	4	528.1	528.1
2011	WY	Electric Generators, Electric Utilities	Wind	17	7	624.6	605.2
2011	WY	Electric Generators, Independent Power Producers	Wind	13	13	807.2	807.2
2011	WY	Total Electric Power Industry	Wind	30	20	1,431.8	1,412.4
2012	AK	Electric Generators, Electric Utilities	Wind	21	2	13.7	13.7

Year	State Code	Producer Type	Fuel Source	Generators	Facilities	Nameplate Capacity (Megawatts)	Summer Capacity (Megawatts)
2012	AK	Electric Generators, Independent Power Producers	Wind	3	2	19.0	19.0
2012	AK	Total Electric Power Industry	Wind	24	4	32.7	32.7
2012	AZ	Electric Generators, Independent Power Producers	Wind	4	4	237.3	237.3
2012	AZ	Total Electric Power Industry	Wind	4	4	237.3	237.3
2012	CA	Commercial Power	Wind	1	1	1.0	1.0
2012	CA	Electric Generators, Electric Utilities	Wind	6	3	491.2	491.1
2012	CA	Electric Generators, Independent Power Producers	Wind	118	104	5,027.9	5,013.2
2012	CA	Industrial Power	Wind	1	1	1.0	1.0
2012	CA	Total Electric Power Industry	Wind	126	109	5,521.1	5,506.3
2012	CO	Commercial Power	Wind	4	1	8.8	8.8
2012	CO	Electric Generators, Electric Utilities	Wind	5	3	60.3	41.8
2012	CO	Electric Generators, Independent Power Producers	Wind	16	15	2,228.2	2,218.7
2012	CO	Industrial Power	Wind	1	1	1.8	1.8
2012	CO	Total Electric Power Industry	Wind	26	20	2,299.1	2,271.1
2012	DE	Commercial Power	Wind	1	1	2.0	2.0
2012	DE	Total Electric Power Industry	Wind	1	1	2.0	2.0
2012	HI	Electric Generators, Independent Power Producers	Wind	7	7	205.6	205.6
2012	HI	Total Electric Power Industry	Wind	7	7	205.6	205.6
2012	IA	Commercial Power	Wind	1	1	1.0	1.0
2012	IA	Electric Generators, Electric Utilities	Wind	29	23	2,640.3	2,543.9
2012	IA	Electric Generators, Independent Power Producers	Wind	45	42	2,462.6	2,460.1
2012	IA	Total Electric Power Industry	Wind	75	66	5,103.9	5,005.0
2012	ID	Electric Generators, Electric Utilities	Wind	1	1	57.6	57.6
2012	ID	Electric Generators, Independent Power Producers	Wind	31	31	909.0	905.1
2012	ID	Total Electric Power Industry	Wind	32	32	966.6	962.7
2012	IL	Electric Generators, Electric Utilities	Wind	4	3	6.2	6.2
2012	IL	Electric Generators, Independent Power Producers	Wind	27	24	3,538.6	3,513.9
2012	IL	Total Electric Power Industry	Wind	31	27	3,544.8	3,520.1
2012	IN	Commercial Power	Wind	1	1	1.0	1.0
2012	IN	Electric Generators, Independent Power Producers	Wind	12	9	1,538.7	1,538.7
2012	IN	Total Electric Power Industry	Wind	13	10	1,539.7	1,539.7
2012	KS	Electric Generators, Electric Utilities	Wind	4	3	297.5	297.5
2012	KS	Electric Generators, Independent Power Producers	Wind	17	16	2,421.4	2,421.6
2012	KS	Total Electric Power Industry	Wind	21	19	2,718.9	2,719.1
2012	MA	Commercial Power	Wind	6	3	8.0	6.2
2012	MA	Electric Generators, Electric Utilities	Wind	4	4	21.4	21.4
2012	MA	Electric Generators, Independent Power Producers	Wind	6	4	36.2	36.2
2012	MA	Total Electric Power Industry	Wind	16	11	65.6	63.8
2012	MD	Electric Generators, Independent Power Producers	Wind	3	3	120.0	120.0
2012	MD	Total Electric Power Industry	Wind	3	3	120.0	120.0
2012	ME	Electric Generators, Independent Power Producers	Wind	11	10	430.6	427.6
2012	ME	Total Electric Power Industry	Wind	11	10	430.6	427.6
2012	MI	Electric Generators, Electric Utilities	Wind	5	5	313.2	313.2
2012	MI	Electric Generators, Independent Power Producers	Wind	9	9	562.6	561.6
2012	MI	Total Electric Power Industry	Wind	14	14	875.8	874.8
2012	MN	Commercial Power	Wind	6	3	9.4	8.3
2012	MN	Electric Generators, Electric Utilities	Wind	23	12	594.9	593.4
2012	MN	Electric Generators, Independent Power Producers	Wind	112	107	2,241.8	2,240.6
2012	MN	Total Electric Power Industry	Wind	141	122	2,846.1	2,842.3
2012	MO	Electric Generators, Independent Power Producers	Wind	6	6	458.5	458.5
2012	MO	Total Electric Power Industry	Wind	6	6	458.5	458.5
2012	MT	Electric Generators, Electric Utilities	Wind	2	2	70.0	70.0
2012	MT	Electric Generators, Independent Power Producers	Wind	8	8	572.6	557.8
2012	MT	Total Electric Power Industry	Wind	10	10	642.6	627.8
2012	ND	Electric Generators, Electric Utilities	Wind	11	9	569.6	526.4
2012	ND	Electric Generators, Independent Power Producers	Wind	16	14	1,232.8	1,232.8
2012	ND	Total Electric Power Industry	Wind	27	23	1,802.4	1,759.2
2012	NE	Electric Generators, Electric Utilities	Wind	4	3	71.1	71.1
2012	NE	Electric Generators, Independent Power Producers	Wind	8	7	384.3	384.3
2012	NE	Total Electric Power Industry	Wind	12	10	455.4	455.4
2012	NH	Electric Generators, Independent Power Producers	Wind	3	3	171.0	171.0
2012	NH	Total Electric Power Industry	Wind	3	3	171.0	171.0
2012	NJ	Electric Generators, Independent Power Producers	Wind	1	1	7.5	7.5

Year	State Code	Producer Type	Fuel Source	Generators	Facilities	Nameplate Capacity (Megawatts)	Summer Capacity (Megawatts)
2012	NJ	Total Electric Power Industry	Wind	1	1	7.5	7.5
2012	NM	Commercial Power	Wind	1	1	1.5	1.5
2012	NM	Electric Generators, Independent Power Producers	Wind	10	9	776.0	776.0
2012	NM	Total Electric Power Industry	Wind	11	10	777.5	777.5
2012	NV	Electric Generators, Independent Power Producers	Wind	1	1	150.0	150.0
2012	NV	Total Electric Power Industry	Wind	1	1	150.0	150.0
2012	NY	Electric Generators, Independent Power Producers	Wind	23	19	1,637.1	1,633.0
2012	NY	Industrial Power	Wind	2	1	3.4	3.4
2012	NY	Total Electric Power Industry	Wind	25	20	1,640.5	1,636.4
2012	OH	Electric Generators, Electric Utilities	Wind	4	1	7.2	7.2
2012	OH	Electric Generators, Independent Power Producers	Wind	2	2	452.0	452.0
2012	OH	Industrial Power	Wind	1	1	2.5	2.5
2012	OH	Total Electric Power Industry	Wind	7	4	461.7	461.7
2012	OK	Electric Generators, Electric Utilities	Wind	3	3	448.2	448.2
2012	OK	Electric Generators, Independent Power Producers	Wind	25	22	2,684.7	2,684.7
2012	OK	Total Electric Power Industry	Wind	28	25	3,132.9	3,132.9
2012	OR	Electric Generators, Electric Utilities	Wind	4	2	553.2	550.2
2012	OR	Electric Generators, Independent Power Producers	Wind	34	32	2,608.2	2,601.7
2012	OR	Total Electric Power Industry	Wind	38	34	3,161.4	3,151.9
2012	PA	Electric Generators, Independent Power Producers	Wind	25	25	1,344.1	1,343.9
2012	PA	Total Electric Power Industry	Wind	25	25	1,344.1	1,343.9
2012	RI	Electric Generators, Independent Power Producers	Wind	1	1	1.5	1.5
2012	RI	Total Electric Power Industry	Wind	1	1	1.5	1.5
2012	SD	Electric Generators, Electric Utilities	Wind	5	2	164.6	164.6
2012	SD	Electric Generators, Independent Power Producers	Wind	7	7	625.9	625.9
2012	SD	Total Electric Power Industry	Wind	12	9	790.5	790.5
2012	TN	Electric Generators, Electric Utilities	Wind	3	1	1.8	2.1
2012	TN	Electric Generators, Independent Power Producers	Wind	1	1	27.0	27.0
2012	TN	Total Electric Power Industry	Wind	4	2	28.8	29.1
2012	TX	Electric Generators, Electric Utilities	Wind	2	2	79.5	79.5
2012	TX	Electric Generators, Independent Power Producers	Wind	109	100	12,105.5	12,099.4
2012	TX	Total Electric Power Industry	Wind	111	102	12,185.0	12,178.9
2012	US	Commercial Power	Wind	21	12	32.7	29.8
2012	US	Electric Generators, Electric Utilities	Wind	179	109	8,948.4	8,488.7
2012	US	Electric Generators, Independent Power Producers	Wind	742	684	50,639.6	50,547.6
2012	US	Industrial Power	Wind	5	4	8.7	8.7
2012	US	Total Electric Power Industry	Wind	947	809	59,629.4	59,074.8
2012	UT	Electric Generators, Independent Power Producers	Wind	3	3	324.4	324.4
2012	UT	Total Electric Power Industry	Wind	3	3	324.4	324.4
2012	VT	Electric Generators, Electric Utilities	Wind	2	2	71.0	70.2
2012	VT	Electric Generators, Independent Power Producers	Wind	2	2	50.0	50.0
2012	VT	Total Electric Power Industry	Wind	4	4	121.0	120.2
2012	WA	Electric Generators, Electric Utilities	Wind	11	8	1,362.4	1,357.7
2012	WA	Electric Generators, Independent Power Producers	Wind	12	12	1,448.5	1,448.5
2012	WA	Total Electric Power Industry	Wind	23	20	2,810.9	2,806.2
2012	WI	Electric Generators, Electric Utilities	Wind	9	8	427.7	161.6
2012	WI	Electric Generators, Independent Power Producers	Wind	5	4	208.0	208.0
2012	WI	Total Electric Power Industry	Wind	14	12	635.7	369.6
2012	WV	Electric Generators, Independent Power Producers	Wind	6	5	583.3	583.3
2012	WV	Total Electric Power Industry	Wind	6	5	583.3	583.3
2012	WY	Electric Generators, Electric Utilities	Wind	17	7	625.8	600.1
2012	WY	Electric Generators, Independent Power Producers	Wind	13	13	807.2	807.2
2012	WY	Total Electric Power Industry	Wind	30	20	1,433.0	1,407.3
2013	AK	Electric Generators, Electric Utilities	Wind	24	4	40.1	40.1
2013	AK	Electric Generators, Independent Power Producers	Wind	4	2	19.9	19.9
2013	AK	Total Electric Power Industry	Wind	28	6	60.0	60.0
2013	AZ	Electric Generators, Independent Power Producers	Wind	4	4	237.3	237.3
2013	AZ	Total Electric Power Industry	Wind	4	4	237.3	237.3
2013	CA	Commercial Power	Wind	1	1	1.0	1.0
2013	CA	Electric Generators, Electric Utilities	Wind	5	2	363.2	363.1
2013	CA	Electric Generators, Independent Power Producers	Wind	118	103	5,252.6	5,234.9
2013	CA	Industrial Power	Wind	1	1	1.0	1.0
2013	CA	Total Electric Power Industry	Wind	125	107	5,617.8	5,600.0

Year	State Code	Producer Type	Fuel Source	Generators	Facilities	Nameplate Capacity (Megawatts)	Summer Capacity (Megawatts)
2013	CO	Commercial Power	Wind	4	1	8.8	8.8
2013	CO	Electric Generators, Electric Utilities	Wind	5	3	60.3	41.8
2013	CO	Electric Generators, Independent Power Producers	Wind	21	16	2,260.0	2,250.5
2013	CO	Industrial Power	Wind	1	1	1.8	1.8
2013	CO	Total Electric Power Industry	Wind	31	21	2,330.9	2,302.9
2013	DE	Commercial Power	Wind	1	1	2.0	2.0
2013	DE	Total Electric Power Industry	Wind	1	1	2.0	2.0
2013	HI	Electric Generators, Independent Power Producers	Wind	7	7	205.6	205.6
2013	HI	Total Electric Power Industry	Wind	7	7	205.6	205.6
2013	IA	Commercial Power	Wind	1	1	1.0	1.0
2013	IA	Electric Generators, Electric Utilities	Wind	30	23	2,687.5	2,587.4
2013	IA	Electric Generators, Independent Power Producers	Wind	47	44	2,465.6	2,458.6
2013	IA	Total Electric Power Industry	Wind	78	68	5,154.1	5,047.0
2013	ID	Electric Generators, Electric Utilities	Wind	1	1	57.6	57.6
2013	ID	Electric Generators, Independent Power Producers	Wind	31	31	909.0	905.1
2013	ID	Total Electric Power Industry	Wind	32	32	966.6	962.7
2013	IL	Electric Generators, Electric Utilities	Wind	4	3	6.2	6.2
2013	IL	Electric Generators, Independent Power Producers	Wind	29	25	3,543.6	3,518.9
2013	IL	Total Electric Power Industry	Wind	33	28	3,549.8	3,525.1
2013	IN	Commercial Power	Wind	1	1	1.0	1.0
2013	IN	Electric Generators, Independent Power Producers	Wind	12	9	1,538.7	1,538.7
2013	IN	Total Electric Power Industry	Wind	13	10	1,539.7	1,539.7
2013	KS	Electric Generators, Electric Utilities	Wind	4	3	297.5	297.5
2013	KS	Electric Generators, Independent Power Producers	Wind	18	17	2,671.2	2,671.4
2013	KS	Total Electric Power Industry	Wind	22	20	2,968.7	2,968.9
2013	MA	Commercial Power	Wind	8	4	11.4	9.6
2013	MA	Electric Generators, Electric Utilities	Wind	4	4	21.4	21.4
2013	MA	Electric Generators, Independent Power Producers	Wind	9	7	41.7	41.7
2013	MA	Total Electric Power Industry	Wind	21	15	74.5	72.7
2013	MD	Electric Generators, Independent Power Producers	Wind	3	3	120.0	120.0
2013	MD	Total Electric Power Industry	Wind	3	3	120.0	120.0
2013	ME	Electric Generators, Independent Power Producers	Wind	11	10	430.6	430.6
2013	ME	Total Electric Power Industry	Wind	11	10	430.6	430.6
2013	MI	Electric Generators, Electric Utilities	Wind	6	6	423.6	343.6
2013	MI	Electric Generators, Independent Power Producers	Wind	11	11	737.7	736.7
2013	MI	Total Electric Power Industry	Wind	17	17	1,161.3	1,080.3
2013	MN	Commercial Power	Wind	6	3	9.4	8.3
2013	MN	Electric Generators, Electric Utilities	Wind	23	12	594.9	593.4
2013	MN	Electric Generators, Independent Power Producers	Wind	113	108	2,243.4	2,242.0
2013	MN	Total Electric Power Industry	Wind	142	123	2,847.7	2,843.7
2013	MO	Electric Generators, Independent Power Producers	Wind	6	6	458.5	458.5
2013	MO	Total Electric Power Industry	Wind	6	6	458.5	458.5
2013	MT	Electric Generators, Electric Utilities	Wind	2	2	70.0	70.0
2013	MT	Electric Generators, Independent Power Producers	Wind	8	8	572.6	542.4
2013	MT	Total Electric Power Industry	Wind	10	10	642.6	612.4
2013	ND	Electric Generators, Electric Utilities	Wind	11	9	569.6	526.4
2013	ND	Electric Generators, Independent Power Producers	Wind	15	14	1,232.8	1,232.8
2013	ND	Total Electric Power Industry	Wind	26	23	1,802.4	1,759.2
2013	NE	Electric Generators, Electric Utilities	Wind	4	3	71.1	71.3
2013	NE	Electric Generators, Independent Power Producers	Wind	9	8	459.1	459.1
2013	NE	Total Electric Power Industry	Wind	13	11	530.2	530.4
2013	NH	Electric Generators, Independent Power Producers	Wind	3	3	171.0	171.0
2013	NH	Total Electric Power Industry	Wind	3	3	171.0	171.0
2013	NJ	Electric Generators, Independent Power Producers	Wind	1	1	7.5	7.5
2013	NJ	Total Electric Power Industry	Wind	1	1	7.5	7.5
2013	NM	Commercial Power	Wind	1	1	1.5	1.5
2013	NM	Electric Generators, Independent Power Producers	Wind	10	9	776.0	776.0
2013	NM	Total Electric Power Industry	Wind	11	10	777.5	777.5
2013	NV	Electric Generators, Independent Power Producers	Wind	1	1	150.0	150.0
2013	NV	Total Electric Power Industry	Wind	1	1	150.0	150.0
2013	NY	Electric Generators, Independent Power Producers	Wind	24	20	1,731.5	1,727.4
2013	NY	Industrial Power	Wind	2	1	3.4	3.4
2013	NY	Total Electric Power Industry	Wind	26	21	1,734.9	1,730.8

Year	State Code	Producer Type	Fuel Source	Generators	Facilities	Nameplate Capacity (Megawatts)	Summer Capacity (Megawatts)
2013	OH	Electric Generators, Electric Utilities	Wind	4	1	7.2	7.2
2013	OH	Electric Generators, Independent Power Producers	Wind	4	4	456.4	405.4
2013	OH	Industrial Power	Wind	5	3	11.5	11.5
2013	OH	Total Electric Power Industry	Wind	13	8	475.1	424.1
2013	OK	Electric Generators, Electric Utilities	Wind	3	3	448.2	448.2
2013	OK	Electric Generators, Independent Power Producers	Wind	25	22	2,684.7	2,684.7
2013	OK	Total Electric Power Industry	Wind	28	25	3,132.9	3,132.9
2013	OR	Electric Generators, Electric Utilities	Wind	4	2	553.2	553.2
2013	OR	Electric Generators, Independent Power Producers	Wind	34	32	2,608.2	2,607.7
2013	OR	Total Electric Power Industry	Wind	38	34	3,161.4	3,160.9
2013	PA	Electric Generators, Independent Power Producers	Wind	25	25	1,344.1	1,343.9
2013	PA	Total Electric Power Industry	Wind	25	25	1,344.1	1,343.9
2013	RI	Electric Generators, Independent Power Producers	Wind	2	2	3.0	3.0
2013	RI	Total Electric Power Industry	Wind	2	2	3.0	3.0
2013	SD	Electric Generators, Electric Utilities	Wind	5	2	164.6	164.6
2013	SD	Electric Generators, Independent Power Producers	Wind	7	7	625.9	625.9
2013	SD	Total Electric Power Industry	Wind	12	9	790.5	790.5
2013	TN	Electric Generators, Electric Utilities	Wind	3	1	1.8	2.1
2013	TN	Electric Generators, Independent Power Producers	Wind	1	1	27.0	27.0
2013	TN	Total Electric Power Industry	Wind	4	2	28.8	29.1
2013	TX	Electric Generators, Electric Utilities	Wind	2	2	79.5	79.5
2013	TX	Electric Generators, Independent Power Producers	Wind	109	100	12,248.5	12,242.4
2013	TX	Total Electric Power Industry	Wind	111	102	12,328.0	12,321.9
2013	US	Commercial Power	Wind	23	13	36.1	33.2
2013	US	Electric Generators, Electric Utilities	Wind	182	110	9,003.3	8,424.7
2013	US	Electric Generators, Independent Power Producers	Wind	763	699	51,655.1	51,497.8
2013	US	Industrial Power	Wind	9	6	17.7	17.7
2013	US	Total Electric Power Industry	Wind	977	828	60,712.2	59,973.4
2013	UT	Electric Generators, Independent Power Producers	Wind	3	3	324.4	324.4
2013	UT	Total Electric Power Industry	Wind	3	3	324.4	324.4
2013	VT	Electric Generators, Electric Utilities	Wind	2	2	71.0	70.2
2013	VT	Electric Generators, Independent Power Producers	Wind	2	2	50.0	50.0
2013	VT	Total Electric Power Industry	Wind	4	4	121.0	120.2
2013	WA	Electric Generators, Electric Utilities	Wind	11	8	1,362.5	1,357.8
2013	WA	Electric Generators, Independent Power Producers	Wind	12	12	1,448.5	1,448.5
2013	WA	Total Electric Power Industry	Wind	23	20	2,811.0	2,806.3
2013	WI	Electric Generators, Electric Utilities	Wind	8	7	426.5	120.8
2013	WI	Electric Generators, Independent Power Producers	Wind	5	4	208.0	207.8
2013	WI	Total Electric Power Industry	Wind	13	11	634.5	328.6
2013	WV	Electric Generators, Independent Power Producers	Wind	6	5	583.3	583.3
2013	WV	Total Electric Power Industry	Wind	6	5	583.3	583.3
2013	WY	Electric Generators, Electric Utilities	Wind	17	7	625.8	601.3
2013	WY	Electric Generators, Independent Power Producers	Wind	13	13	807.2	807.2
2013	WY	Total Electric Power Industry	Wind	30	20	1,433.0	1,408.5

Montana-Dakota Utilities  
Docket No. D2015.6.51  
Data Responses of the Montana Consumer Counsel  
to the Montana Public Service Commission  
(PSC-094 through PSC-101)

PSC-098

Regarding: Transmission Poles and Fixtures

Witness: Pous

- a. Are you able to provide a breakdown of the condition of MDU's transmission poles to support the extended life you are recommending?

**RESPONSE:**

- a. Mr. Pous references pages 5-37 of the 2014 Depreciation Study to demonstrate that MDU has poles that have already lasted for at least 70 years and are still in service. Therefore, from a physical condition standpoint, empirical data supports life characteristics greater than 60 years. Moreover, those poles that have already reached 70 years of service did so without the benefit of chemical treatments and pole inspection programs since initially being placed into service.

PSC-099

Regarding: Depreciation

Witness: Pous

- a. On Page 47 of your testimony, you state you do not believe words such as “expectations,” “anticipations,” and “likely” provide credible evidence for future actions. However, on Page 57, you partly justify your recommended life curve based on “predictive” purposes. Please reconcile the appropriateness of the word “predictive” against the previous words you deemed unfit to base judgement on.

**RESPONSE:**

- a. The presentation of testimony on referenced pages 47 and 57, in conjunction with related testimony on pages 46 and 56, respectively, by Mr. Pous sets forth the requested information. Depreciation is a forecast for the future. The bases for a forecast normally rely on available data, analyses and interpretation of the data. Mr. Pous’ use of the word “predictive” is based on the facts associated with the advancements made to extend the useful life of underground conductor in reaction to the industry’s experience with inferior polyethylene conductor and the fact that the current investment in polyethylene conductor is very limited. Therefore, the Iowa Survivor curve matches referenced at page 57 are artificially low since they include the early retirement of the inferior conductor that effectively no longer exists for MDU. In other words, there is a clear and factual basis for modifying the results of analyzing historical data for establishing a predictive model for future expectations in this instance. Alternatively, the use of the words “expectations”, “anticipations”, and “likely” without any meaningful basis other than reference to the word “judgment”, which is only a process, as the bases for future expectations bears no relation to the underlying support associated with the reference to the word “predictive”. The difference rests with the support of the words, not the words themselves.

Montana-Dakota Utilities  
Docket No. D2015.6.51  
Data Responses of the Montana Consumer Counsel  
to the Montana Public Service Commission  
(PSC-094 through PSC-101)

PSC-100

Regarding: Power Plan

Witness: Pous

- a. On Page 100 you mention a new accounting system, PowerPlan, implemented by MDU. What is the reason you have not mentioned this new accounting system in your previous testimony?

**RESPONSE:**

- a. Without reviewing all aspects of any prior MDU case, Mr. Pous would note that PowerPlan was not installed until the middle of 2013. Therefore, the first full year of data did not occur until the end of 2014, which is the test year in the 2014 Depreciation Study.

PSC-101

Regarding: Depreciation

Witness: Pous

- a. In Footnote 106 you reference Docket No. 090079-EI, a proceeding before the Florida Public Service Commission. The Florida Commission adopted your recommendation of a -20% net salvage in that proceeding. Please elaborate further on why Progress Energy Florida, Inc., (PEFL), provides a valid comparison with MDU.
- b. In any other sense for comparison in this proceeding could PEFL be used as a comparison company?
- c. Please provide workpapers to support your claim that Account 356 from the Florida proceeding is similar.

**RESPONSE:**

- a. The focus of the footnote was not to identify my recommendation, but rather to place more definition around the judgment and experience relied upon by Mr. Robinson for his efforts that corresponded to a 50% discount of the historical results versus any other level of gradualism. In this regard, the only other identifiable experience of Mr. Robinson for investment in this account was his recommendation for PEFL at a -45%. Given this item of identifiable experience, and the selection of an arbitrary 50% discount of the most recent three-year average, it might normally be expected that the retention of the existing -70% net salvage value, which reflects an approximate 60% discount would have been more logical based on the available facts.
- b. Mr. Pous has not viewed the remainder of the accounts to determine whether similar circumstances exist.
- c. The account addressed is Account 365 rather than Account 356. Mr. Pous relies on the FERC Uniform System of Accounts for his understanding that the same account for both utilities will include similar plant.