Green Pricing and Net Metering Programs, 2005

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Preface

The Energy Information Administration (EIA) reports historical data on green pricing and net metering programs in its report, the *Renewable Energy Annual*. This report, *Green Pricing and Net Metering Programs*, 2005, provides an overview and tables with historical data for 2002-2005. These tables correspond to similar tables to be presented in *Renewable Energy Annual 2005* and are numbered accordingly.

Data in this report is based upon electric industry participants information reported on Form EIA-861, "Annual Electric Power Industry Report." General information about the survey may be found here: http://www.eia.doe.gov/oss/forms.html#eia-861. Definitions for terms used in this report can be found in EIA's Energy Glossary: http://www.eia.doe.gov/glossary/index.html.

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Background

Green pricing/marketing programs allow electricity customers to voluntarily pay the additional costs for renewable energy through direct payments on their monthly bills. In return, the electricity provider guarantees that it will provide either directly or by contract that amount of renewable-based electricity.

The Energy Information Administration (EIA) collects information about green pricing programs on the Form EIA-861, "Annual Electric Power Industry Report," which is a survey of electric industry participants. All respondents, except independent power producers and qualifying facilities, were asked to report their number of customers in green pricing programs by state and customer class.

Net metering programs usually permit customers operating very small generators to purchase extra electricity when needed. Also, any excess power at the end of the month can be sold back to the utility. Provisions vary by state and utility and often apply to solar or wind energy. In addition, pricing schemes vary by individual utility and customer circumstance. This system facilitates the ease of operating intermittent generators, such as those using solar and wind energy, and improves their economics. The EIA collects information on net metering on the Form EIA-861 in much the same manner as it does green pricing.

2005 In Review

In 2005, the number of electric industry participants reporting customers in green pricing programs increased by 39 to 442 (Table H1). The total number of green pricing customers was nearly 943,000. Residential customers represented 92 percent of the total. Net gains of more than 102,000 customers in 33 states were largely offset by net losses of about 88,000 primarily in four states (Ohio, California, Pennsylvania, and Tennessee) (Table 63).

Of particular interest in reviewing these results is the status of one company, Green Mountain Energy, an Austin, Texas based green power marketer, which was a dominant player in the market during 2005. Early in 2006, the company reported that effective December 31, 2005, it had pulled out of the Ohio market, where it had some 450,000 green pricing customers. Also, its customer base in Pennsylvania, where it once had 100,000 customers, began plunging during 2005 due to rising energy prices.²

Growth in the number of net metering customers has been rapid. In 2005, 188 electric industry participants reported 21,146 net metering customers, up by 5,320 or 34 percent from the previous year (Table H1). Ninety-one percent were residential customers. Thirty-two states reported net gains of net metering customers (Table 64). California accounted for a net gain of 3,921 customers, followed by New Jersey with 297. This is attributed in part to more aggressive support for renewable energy in these two states, particularly for energy sources like roof-top solar, which is a popular application for net metering.³

¹ "Electric industry participants" include electric utilities, wholesale power marketers, energy service providers, and electric power producers.

² Austin American Statesman, "Green's Alternative Power Play: Austin-based company has faced mountain of challenges in quest to bring wind, other renewable energy to forefront," (Austin, Texas, January 22, 2006). See this website:

http://www.statesman.com/business/content/business/stories/other/01/22greenmountain.html

³ For details of individual state net metering programs, including some history, see the North Carolina Solar Center DSIRE database on this website:

http://www.dsireusa.org/summarytables/reg1.cfm?&CurrentPageID=7&EE=1&RE=1

Table H1. Estimated U.S. Green Pricing Customers by Customer Class, 2002-2005

	Electric	Participarting Customers			
Year	Industry	Custo	Total		
	Participants	Residential	Non-residential	Total	
2002	212	688,069	23,481	711,550	
2003	308	819,579	57,547	877,126	
2004	403	864,794	63,539	928,333	
2005	442	871,774	70,998	942,772	

Note: Non-residential may include some customers for whom no customer class is specified.

Totals may not equal the sum of the components due to independent rounding.

Source: Energy Information Administration, Form EIA-861, "Annual Electric Power Industry Report."

Table H2. Estimated U.S. Net Metering Customers by Customer Class, 2002-2005

	Electric	Participarting Customers			
Year	Industry	Custo	Total		
	Participants	Residential	Non-residential	Total	
2002	96	3,559	913	4,472	
2003	127	5,870	943	6,813	
2004	166	14,114	1,712	15,826	
2005	188	19,244	1,902	21,146	

Note: Non-residential may include some customers for whom no customer class is specified.

Totals may not equal the sum of the components due to independent rounding.

Source: Energy Information Administration, Form EIA-861, "Annual Electric Power Industry Report."

Table 63. Estimated U.S. Green Pricing Customers by State and Customer Class, 2004 and 2005

	Electric Industry		2005	<u> </u>	2004
State	Participants 2005 ^a	Residential	Non-Residential	Total	Total
	r artioipanto 2000	recordential	Non Nooidontiai	Total	Total
Alabama	2	970	5	975	755
Alaska	1	320	5	325	
Arizona	3	5,783	113	5,896	5,792
Arkansas					
California	9	38,728	1,708	40,436	62,090
Colorado	24	39,387	1,022	40,409	40,166
Connecticut					
Delaware					15
District of Columbia	2	4,743	2,306	7,049	5,222
Florida	4	23,569	30	23,599	11,076
Georgia	16	3,738	57	3,795	3,241
Hawaii	3	4,234	45	4,279	4,005
Idaho	6	3,764	114	3,878	4,283
Illinois	6	1,225	2	1,227	31
Indiana	10	1,400	27	1,427	1,339
Iowa	54	7,896	154	8,050	7,313
Kansas					
Kentucky	10	796	13	809	513
Louisiana					
Maine	2	1,707	312	2,019	8
Maryland	2	28,772	3,955	32,727	15,178
Massachusetts	3	4,543	166	4,709	2,866
Michigan	9	1,867	147	2,014	1,376
Minnesota	93	24,374	314	24,688	23,058
Mississippi	1	3	0	3	81
Missouri	15	443	8	451	398
Montana	6	392	8	400	407
Nebraska	4	3,720	48	3,768	4,071
Nevada	3	384	0	384	498
New Hampshire					
New Jersey	2	1,390	302	1,692	1,911
New Mexico	11	9,400	452	9,852	8,461
New York	7	6,192	385	6,577	1,485
North Carolina	19	7,610	277	7,887	6,266
North Dakota	12	6,835	22	6,857	4,687
Ohio	3	360,398	42,035	402,433	454,509
Oklahoma	7	10,274	480	10,754	9,537
Oregon	11	62,267	1,488	63,755	53,902
Pennsylvania	3	29,718	40	29,758	36,328
Rhode Island	2	3,385	92	3,477	1,505
South Carolina	10	2,188	267	2,455	2,076
South Dakota	7	687	28	715	473
Tennessee					6,523
Texas	7	74,948	12,276	87,224	68,380
Utah	5	16,294	419	16,713	14,067
Vermont	1	2,008	87	2,095	899
Virginia	2	2,989	20	3,009	3,438
Washington	20	30,679	672	31,351	28,109
West Virginia					
Wisconsin	55	38,668	1,033	39,701	29,199
Wyoming	5	3,086	64	3,150	2,796

^a Includes entities with green pricing programs in more than one state.

Note: Non-residential may include some customers for whom no customer class is specified. Blank cells indicate no data was reported for the state or the number of customers in a class was zero. Totals may not equal the sum of the components due to independent rounding. Source: Energy Information Administration, Form EIA-861, "Annual Electric Power Industry Report."

Table 64. Estimated U.S. Net Metering Customers by State and Customer Class, 2004 and 2005

	Electric Industry	lectric Industry 2005			2004	
State	Participants 2005a	Residential	Non-Residential	Total	Total	
				•		
Alabama	2	1	12	13	13	
Alaska						
Arizona	5	145	7	152	43	
Arkansas	2	4	1	5	3	
California	18	16,134	1,293	17,427	13,506	
Colorado	10	132	13	145	87	
Connecticut	2	64	11	75	31	
Delaware	1	12	8	20		
District of Columbia						
Florida	5	21	8	29	30	
Georgia	1	1	0	1	2	
Hawaii	4	90	8	98	46	
Idaho	3	18	3	21	19	
Illinois	4	1	7	8	2	
Indiana	2	8	8	16	16	
lowa	5	10	6	16	8	
Kansas	3	7	4	11	10	
Kentucky	3	1	2	3	2	
Louisiana	ŭ	•	_	Ū	_	
Maine	1	2	6	8		
Maryland	5	8	1	9	9	
Massachusetts	4	226	20	246	170	
Michigan	2	5	20	7	5	
Minnesota	25	177	16	193	233	
	25	177	10	193		
Mississippi	2	2	2	_	1	
Missouri	3	3		5	2	
Montana	2	177	76	253	186	
Nebraska	_					
Nevada	2	178	10	188	100	
New Hampshire	4	65	28	93	81	
New Jersey	2	550	54	604	307	
New Mexico	5	9	7	16	11	
New York	2	88	42	130	87	
North Carolina					1	
North Dakota	2	4	0	4	4	
Ohio	5	21	10	31	18	
Oklahoma	2	3	27	30	31	
Oregon	9	301	40	341	232	
Pennsylvania	4	106	28	134	89	
Rhode Island	2	62	19	81	25	
South Carolina						
South Dakota						
Tennessee					7	
Texas	7	152	11	163	16	
Utah	2	26	4	30	10	
Vermont	5	149	15	164	67	
Virginia	9	26	2	28	19	
Washington	11	73	23	96	73	
West Virginia	1	0	1	1	1	
Wisconsin	9	176	64	240	212	
Wyoming	5	8	3	11	11	
· · you mig	3	0	3	11	11	
Total	188	19,244	1,902	21,146	15,826	

^a Includes entities with net metering programs in more than one state.

Note: Non-residential may include some customers for whom no customer class is specified. Blank cells indicate no data was reported for the state or the number of customers in a class was zero. Totals may not equal the sum of the components due to independent rounding. Source: Energy Information Administration, Form EIA-861, "Annual Electric Power Industry Report."