Table 1.
 2006 Summary Statistics

Item	Value	U.S. Rank
Montana		
NERC Region(s)		MRO/WECC
Primary Energy Source		Coal
Net Summer Capacity (megawatts)	5,437	40
Electric Utilities	2,163	38
Independent Power Producers & Combined Heat and Power	3,274	27
Net Generation (megawatthours)	28,243,536	41
Electric Utilities	6,956,390	39
Independent Power Producers & Combined Heat and Power	21,287,146	14
Emissions (thousand metric tons)		
Sulfur Dioxide	22	40
Nitrogen Oxide	38	35
Carbon Dioxide	19,087	37
Sulfur Dioxide (lbs/MWh)	1.7	40
Nitrogen Oxide (lbs/MWh)	3.0	18
Carbon Dioxide (lbs/MWh)	1,490	21
Total Retail Sales (megawatthours)	13,814,980	41
Full Service Provider Sales (megawatthours)	10,820,511	42
Deregulated Sales (megawatthours)	2,994,469	12
Direct Use (megawatthours)	120,358	44
Average Retail Price (cents/kWh)	6.91	37

Table 2. Ten Largest Plants by Generating Capacity, 2006

Plant	Primary Energy Source or Technology	Operating Company	Net Summer Capacity (MW)	
Montana				
1. Colstrip	Coal	PPL Montana LLC	2,094	
2. Noxon Rapids	Hydroelectric	Avista Corp	535	
3. Libby	Hydroelectric	USCE-North Pacific Division	525	
4. Hungry Horse	Hydroelectric	U S Bureau of Reclamation	428	
5. Yellowtail	Hydroelectric	U S Bureau of Reclamation	287	
6. Kerr	Hydroelectric	PPL Montana LLC	212	
7. Fort Peck	Hydroelectric	USCE-Missouri River District	169	
8. J E Corette Plant	Coal	PPL Montana LLC	158	
9. Judith Gap Wind Energy Center	Other Renewables	Invenergy Services LLC	135	
10. Hardin Generator Project	Coal	Rocky Mountain Power Inc	109	

Table 3. Top Five Retailers of Electricity, with End Use Sectors, 2006 (Megawatthours)

Entity	Type of Provider	All Sectors	Residential	Commercial	Industrial	Transportation
Montana						
1. NorthWestern Energy LLC	Investor-Owned	5,724,620	2,182,722	3,019,330	522,568	-
2. PPL EnergyPlus LLC	Other Provider	2,278,410	-	-	2,278,410	-
3. Flathead Electric Coop Inc	Cooperative	1,380,361	604,712	426,594	349,055	-
4. MDU Resources Group Inc	Investor-Owned	643,223	156,587	218,404	268,232	-
5. Conoco Inc	Other Provider	482,840	-	-	482,840	-
Total Sales, Top Five Providers		10,509,454	2,944,021	3,664,328	3,901,105	-
Percent of Total State Sales		76	67	78	82	-

Table 4. Electric Power Net Summer Capacity by Primary Energy Source and Industry Sector, 1990, 1995, and 2001 Through 2006

M	[ega	aw	att	(2)
(TAT		u vv	au	o,

F C	1990	1995	2001	2002	2003	2004	2005	2006	Percentag	e Share
Energy Source	1990	1995	2001	2002	2003	2004	2005	2000	1990	2006
Montana										
Electric Utilities	4,912	4,943	2,232	2,232	2,274	2,189	2,186	2,163	98.8	39.8
Coal	2,260	2,260	52	52	52	52	52	52	45.4	1.0
Petroleum	-	-	-	-	-	-	2	2	-	al a
Natural Gas	120	120	58	58	97	98	100	100	2.4	1.8
Hydroelectric	2,520	2,551	2,122	2,122	2,124	2,040	2,032	2,009	50.7	36.9
Other Renewables	13	13	-	-	-	-	-	-	0.3	
Independent Power Producers and Combined Heat and Power	60	121	2,907	2,939	2,937	2,943	3,082	3,274	1.2	60.2
Coal	39	39	2,283	2,244	2,248	2,283	2,287	2,408	0.8	44.3
Petroleum	-	61	55	90	90	55	55	55	-	1.0
Natural Gas	-	-	-	-	-	-	-	54	-	1.0
Hydroelectric	11	11	558	595	588	588	588	595	0.2	11.0
Other Renewables	10	10	11	11	11	17	152	162	0.2	3.0
Total Electric Industry	4,972	5,064	5,139	5,172	5,210	5,132	5,268	5,437	100.0	100.0
Coal	2,299	2,299	2,335	2,296	2,300	2,335	2,339	2,460	46.2	45.2
Petroleum	-	61	55	90	90	55	57	57	-	1.0
Natural Gas	120	120	58	58	97	98	100	154	2.4	2.8
Hydroelectric	2,531	2,562	2,680	2,717	2,712	2,627	2,619	2,604	50.9	47.9
Other Renewables	23	23	11	11	11	17	152	162	0.5	3.0

Table 5. Electric Power Net Generation by Primary Energy Source and Industry Sector, 1990, 1995, and 2001 Through 2006 (Megawatthours)

Energy Source	1990	1995	2001	2002	2003	2004	2005	2006	Percei Sha	0
									1990	2006
Montana										
Electric Utilities	25,718,975	25,411,151	4,415,943	6,726,239	6,020,681	6,066,404	6,587,015	6,956,390	98.8	24.6
Coal	14,902,659	14,655,727	311,207	285,747	322,205	347,287	283,468	336,324	57.3	1.2
Petroleum	27,369	25,051	854	720	1,482	1,004	458	426	0.1	*
Natural Gas	41,173	31,908	9,979	6,747	17,997	12,532	10,602	8,347	0.2	*
Hydroelectric	10,672,287	10,698,465	4,093,903	6,433,025	5,678,997	5,705,581	6,292,487	6,611,293	41.0	23.4
Other Renewables	75,487	-	-	-	-	-	-	-	0.3	-
Independent Power Producers and Combined Heat and Power	310,797	550,163	19,816,542	18,747,466	20,248,046	20,722,364	21,351,763	21,287,146	1.2	75.4
Coal	216,960	278,420	16,724,676	15,052,082	16,726,430	17,032,941	17,539,871	16,748,756	0.8	59.3
Petroleum	1,613	143,003	496,760	468,939	400,682	437,035	413,533	416,489	*	1.5
Natural Gas	14,082	16,830	10,110	9,931	7,471	19,595	25,465	69,470	0.1	0.2
Other Gases	-	8,678	-	19,160	19,520	22,393	12,787	9,474	-	*
Hydroelectric	44,530	47,388	2,519,571	3,133,884	3,022,775	3,150,450	3,294,862	3,518,868	0.2	12.5
Other Renewables	33,612	55,844	65,425	63,470	71,168	59,950	65,245	524,089	0.1	1.9
Total Electric Industry	26,029,772	25,961,314	24,232,485	25,473,705	26,268,727	26,788,768	27,938,778	28,243,536	100.0	100.0
Coal	15,119,619	14,934,147	17,035,883	15,337,829	17,048,635	17,380,228	17,823,339	17,085,080	58.1	60.5
Petroleum	28,982	168,054	497,614	469,659	402,164	438,039	413,991	416,915	0.1	1.5
Natural Gas	55,255	48,738	20,089	16,678	25,468	32,127	36,067	77,817	0.2	0.3
Other Gases	-	8,678	-	19,160	19,520	22,393	12,787	9,474	-	*
Hydroelectric	10,716,817	10,745,853	6,613,474	9,566,909	8,701,772	8,856,031	9,587,349	10,130,161	41.2	35.9
Other Renewables	109,099	55,844	65,425	63,470	71,168	59,950	65,245	524,089	0.4	1.9

Table 6. Electric Power Delivered Fuel Prices and Quality for Coal, Petroleum, and Natural Gas, 1990, 1995, and 2001 Through 2006

Fuel, Quality	1990	1995	2001	2002	2003	2004	2005	2006
Montana								
Coal (cents per million Btu)	67	67	95	W	W	W	W	W
Average heat value (Btu per pound)	8,564	8,520	8,380	8,482	8,515	8,504	8,447	8,428
Average sulfur Content (percent)	0.63	0.68	0.53	0.64	0.62	0.63	0.66	0.66
Petroleum (cents per million Btu)	543	491	-	W	W	W	W	W
Average heat value (Btu per gallon)	141,000	141,000	-	137,148	136,574	137,064	126,095	130,833
Average sulfur Content (percent)	-	-	-	3.66	0.45	0.46	0.35	5.57
Natural Gas (cents per million Btu)	145	358	666	W	W	W	W	W
Average heat value (Btu per cubic foot)	1,218	1,073	1,020	1,104	1,123	1,095	1,106	1,093

Table 7. Electric Power Industry Emissions Estimates, 1990, 1995, and 2001 Through 2006 (Thousand Metric Tons)

Emission Type	1990	1990 1995		2002	2003	2004	2005	2006
Montana								
Sulfur Dioxide								
Coal	16	18	28	18	16	19	18	18
Petroleum	*	3	26	3	2	2	2	2
Natural Gas	*	*	-	-	-	-	-	-
Other	1	2	1	2	5	2	2	1
Total	17	23	55	22	23	23	22	22
Nitrogen Oxide								
Coal	85	73	36	31	32	33	36	36
Petroleum	*	1	2	1	*	*	*	*
Natural Gas	*	*	神	*	*	*	*	1
Other	*	1	1	1	3	1	1	1
Total	86	75	40	34	35	35	38	38
Carbon Dioxide								
Coal	15,633	15,639	17,349	15,749	17,908	18,358	18,669	18,185
Petroleum	54	734	799	743	703	823	778	785
Natural Gas	174	205	75	68	58	124	102	117
Total	15,861	16,579	18,223	16,560	18,669	19,305	19,549	19,087

Table 8. Retail Sales, Revenue, and Average Retail Prices by Sector, 1990, 1995, and 2001 Through 2006

Sector	1990	1995	2001	2002	2003	2004	2005	2006	Percenta	ge Share
Sector	1550	1333	2001	2002	2000			2000	1990	2006
Montana										
Retail Sales (thousand megawatthours)										
Residential	3,358	3,640	3,886	4,031	4,120	4,053	4,221	4,394	25.6	31.8
Commercial	2,738	3,133	3,866	4,003	4,438	4,330	4,473	4,686	20.9	33.9
Industrial	6,529	6,368	3,370	4,463	4,267	4,574	4,784	4,735	49.7	34.3
Other	499	278	324	335	NA	NA	NA	NA	3.8	NA
All Sectors	13,125	13,419	11,447	12,831	12,825	12,957	13,479	13,815	100.0	100.0
Retail Revenue (million dollars)										
Residential	183	222	267	291	311	319	342	364	35.2	38.1
Commercial	128	166	228	251	304	321	332	349	24.7	36.5
Industrial	187	219	222	165	172	190	231	242	36.0	25.4
Other	21	17	24	24	NA	NA	NA	NA	4.1	NA
All Sectors	520	624	742	732	787	830	906	955	100.0	100.0
Average Retail Prices (cents/KWh)										
Residential	5.45	6.09	6.88	7.23	7.56	7.86	8.10	8.28	NA	NA
Commercial	4.68	5.31	5.91	6.28	6.85	7.42	7.43	7.44	NA	NA
Industrial	2.87	3.44	6.59	3.71	4.03	4.15	4.83	5.12	NA	NA
Other	4.26	6.21	7.47	7.04	NA	NA	NA	NA	NA	NA
All Sectors	3.96	4.65	6.48	5.70	6.14	6.40	6.72	6.91	NA	NA

Table 9. Retail Electricity Sales Statistics, 2006

		Full	Service Provid	ers		Other I		
Item	Investor- Owned	Public	Federal	Cooperative	Facility	Energy	Delivery	Total
Montana								
Number of Entities	4	1	3	30	NA	5	2	45
Number of Retail Customers	343,677	950	19,853	186,160	NA	19	NA	550,659
Retail Sales (thousand megawatthours)	6,117	15	885	3,803	NA	2,994	NA	13,815
Percentage of Retail Sales	44.28	0.11	6.41	27.53	NA	21.68	NA	100.00
Revenue from Retail Sales (million dollars)	518	1	34	266	NA	120	16	955
Percentage of Revenue	54.23	0.09	3.54	27.87	NA	12.61	1.67	100.00
Average Retail Price (cents/kWh)	8.09	5.52	3.82	7.00	NA	4.02	0.53	6.91

Table 9 Notes: Data are shown for All Sectors. Full Service Providers sell bundled electricity services (e.g., both energy and delivery) to end users. Full Service Providers may purchase electricity from others (such as independent Power Producers or other full service providers) prior to delivery. Other Providers sell either the energy or the delivery services, but not both. Sales volumes and customer counts shown for Other Providers refer to delivered electricity, which is a joint activity of both energy and delivery providers; for clarity, they are reported only in the Energy column in this table. The revenue shown under Other Providers represents the revenue realized from the sale of the energy and the delivery services distinctly. "Public" entities include municipalities, State power agencies, and municipal marketing authorities. "Federal" entities are either owned or financed by the Federal Government. "Cooperatives" are electric utilities legally established to be owned by and operated for the benefit of those using its services. The cooperative will generate, transmit and/or distribute supplies of electric energy to a specified area not being serviced by another utility. "Facility" sales represent direct electricity transactions from independent generators to end use consumers.

Table 10. Supply and Disposition of Electricity, 1990, 1995, and 2001 Through 2006 (Million Kilowatthours)

Category	1990	1995	2001	2002	2003	2004	2005	2006
Montana								
Supply								
Generation								
Electric Utilities	25,719	25,411	4,416	6,726	6,021	6,066	6,587	6,956
Independent Power Producers	261	327	19,316	18,327	19,792	20,210	20,851	20,764
Combined Heat and Power, Electric	-	150	426	348	378	434	412	408
Electric Power Sector Generation Subtotal	25,980	25,888	24,158	25,402	26,191	26,710	27,851	28,128
Combined Heat and Power, Industrial	49	73	75	72	78	78	88	116
Industrial and Commercial Generation Subtotal	49	73	75	72	78	78	88	116
Total Net Generation	26,030	25,961	24,232	25,474	26,269	26,789	27,939	28,244
Total International Imports	47	-	-	52	11	40	109	86
Total Supply	26,077	25,961	24,232	25,526	26,280	26,829	28,048	28,329
Disposition								
Retail Sales								
Full Service Providers	13,125	13,419	9,599	10,323	10,282	10,084	10,642	10,821
Energy-Only Providers	-	-	1,847	2,508	2,542	2,873	2,836	2,994
Total Electric Industry Retail Sales	13,125	13,419	11,447	12,831	12,825	12,957	13,479	13,815
Direct Use	70	100	150	153	155	155	93	120
Total International Exports	*	*	*	-	1	76	100	299
Estimated Losses	984	1,019	1,415	2,257	1,449	3,066	3,721	3,575
Total Disposition	14,179	14,538	13,012	15,242	14,430	16,255	17,393	17,810
Net Interstate Trade	11,898	11,424	11,221	10,284	11,850	10,574	10,655	10,519
Net Trade Index (ratio)	1.84	1.79	1.86	1.67	1.82	1.65	1.61	1.59

R = Revised

Table 10 Notes: Estimated Losses are reported at the utility level, and then allocated to States based on the utility's retail sales by State. Reported losses may include electricity unaccounted for by the utility. Net Interstate Trade represents the difference between the amount of electricity produced in the State and consumed in the State. Positive values indicate a State that is a net interstate exporter of electricity; negative values indicate a State that is a net interstate importer of electricity. The Net Trade Index represents a State's electricity self-sufficiency. Values greater than 1 indicate that, on an annual net basis, the State supplied electricity consumed outside the State; values less than 1 indicate that, on an annual net basis, the State consumed electricity produced outside the State.

General Notes: Table 4 "Other Renewables" includes wood, black liquor, other wood waste, municipal solid waste, landfill gas, sludge waste, agriculture byproducts, other biomass, geothermal, solar thermal, photovoltaic energy, and wind. The "Other" category includes batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, tire-derived fuels and miscellaneous technologies. However, Table 5 "Other Renewables" includes only biogenic municipal solid waste, in addition to wood, black liquor, other wood waste, landfill gas, sludge waste, agriculture byproducts, other biomass, geothermal, solar thermal, photovoltaic energy, and wind. In Table 5 "Other" includes Non-biogenic municipal solid waste, batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, tire-derived fuels and miscellaneous technologies. In Table 7, "Other Renewables" emissions include biogenic municipal solid waste, and other renewable waste.

Direct use is commercial or industrial use of electricity that (1) is self-generated (2) is produced by either the same entity that consumes the power or an affiliate, and (3) is used in direct support of a service or industrial process located within the same facility or group of facilities that houses the generating equipment. Direct use is exclusive of station use.

NA = Not applicable; NM = Not meaningful.

W = Withheld to avoid disclosure of individual company data.

^{- =} Data not available.

^{* =} Value is less than half of the smallest unit of measure (e.g., for values with no decimals, the smallest unit is 1 and values under 0.5 are shown as *.)

Totals may not equal sum of components because of independent rounding.