

**Table 1. 2004 Summary Statistics**

Item	Value	U.S. Rank
<b>Montana</b>		
NERC Region(s).....		WECC/MAPP
Primary Energy Source .....		Coal
Net Summer Capability (megawatts).....	5,132	40
Electric Utilities .....	2,189	39
Independent Power Producers & Combined Heat and Power .....	2,943	31
Net Generation (megawatthours).....	26,788,768	41
Electric Utilities .....	6,066,404	41
Independent Power Producers & Combined Heat and Power .....	20,722,364	14
Emissions (thousand metric tons)		
Sulfur Dioxide .....	23	40
Nitrogen Oxide .....	37	36
Carbon Dioxide .....	19,088	38
Sulfur Dioxide (lbs/MWh).....	1.9	42
Nitrogen Oxide (lbs/MWh).....	3.1	17
Carbon Dioxide (lbs/MWh).....	1,571	20
Total Retail Sales (megawatthours).....	12,956,782	41
Full Service Provider Sales (megawatthours).....	10,084,134	45
Deregulated Sales (megawatthours).....	2,872,648	12
Direct Use (megawatthours).....	155,392	45
Average Retail Price (cents/kWh).....	6.40	33

See footnotes at end of tables.

**Table 2. Ten Largest Plants by Generating Capability, 2004**

Plant	Energy Sources	Operating Company	Net Summer Capability (MW)
<b>Montana</b>			
1. Colstrip .....	Other,Gas,Petroleum	PPL Montana LLC	2,094
2. Noxon Rapids.....	Hydroelectric	Avista Corporation	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	200
8. J E Corette Plant .....	Gas,Coal	PPL Montana LLC	154
9. Thompson Falls.....	Hydroelectric	PPL Montana LLC	88
10. Glendive GT .....	Petroleum,Gas	MDU Resources Group Inc	76

See footnotes at end of tables.

**Table 3. Top Five Providers of Retail Electricity, 2004**  
(Megawatthours)

Entity	Ownership Type	All Sectors	Residential	Commercial	Industrial	Transportation
<b>Montana</b>						
1. NorthWestern Energy LLC .....	Investor-Owned	5,318,700	2,018,578	2,814,194	485,928	0
2. PPL EnergyPlus LLC .....	Power Marketer	2,362,601	0	0	2,362,601	0
3. Flathead Electric Coop Inc.....	Cooperative	1,274,131	540,207	383,630	350,294	0
4. MDU Resources Group Inc.....	Investor-Owned	610,855	143,594	214,006	253,255	0
5. Bonneville Power Admin .....	Power Marketer	570,960	0	0	570,960	0
Total Sales, Top Five Providers.....		10,137,247	2,702,379	3,411,830	4,023,038	0
Percent of Total State Sales .....		78	67	79	88	0

See footnotes at end of tables.

**Table 4. Electric Power Industry Net Summer Capability by Primary Energy Source, 1990, 1995, and 2000 Through 2004**  
(Megawatts)

Energy Source	1990	1995	2000	2001	2002	2003	2004	Percentage Share	
								1990	2004
<b>Montana</b>									
<b>Electric Utilities .....</b>	<b>4,912</b>	<b>4,943</b>	<b>3,005</b>	<b>2,232</b>	<b>2,232</b>	<b>2,274</b>	<b>2,189</b>	<b>98.8</b>	<b>42.7</b>
Coal .....	2,260	2,260	792	52	52	52	52	45.5	1.0
Petroleum .....	0	0	5	0	0	0	0	.0	.0
Natural Gas .....	70	70	0	0	0	0	0	1.4	.0
Dual Fired .....	50	50	58	58	58	97	98	1.0	1.9
Hydroelectric .....	2,520	2,551	2,150	2,122	2,122	2,124	2,040	50.7	39.8
Other Renewables.....	13	12	0	0	0	0	0	.3	.0
<b>Independent Power Producers and Combined</b>									
<b>Heat and Power.....</b>	<b>60</b>	<b>121</b>	<b>2,154</b>	<b>2,907</b>	<b>2,940</b>	<b>2,937</b>	<b>2,943</b>	<b>1.2</b>	<b>57.3</b>
Coal .....	39	39	1,501	2,283	2,244	2,248	2,283	.8	44.5
Petroleum .....	0	61	60	55	90	90	55	.0	1.1
Hydroelectric .....	11	11	584	558	595	588	588	.2	11.5
Other Renewables.....	10	10	10	11	11	11	17	.2	.3
<b>Total Electric Industry .....</b>	<b>4,972</b>	<b>5,064</b>	<b>5,160</b>	<b>5,139</b>	<b>5,172</b>	<b>5,210</b>	<b>5,132</b>	<b>100.0</b>	<b>100.0</b>
Coal .....	2,299	2,299	2,293	2,335	2,296	2,300	2,335	46.2	45.5
Petroleum .....	0	61	65	55	90	90	55	.0	1.1
Natural Gas .....	70	70	0	0	0	0	0	1.4	.0
Dual Fired .....	50	50	58	58	58	97	98	1.0	1.9
Hydroelectric .....	2,531	2,562	2,734	2,680	2,717	2,712	2,627	50.9	51.2
Other Renewables.....	23	23	10	11	11	11	17	.5	.3

See footnotes at end of tables.

**Table 5. Electric Power Industry Generation by Primary Energy Source, 1990, 1995, and 2000 Through 2004**  
(Megawatthours)

Energy Source	1990	1995	2000	2001	2002	2003	2004	Percentage Share	
								1990	2004
<b>Montana</b>									
<b>Electric Utilities</b> .....	<b>25,718,975</b>	<b>25,411,151</b>	<b>6,627,410</b>	<b>4,415,943</b>	<b>6,726,239</b>	<b>6,020,681</b>	<b>6,066,404</b>	<b>98.8</b>	<b>22.6</b>
Coal.....	14,902,659	14,655,727	323,757	311,207	285,747	322,205	347,287	57.3	1.3
Petroleum.....	27,369	25,051	487	854	720	1,482	1,004	.1	*
Natural Gas.....	41,173	31,908	13,438	9,979	6,747	17,997	12,532	.2	*
Hydroelectric.....	10,672,287	10,698,465	6,289,728	4,093,903	6,433,025	5,678,997	5,705,581	41.0	21.3
Other Renewables.....	75,487	0	0	0	0	0	0	.3	.0
<b>Independent Power Producers and Combined</b>									
<b>Heat and Power</b> .....	<b>310,797</b>	<b>550,163</b>	<b>19,824,418</b>	<b>19,816,542</b>	<b>18,747,466</b>	<b>20,248,046</b>	<b>20,722,364</b>	<b>1.2</b>	<b>77.4</b>
Coal.....	216,960	278,420	15,877,082	16,724,676	15,052,082	16,726,430	17,032,941	.8	63.6
Petroleum.....	1,613	143,003	519,404	496,760	468,939	400,682	437,035	*	1.6
Natural Gas.....	14,082	16,830	13,169	10,110	9,931	7,471	19,595	.1	.1
Other Gases.....	0	8,678	34,311	0	19,160	19,520	22,393	.0	.1
Hydroelectric.....	44,530	47,388	3,333,529	2,519,571	3,133,884	3,022,775	3,150,450	.2	11.8
Other Renewables.....	33,612	55,844	46,923	65,425	63,470	71,168	59,950	.1	.2
<b>Total Electric Industry</b> .....	<b>26,029,772</b>	<b>25,961,314</b>	<b>26,451,828</b>	<b>24,232,485</b>	<b>25,473,705</b>	<b>26,268,726</b>	<b>26,788,768</b>	<b>100.0</b>	<b>100.0</b>
Coal.....	15,119,619	14,934,147	16,200,839	17,035,883	15,337,829	17,048,635	17,380,228	58.1	64.9
Petroleum.....	28,982	168,054	519,891	497,614	469,659	402,164	438,039	.1	1.6
Natural Gas.....	55,255	48,738	26,607	20,089	16,678	25,468	32,127	.2	.1
Other Gases.....	0	8,678	34,311	0	19,160	19,520	22,393	.0	.1
Hydroelectric.....	10,716,817	10,745,853	9,623,257	6,613,474	9,566,909	8,701,772	8,856,031	41.2	33.1
Other Renewables.....	109,099	55,844	46,923	65,425	63,470	71,168	59,950	.4	.2

See footnotes at end of tables.

**Table 6. Electric Power Delivered Fuel Prices for Coal, Petroleum, and Natural Gas, 1990, 1995, and 2000 Through 2004**

Fuel, Quality	1990	1995	2000	2001	2002	2003	2004
<b>Montana</b>							
Coal (cents per million Btu).....	67.0	67.3	91.5	94.9	W	W	W
Average heat value (Btu per pound).....	8,564	8,520	6,618	8,384	8,461	8,515	8,504
Average sulfur Content (percent).....	.6	.7	.5	.5	.6	.6	.6
Petroleum (cents per million Btu).....	543.2	490.7	.0	.0	W	W	W
Average heat value (Btu per gallon).....	141,000	141,000	0	0	137,748	136,574	137,064
Average sulfur Content (percent).....	.0	.0	.0	.0	3.7	.5	.5
Natural Gas (cents per million Btu).....	145.2	358.1	510.4	666.4	W	W	W
Average heat value (Btu per cubic foot).....	1,218	1,073	1,139	1,021	1,016	1,123	1,095

See footnotes at end of tables.

**Table 7. Electric Power Industry Emissions Estimates, 1990, 1995, and 2000 Through 2004**  
(Thousand Metric Tons)

Emission Type	1990	1995	2000	2001	2002	2003	2004
<b>Montana</b>							
Sulfur Dioxide							
Coal .....	16	18	19	31	23	16	19
Petroleum.....	*	3	3	27	22	2	2
Natural Gas .....	0	0	0	0	0	0	0
Other.....	1	2	2	1	1	5	2
Total.....	17	23	24	60	46	23	23
Nitrogen Oxide							
Coal .....	85	73	33	38	33	33	35
Petroleum.....	*	1	1	1	1	1	2
Gas.....	*	*	*	*	*	*	*
Other.....	*	1	1	1	1	3	1
Total.....	86	75	36	40	35	37	37
Carbon Dioxide							
Coal .....	15,643	15,844	16,699	17,432	15,741	17,898	18,142
Petroleum.....	42	741	787	808	743	703	822
Gas.....	169	204	165	75	68	58	124
Geothermal .....	0	0	0	0	0	0	0
Other.....	0	0	0	0	0	0	0
Total.....	15,854	16,790	17,651	18,315	16,552	18,659	19,088

See footnotes at end of tables.

**Table 8. Retail Sales, Revenue, and Average Retail Price by Sector, 1990, 1995, and 2000 Through 2004**

Sector	1990	1995	2000	2001	2002	2003	2004	Percentage Share	
								1990	2004
<b>Montana</b>									
Retail Sales (thousand megawatthours)									
Residential.....	3,358	3,640	3,908	3,886	4,031	4,120	4,053	25.6	31.3
Commercial .....	2,738	3,133	3,792	3,866	4,003	4,438	4,330	20.9	33.4
Industrial.....	6,529	6,368	6,568	3,370	4,463	4,267	4,574	49.7	35.3
Other .....	499	278	312	324	335	NA	NA	3.8	NA
Total.....	13,125	13,419	14,580	11,447	12,831	12,825	12,957	100.0	100.0
Retail Revenue (million dollars)									
Residential.....	183	222	254	267	291	311	319	35.2	38.4
Commercial .....	128	166	213	228	251	304	321	24.6	38.7
Industrial.....	187	219	261	222	165	172	190	36.0	22.9
Other .....	21	17	2	24	24	NA	NA	4.0	NA
Total.....	520	624	729	742	732	787	830	100.0	100.0
Average Retail Price (cents/kWh)									
Residential.....	5.45	6.09	6.49	6.88	7.23	7.56	7.86	NA	NA
Commercial .....	4.68	5.31	5.60	5.91	6.28	6.85	7.42	NA	NA
Industrial.....	2.87	3.44	3.97	6.59	3.71	4.03	4.15	NA	NA
Other .....	4.26	6.21	.68	7.47	7.04	NA	NA	NA	NA
Total.....	3.96	4.65	5.00	6.48	5.70	6.14	6.40	NA	NA

See footnotes at end of tables.

**Table 9. Retail Electricity Sales Statistics, 2004**

Item	Full Service Providers					Other Providers		Total
	Investor-Owned	Public	Federal	Cooperative	Facility	Energy	Delivery	
Number of Entities.....	4	1	3	30	NA	4	2	44
Number of Retail Customers.....	331,708	923	19,088	176,269	NA	22	NA	528,010
Retail Sales (thousand megawatthours).....	5,766	14	985	3,319	NA	2,873	NA	12,957
Percentage of Retail Sales.....	44.50	.11	7.60	25.61	NA	22.17	NA	100.00
Revenue from Retail Sales (million dollars).....	440	1	37	233	NA	100	20	830
Percentage of Revenue.....	53.00	.10	4.50	28.04	NA	12.02	2.35	100.00
Average Retail Price (cents/kWh).....	7.62	5.70	3.79	7.01	NA	3.47	.68	6.40

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 service. 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.

Other Notes: NA = Not applicable; NM = Not meaningful;  
W = Withheld to avoid disclosure of individual company data;  
\* = 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; Table 4 "Other Renewables" includes generation from municipal solid waste; Table 7 "Other" includes emissions from municipal solid 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.