Table 1.
 2006 Summary Statistics

Item	Value	U.S. Rank
Hawaii		
NERC Region(s)		-
Primary Energy Source		Petroleum
Net Summer Capacity (megawatts)	2,414	47
Electric Utilities	1,730	40
Independent Power Producers & Combined Heat and Power	684	43
Net Generation (megawatthours)	11,559,174	45
Electric Utilities	7,040,473	37
Independent Power Producers & Combined Heat and Power	4,518,701	38
Emissions (thousand metric tons)		
Sulfur Dioxide	22	39
Nitrogen Oxide	29	37
Carbon Dioxide	9,036	41
Sulfur Dioxide (lbs/MWh)	4.2	22
Nitrogen Oxide (lbs/MWh)	5.5	3
Carbon Dioxide (lbs/MWh)	1,723	16
Total Retail Sales (megawatthours)	10,567,912	47
Full Service Provider Sales (megawatthours)	10,567,912	43
Direct Use (megawatthours)	365,273	36
Average Retail Price (cents/kWh)	20.72	1

There is no NERC Region for Hawaii. This is shown as "--" in the table.

Table 2. Ten Largest Plants by Generating Capacity, 2006

Plant	Primary Energy Source or Technology Operating Company		Net Summer Capacity (MW)
Hawaii			
1. Kahe	Petroleum	Hawaiian Electric Co Inc	582
2. Waiau	Petroleum	Hawaiian Electric Co Inc	457
3. Kalaeola Cogen Plant	Petroleum	Kalaeloa Partners LP	214
4. Maalaea	Petroleum	Maui Electric Co Ltd	205
5. AES Hawaii	Coal	AES Hawaii Inc	180
6. Honolulu	Petroleum	Hawaiian Electric Co Inc	100
7. Port Allen	Petroleum	Kauai Island Utility Cooperative	93
8. Keahole	Petroleum	Hawaii Electric Light Co Inc	63
9. Hamakua Energy Plant	Petroleum	Hamakua Energy Partners LP	61
10. H Power	Other	Covanta Honolulu Resource Recovery	60

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

Entity	Type of Provider	All Sectors	Residential	Commercial	Industrial	Transportation
Hawaii						
1. Hawaiian Electric Co Inc	Investor-Owned	7,700,605	2,134,432	2,491,323	3,074,850	-
2. Maui Electric Co Ltd	Investor-Owned	1,266,467	445,434	415,304	405,729	-
3. Hawaii Electric Light Co Inc	Investor-Owned	1,148,760	442,294	458,252	248,214	-
4. Kauai Island Utility Cooperative	Cooperative	452,080	160,272	124,854	166,954	-
Total Sales, Top Five Providers		10,567,912	3,182,432	3,489,733	3,895,747	-
Percent of Total State Sales		100	100	100	100	-

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

(Megawatts)

E	1000	1005	2001	2002	2002	2004	2005	2006	Percentag	ge Share
Energy Source	1990	1995	2001	2002	2003	2004	2005	2000	1990	2006
Hawaii										
Electric Utilities	1,487	1,602	1,622	1,622	1,624	1,691	1,705 ^R	1,730	78.8	71.7
Petroleum	1,483	1,598	1,616	1,618	1,620	1,687	1,699 ^R	1,724	78.6	71.4
Hydroelectric	3	3	3	2	2	2	4	4	0.2	0.2
Other Renewables	-	-	2	2	2	2	2	2	-	0.1
Independent Power Producers and Combined Heat and Power	400	757	670	645	644	620	653 ^R	684	21.2	28.3
Coal	22	213	202	202	202	180	180	180	1.2	7.5
Petroleum	132	275	251	264	262	262	296 ^R	296	7.0	12.2
Other Gases	8	8	9	9	9	9	9	9	0.4	0.4
Hydroelectric	14	25	22	22	21	21	20	20	0.8	0.8
Other Renewables	223	237	186	148	150	149	149	180	11.8	7.5
Total Electric Industry	1,886	2,359	2,292	2,267	2,268	2,311	2,358	2,414	100.0	100.0
Coal	22	213	202	202	202	180	180	180	1.2	7.5
Petroleum	1,616	1,874	1,867	1,882	1,882	1,949	1,994	2,019	85.7	83.6
Other Gases	8	8	9	9	9	9	9	9	0.4	0.4
Hydroelectric	18	28	25	23	22	22	24	24	0.9	1.0
Other Renewables	223	237	188	150	153	151	151	182	11.8	7.6

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	Percer Sha	0
									1990	2006
Hawaii										
Electric Utilities	7,996,096	6,190,584	6,383,088	7,513,051	6,493,205	6,982,469	6,915,159	7,040,473	82.4	60.9
Petroleum	7,967,354	6,174,627	6,362,846	7,502,913	6,489,565	6,971,259	6,904,293	7,015,977	82.1	60.7
Hydroelectric	22,743	15,957	18,132	8,533	2,078	9,724	9,169	23,656	0.2	0.2
Other Renewables	5,999	-	2,110	1,605	1,562	1,486	1,697	840	0.1	*
Independent Power Producers and Combined Heat and Power	1,706,656	4,113,399	4,250,005	4,150,019	4,483,166	4,427,934	4,607,646	4,518,701	17.6	39.1
Coal	2,381	1,561,204	1,604,764	1,545,797	1,644,137	1,603,811	1,631,250	1,548,598	*	13.4
Petroleum	768,508	1,504,368	1,860,978	1,964,077	2,012,985	1,980,543 ^R	2,172,134 ^R	2,047,281	7.9	17.7
Other Gases	16,163	69,307	37,855	40,816	40,251	40,794	30,983	33,971	0.2	0.3
Hydroelectric	56,773	81,853	82,618	86,535	88,427	84,177	87,019	96,431	0.6	0.8
Other Renewables	862,831	894,548	494,312	369,313	525,469	548,125	537,250	616,802	8.9	5.3
Other	-	2,119	169,478	143,481	171,897	170,483	149,011	175,617	-	1.5
Total Electric Industry	9,702,752	10,303,983	10,633,093	11,663,070	10,976,371	11,410,403	11,522,805	11,559,174	100.0	100.0
Coal	2,381	1,561,204	1,604,764	1,545,797	1,644,137	1,603,811	1,631,250	1,548,598	*	13.4
Petroleum	8,735,862	7,678,995	8,223,824	9,466,990	8,502,550	8,951,802 ^R	9,076,427 ^R	9,063,258	90.0	78.4
Other Gases	16,163	69,307	37,855	40,816	40,251	40,794	30,983	33,971	0.2	0.3
Hydroelectric	79,516	97,810	100,750	95,068	90,505	93,901	96,188	120,087	0.8	1.0
Other Renewables	868,830	894,548	496,422	370,918	527,031	549,611	538,947	617,642	9.0	5.3
Other	-	2,119	169,478	143,481	171,897	170,483	149,011	175,617	-	1.5

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

Till ough 2000								
Fuel, Quality	1990	1995	2001	2002	2003	2004	2005	2006
Hawaii								
Coal (cents per million Btu)	-	-	-	W	W	W	W	W
Average heat value (Btu per pound)	-	-	-	11,536	11,422	11,097	10,975	10,943
Average sulfur Content (percent)	-	-	-	0.32	0.44	0.49	0.55	0.51
Petroleum (cents per million Btu)	415	298	490	W	W	W	W	W
Average heat value (Btu per gallon)	148,881	149,390	146,429	139,410	140,581	140,629	135,093	134,674
Average sulfur Content (percent)	0.46	0.42	0.46	0.44	0.42	0.45	0.34	0.33

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

(Thousand Metric Tons)								
Emission Type	1990	1995	2001	2002	2003	2004	2005	2006
Hawaii								
Sulfur Dioxide								
Coal	*	4	1	2	1	1	1	1
Petroleum	35	25	24	20	21	22	20	21
Other	*	*	*	*	*	*	*	*
Total	35	29	26	23	23	24	21	22
Nitrogen Oxide								
Coal	*	6	1	3	1	1	1	1
Petroleum	14	9	24	28	25	26	27	27
Other	1	1	1	1	2	2	1	1
Total	15	16	27	32	28	29	30	29
Carbon Dioxide								
Coal	6	1,599	1,638	1,596	1,700	1,711	1,575	1,513
Petroleum	7,743	6,397	6,713	7,462	6,738	7,173	7,268	7,305
Geothermal	-	6	5	2	5	5	6	5
Other Renewables	234	263	351	183	209	210	182	213
Total	7,983	8,264	8,708	9,243	8,652	9,100	9,031	9,036

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
2	2,7,0	2772							1990	2006
Hawaii										
Retail Sales (thousand megawatthours)										
Residential	2,324	2,606	2,802	2,898	3,028	3,162	3,164	3,182	28.0	30.1
Commercial	2,194	2,721	3,129	3,168	3,517	3,632	3,463	3,490	26.4	33.0
Industrial	3,734	3,803	3,790	3,770	3,846	3,937	3,912	3,896	44.9	36.9
Other	58	57	63	55	NA	NA	NA	NA	0.7	NA
All Sectors	8,311	9,188	9,785	9,892	10,391	10,732	10,539	10,568	100.0	100.0
Retail Revenue (million dollars)										
Residential	238	347	458	453	507	571	655	743	31.8	33.9
Commercial	223	331	464	447	528	588	659	748	29.8	34.1
Industrial	283	352	443	415	469	526	618	700	37.7	31.9
Other	5	7	11	9	NA	NA	NA	NA	0.7	NA
All Sectors	750	1,038	1,374	1,325	1,504	1,685	1,932	2,190	100.0	100.0
Average Retail Prices (cents/KWh)										
Residential	10.26	13.32	16.34	15.63	16.73	18.06	20.70	23.35	NA	NA
Commercial	10.18	12.16	14.81	14.11	15.02	16.19	19.04	21.42	NA	NA
Industrial	7.57	9.27	11.68	11.02	12.20	13.35	15.79	17.96	NA	NA
Other	9.40	12.11	16.81	16.85	NA	NA	NA	NA	NA	NA
All Sectors	9.02	11.29	14.05	13.39	14.47	15.70	18.33	20.72	NA	NA

Table 9. Retail Electricity Sales Statistics, 2006

Item		Full	Other I					
	Investor- Owned	Public	Federal	Cooperative	Facility	Energy	Delivery	Total
Hawaii								
Number of Entities	3	NA	NA	1	NA	NA	NA	4
Number of Retail Customers	432,737	NA	NA	30,878	NA	NA	NA	463,615
Retail Sales (thousand megawatthours)	10,116	NA	NA	452	NA	NA	NA	10,568
Percentage of Retail Sales	95.72	NA	NA	4.28	NA	NA	NA	100.00
Revenue from Retail Sales (million dollars)	2,044	NA	NA	146	NA	NA	NA	2,190
Percentage of Revenue	93.34	NA	NA	6.66	NA	NA	NA	100.00
Average Retail Price (cents/kWh)	20.21	NA	NA	32.27	NA	NA	NA	20.72

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
Hawaii								
Supply								
Generation								
Electric Utilities	7,996	6,191	6,383	7,513	6,493	6,982	6,915	7,040
Independent Power Producers	386	641	521	400	551	267	280	349
Combined Heat and Power, Electric	542	2,809	3,225	3,289	3,640	3,568	3,769	3,566
Electric Power Sector Generation Subtotal	8,924	9,640	10,129	11,202	10,685	10,818	10,964	10,956
Combined Heat and Power, Commercial	-	-	-	-	-	325	293	339
Combined Heat and Power, Industrial	779	664	504	461	292	267	266	264
Industrial and Commercial Generation Subtotal	779	664	504	461	292	593	559	603
Total Net Generation	9,703	10,304	10,633	11,663	10,976	11,410	11,523	11,559
Total Supply	9,703	10,304	10,633	11,663	10,976	11,410	11,523	11,559
Disposition								
Retail Sales								
Full Service Providers	8,311	9,188	9,785	9,892	10,206	10,510	10,539	10,568
Facility Direct Retail Sales	-	-	-	-	184	221	*	-
Total Electric Industry Retail Sales	8,311	9,188	9,785	9,892	10,391	10,732	10,539	10,568
Direct Use	558	572	464	474	480	481	398	365
Estimated Losses	623	697	366	517	461	523	643	681
Total Disposition	9,491	10,457	10,614	10,883	11,332	11,735	11,580	11,614
Net Interstate Trade	211	-153	19	780	-355	-325	-57	-55
Net Trade Index (ratio)	1.02	0.99	1.00	1.07	0.97	0.97	1.00	1.00

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.