Table 1. 2003 Summary Statistics

Item	Value	U.S. Rank
Hawaii		
NERC Region(s)		--
Primary Energy Source		Petroleum
Net Summer Capability (megawatts)	2,268	47
Electric Utilities	1,624	41
Independent Power Producers & Combined Heat and Power	644	43
Net Generation (megawatthours)	10,976,371	44
Electric Utilities	6,493,205	39
Independent Power Producers & Combined Heat and Power	4,483,166	36
Emissions (thousand metric tons)		
Sulfur Dioxide	23	39
Nitrogen Oxide	13	42
Carbon Dioxide	8,545	42
Sulfur Dioxide (lbs/MWh)	4.6	24
Nitrogen Oxide (lbs/MWh)	2.6	27
Carbon Dioxide (lbs/MWh)	1,716	17
Total Retail Sales (megawatthours)	10,390,836	47
Full Service Provider Sales (megawatthours)	10,390,836	44
Direct Use (megawatthours)	480,116	36
Average Retail Price (cents/kWh)	14.47	1

See footnotes at end of tables.

Table 2. Ten Largest Plants by Generating Capability, 2003

Plant	Energy Sources	Operating Company	Net Summer Capability (MW)
Hawaii			
1. Kahe	Petroleum	Hawaiian Electric Co Inc	582
2. Waiau	Petroleum	Hawaiian Electric Co Inc	457
3. Maalaea	Petroleum	Maui Electric Co Ltd	190
4. AES Hawaii	Petroleum, Other, Coal	AES Hawaii Inc	180
5. Kalaeola Cogen Plant	Petroleum	Kalaeloa Partners LP	180
6. Honolulu	Petroleum	Hawaiian Electric Co Inc	100
7. Port Allen	Petroleum	Kauai Island Utility Cooperative	96
8. Hamakua Energy Plant	Other	Hamakua Energy Partners LP	61
9. H Power	Petroleum, Other	Honolulu Resource Recovery Venture	60
10. Hawaiian Comm & Sugar Puunene Mill	Petroleum, Coal, Other	Hawaiian Com & Sugar Co Ltd	46

See footnotes at end of tables.

Table 3. Top Five Providers of Retail Electricity, 2003
(Megawatthours)

Entity	Ownership Type	All Sectors	Residential	Commercial	Industrial	Transportation
Hawaii						
1. Hawaiian Electric Co Inc	Investor-Owned	7,522,230	2,066,522	2,401,376	3,054,332	0
2. Maui Electric Co Ltd	Investor-Owned	1,206,719	419,511	394,431	392,777	0
3. Hawaii Electric Light Co Inc	Investor-Owned	1,046,147	389,874	426,906	229,367	0
4. Kauai Island Utility Coop	Cooperative	431,314	151,673	118,269	161,372	0
Total Sales, Top Five Providers		10,206,410	3,027,580	3,340,982	3,837,848	0
Percent of Total State Sales		98	100	95	100	0

See footnotes at end of tables.

Table 4. Electric Power Industry Net Summer Capability by Primary Energy Source, 1994, 1998, and 2003
(Megawatts)

Energy Source	1994	1998	2003	Annual Growth Rate 1994-2003 (Percent)	Percentage Share		
					1994	1998	2003
Hawaii							
Electric Utilities	**1,601**	**1,616**	**1,624**	**0.2**	**67.6**	**68.9**	**71.6**
Petroleum	1,598	1,594	1,620	.2	67.5	68.0	71.4
Natural Gas	0	18	0	NM	.0	.8	.0
Hydroelectric	3	4	2	–4.4	.1	.2	.1
Other Renewables	0	0	2	NM	.0	.0	.1
Independent Power Producers and Combined Heat and Power	**766**	**729**	**644**	**–1.9**	**32.4**	**31.1**	**28.4**
Coal	213	213	202	–.6	9.0	9.1	8.9
Petroleum	276	276	212	–2.9	11.7	11.8	9.3
Natural Gas	0	0	50	NM	.0	.0	2.2
Other Gases	8	8	9	1.3	.3	.3	.4
Hydroelectric	24	25	20	–2.0	1.0	1.1	.9
Other Renewables	245	207	151	–5.2	10.4	8.8	6.7
Total Electric Industry	**2,367**	**2,344**	**2,268**	**–.5**	**100.0**	**100.0**	**100.0**
Coal	213	213	202	–.6	9.0	9.1	8.9
Petroleum	1,874	1,870	1,832	–.3	79.2	79.8	80.8
Natural Gas	0	18	50	NM	.0	.8	2.2
Other Gases	8	8	9	1.3	.3	.3	.4
Hydroelectric	27	28	22	–2.3	1.1	1.2	1.0
Other Renewables	245	207	153	–5.1	10.4	8.8	6.7

See footnotes at end of tables.

Table 5. Electric Power Industry Generation by Primary Energy Source, 1994, 1998, and 2003
(Megawatthours)

Energy Source	1994	1998	2003	Annual Growth Rate 1994-2003 (Percent)	Percentage Share		
					1994	1998	2003
Hawaii							
Electric Utilities	**6,055,087**	**6,301,169**	**6,493,205**	**0.8**	**59.9**	**61.6**	**59.2**
Petroleum	6,036,282	6,287,107	6,489,565	.8	59.7	61.5	59.1
Hydroelectric	18,805	13,750	2,078	–21.7	.2	.1	*
Other Renewables	0	312	1,562	NM	.0	*	*
Independent Power Producers and Combined Heat and Power	**4,053,815**	**3,926,913**	**4,483,167**	**1.1**	**40.1**	**38.4**	**40.8**
Coal	1,326,742	1,434,868	1,644,137	2.4	13.1	14.0	15.0
Petroleum	1,604,631	1,563,961	2,012,985	2.6	15.9	15.3	18.3
Other Gases	65,719	60,443	40,251	–5.3	.6	.6	.4
Hydroelectric	120,621	107,523	88,427	–3.4	1.2	1.1	.8
Other Renewables	936,102	760,118	695,204	–3.3	9.3	7.4	6.3
Other	0	0	2,162	NM	.0	.0	*
Total Electric Industry	**10,108,902**	**10,228,082**	**10,976,371**	**.9**	**100.0**	**100.0**	**100.0**
Coal	1,326,742	1,434,868	1,644,137	2.4	13.1	14.0	15.0
Petroleum	7,640,913	7,851,068	8,502,550	1.2	75.6	76.8	77.5
Other Gases	65,719	60,443	40,251	–5.3	.6	.6	.4
Hydroelectric	139,426	121,273	90,505	–4.7	1.4	1.2	.8
Other Renewables	936,102	760,430	696,766	–3.2	9.3	7.4	6.3
Other	0	0	2,162	NM	.0	.0	*

See footnotes at end of tables.

Table 6. Electric Power Delivered Fuel Prices for Coal, Petroleum, and Natural Gas, 1994, 1998, and 2003

Fuel, Quality	1994	1998	2003	Annual Growth Rate 1994-2003 (Percent)
Hawaii				
Coal (cents per million Btu)	0.0	0.0	W	W
Average heat value (Btu per pound)	0	0	11,422	NM
Average sulfur Content (percent)	.0	.0	.4	NM
Petroleum (cents per million Btu)	271.2	261.5	W	W
Average heat value (Btu per gallon)	149,700	149,205	140,582	–0.7
Average sulfur Content (percent)	.4	.4	.4	–.4

See footnotes at end of tables.

Table 7. Electric Power Industry Emissions Estimates, 1994, 1998, and 2003
(Thousand Metric Tons)

Emission Type	1994	1998	2003	Annual Growth Rate 1994-2003 (Percent)
Hawaii				
Sulfur Dioxide				
Coal	3	5	1	–9.9
Petroleum	17	23	22	2.4
Natural Gas	—	—	—	NM
Other	*	*	*	3.2
Total	21	28	23	1.1
Nitrogen Oxide				
Coal	5	6	2	–12.0
Petroleum	9	9	10	.5
Gas	—	—	—	NM
Other	1	1	2	9.5
Total	15	16	13	–1.9
Carbon Dioxide				
Coal	1,354	1,478	1,699	2.6
Petroleum	6,367	6,584	6,633	.5
Gas	—	—	—	NM
Geothermal	5	6	5	–.5
Other	65	59	209	13.9
Total	7,790	8,127	8,545	1.0

See footnotes at end of tables.

Table 8. Retail Sales, Revenue, and Average Retail Price by Sector, 1994, 1998, and 2003

Sector	1994	1998	2003	Annual Growth Rate 1994-2003 (Percent)	Percentage Share 1994	Percentage Share 1998	Percentage Share 2003
Hawaii							
Retail Sales (thousand megawatthours)							
Residential	2,557	2,641	3,028	1.9	28.6	28.5	29.1
Commercial	2,543	2,776	3,517	3.7	28.4	30.0	33.8
Industrial	3,791	3,787	3,846	.2	42.4	40.9	37.0
Other	58	57	NA	NM	.6	.6	NA
Total	8,948	9,261	10,391	1.7	100.0	100.0	100.0
Retail Revenue (million dollars)							
Residential	318	365	507	5.3	33.3	34.1	33.7
Commercial	297	342	528	6.6	31.1	32.0	35.1
Industrial	334	357	469	3.8	34.9	33.4	31.2
Other	7	7	NA	NM	.7	.6	NA
Total	956	1,070	1,504	5.2	100.0	100.0	100.0
Average Retail Price (cents/kWh)							
Residential	12.45	13.82	16.73	3.3	NA	NA	NA
Commercial	11.67	12.31	15.02	2.8	NA	NA	NA
Industrial	8.82	9.41	12.20	3.7	NA	NA	NA
Other	11.21	12.28	NA	NM	NA	NA	NA
Total	10.68	11.56	14.47	3.4	NA	NA	NA

See footnotes at end of tables.

Table 9. Retail Electricity Sales Statistics, 2003

Item	Full Service Providers: Investor-Owned	Full Service Providers: Public	Full Service Providers: Federal	Full Service Providers: Cooperative	Full Service Providers: Facility	Other Providers: Energy	Other Providers: Delivery	Total
Hawaii								
Number of Entities	3	NA	NA	1	3	NA	NA	7
Number of Retail Customers	415,208	NA	NA	32,361	15	NA	NA	447,584
Retail Sales (thousand megawatthours)	9,775	NA	NA	431	184	NA	NA	10,391
Percentage of Retail Sales	94.07	NA	NA	4.15	1.77	NA	NA	100.00
Revenue from Retail Sales (million dollars)	1,388	NA	NA	97	19	NA	NA	1,504
Percentage of Revenue	92.28	NA	NA	6.44	1.28	NA	NA	100.00
Average Retail Price (cents/kWh)	14.20	NA	NA	22.45	10.46	NA	NA	14.47

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.