

Table 1. 1998 Summary Statistics

Item	Value	U.S. Rank	Item	Value	U.S. Rank
NERC Region(s)		Not Applicable	Utility		
Net Exporter or Importer		Not Applicable	Capability (MW)	1,616	47
Primary Generating Fuel		Petroleum	Generation (MWh)	6,301,169	46
Population (as of 7/98)	1,190,472	41	Average Age of Plants (years)		
Average Electricity Price (cents/kWh) ^a	11.56	50	Petroleum-fired	28	
Industrial	9.41	50	Gas-fired	5	
Commercial	12.31	51	Hydroelectric	67	
Residential	13.82	50	Nonutility		
Industry			Capability (MW)	737	26
Capability (MW)	2,353	47	Share of Capability (Percent) ...	31.3	5
Generation (MWh)	10,226,750	45	Generation (MWh)	3,925,581	24
Capability/person			Share of Generation (Percent) ...	38.4	5
(KWe/person)	1.98	44			
Generation/person					
(MWh/person)	8.59	43			
Emissions (Thousand Short Tons)					
Sulfur Dioxide	18	42			
Nitrogen Oxide	15	44			
Carbon Dioxide	8,170	41			
Sulfur Dioxide/sq. mile (Tons)	2.78	26			
Nitrogen Oxides/sq. mile (Tons)	2.37	28			
Carbon Dioxide/sq. mile (Tons)	1,271.99	21			

Table 2. Five Largest Plants, 1998

Plant	Energy Source ^b	Operating Company	Net Capability (MW)	Age (Years)
1. Kahe	Petroleum	Hawaiian Electric Co Inc	582	35
2. Waiau	Petroleum	Hawaiian Electric Co Inc	457	51
3. Kalaeola Cogeneration	Petroleum	Kalaeloa Partners LP	258	9
4. AES Hawaii Inc	Coal	AES Hawaii Inc	191	6
5. Maalaea	Petroleum	Maui Electric Co Ltd	174	27

Table 3. Top Four Utilities Ranked by Retail Sales Revenue Within the State, 1998

(Million Dollars)

Utility	All Sectors	Residential	Commercial	Industrial	Other
A. Hawaiian Electric Company, Inc	712	229	217	261	5
B. Hawaii Electric Light Co, Inc	153	62	58	32	1
C. Maui Electric Company, Ltd	137	49	48	39	1
D. Citizens Utilities Company	69	25	19	25	1
Total	1,070	365	342	357	7
Percentage of Utility Sales	100	100	100	100	100

Table 4. Electric Power Industry Generating Capability by Plant Type, 1988, 1993, and 1998

(Megawatts Electric)

Plant Type	1988	1993	1998	Annual Growth Rate 1988-1998 (Percent)	Percentage Share 1988	Percentage Share 1993	Percentage Share 1998
Total Utility	1,453	1,602	1,616	1.1	64.3	67.4	68.7
Petroleum-fired	1,443	1,598	1,612	1.0	63.8	67.3	68.5
Hydroelectric	3	3	4	0.6	0.1	0.1	0.2
Renewable	6	--	--	-100.0	0.3	--	--
Total Nonutility	807	774	737	-0.9	35.7	32.6	31.3
Industry	2,260	2,376	2,353	0.4	100.0	100.0	100.0

Figure 1. Utility Generating Capability by Plant Type, 1998

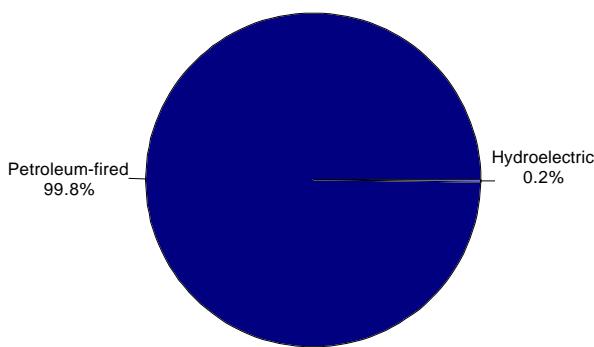


Figure 2. Utility Generation by Primary Energy Source, 1998

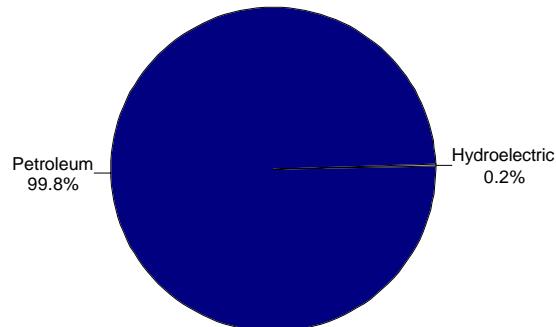


Table 5. Electric Power Industry Generation of Electricity by Primary Energy Source, 1988, 1993, and 1998
(Megawatthours)

Fuel	1988	1993	1998	Annual Growth Rate 1988-1998 (Percent)	Percentage Share 1988	Percentage Share 1993	Percentage Share 1998
Total Utility	7,627,423	6,083,815	6,301,169	-1.9	72.8	61.2	61.6
Petroleum	7,597,134	6,070,063	6,287,107	-1.9	72.5	61.0	61.5
Hydroelectric	14,064	13,752	13,750	-0.2	0.1	0.1	0.1
Renewable	16,225	--	312	-32.6	0.2	--	*
Total Nonutility	2,855,665	3,858,984	3,925,581	3.2	27.2	38.8	38.4
Industry	10,483,088	9,942,799	10,226,750	-0.2	100.0	100.0	100.0

Table 6. Utility Delivered Fuel Prices for Coal, Petroleum, and Gas, 1988, 1993, and 1998
(Cents per Million Btu, 1998 Dollars)

Fuel	1988	1993	1998	Annual Growth Rate 1988-1998 (Percent)
Petroleum	286.7	308.5	261.5	-0.9

Table 7. Electric Power Industry Emissions Estimates, 1988, 1993, and 1998
(Thousand Short Tons)

Emission Type	1988	1993	1998	Annual Growth Rate 1988-1998 (Percent)
Sulfur Dioxide	24	20	18	-3.0
Nitrogen Oxides ^c	10	8	15	3.2
Carbon Dioxide ^c	6,130	5,584	8,170	1.6

Figure 3. Utility Generation of Electricity by Primary Energy Source, 1988-1998

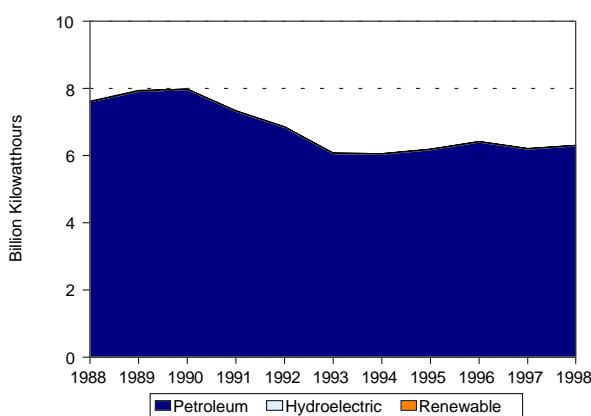
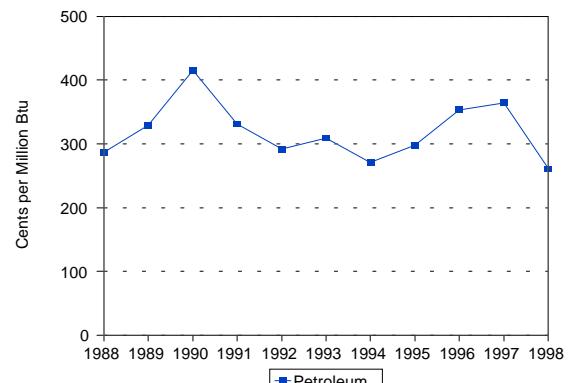
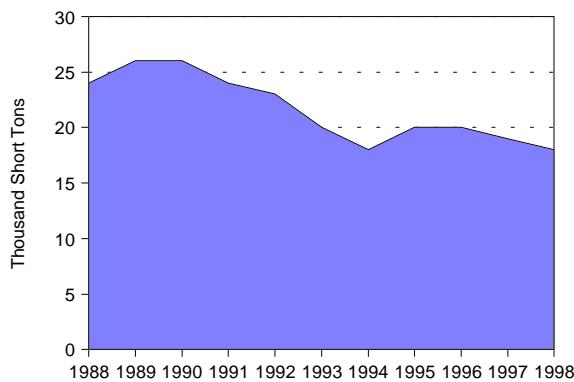
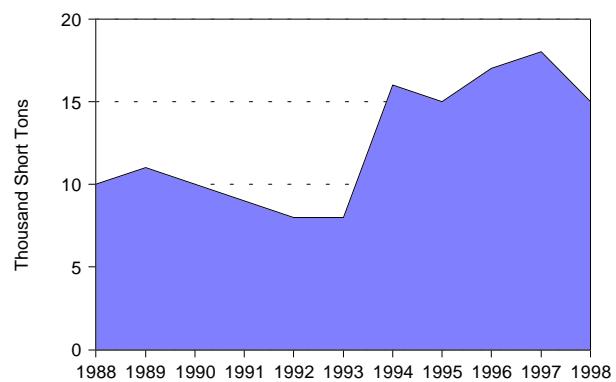
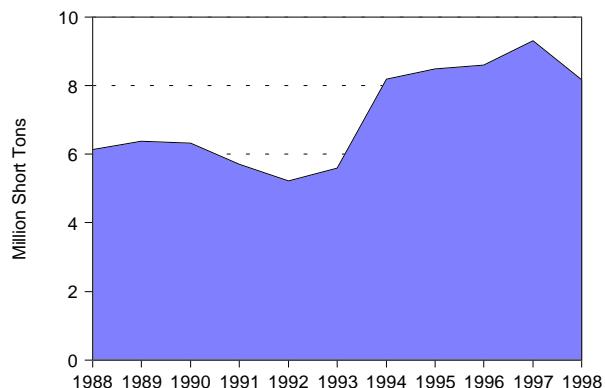
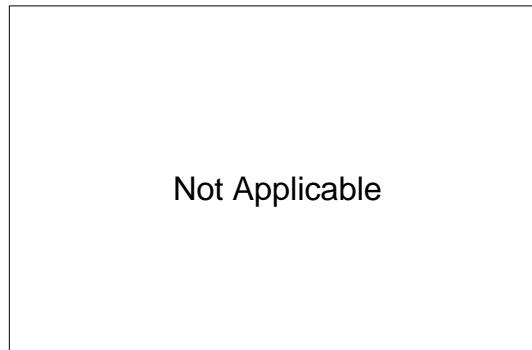


Figure 4. Utility Delivered Fuel Prices for Coal, Petroleum, and Gas, 1988-1998
(1998 Dollars)



**Figure 5. Estimated Sulfur Dioxide Emissions,
1988-1998****Figure 6. Estimated Nitrogen Oxide Emissions,
1988-1998****Figure 7. Estimated Carbon Dioxide Emissions,
1988-1998****Table 8. Utility Retail Sales by Sector, 1988, 1993, and 1998
(Megawatthours)**

Sector	1988	1993	1998	Annual Growth Rate 1988-1998 (Percent)	Percentage Share 1988	Percentage Share 1993	Percentage Share 1998
Residential . . .	2,151,388	2,468,578	2,640,645	2.1	27.9	28.5	28.5
Commercial . .	2,014,205	2,363,224	2,776,068	3.3	26.1	27.3	30.0
Industrial	3,495,480	3,769,876	3,787,397	0.8	45.3	43.5	40.9
Other	57,957	56,233	56,961	-0.2	0.8	0.6	0.6
Total	7,719,029	8,657,911	9,261,071	1.8	100.0	100.0	100.0

Figure 8. Nuclear Power Capacity Factor Comparison, 1988-1998**Table 9. Utility Retail Sales Statistics, 1988, 1993, and 1998**

Item	Investor-Owned	Public	Federal	Cooperative	Total
	1988				
Number of Utilities	5	--	--	--	5
Number of Retail Customers	350,547	--	--	--	350,547
Retail Sales (MWh)	7,719,029	--	--	--	7,719,029
Percentage of Retail Sales	100.0	--	--	--	100.0
Revenue from Retail Sales (million 1998 dollars) ^d	744				744
Percentage of Revenue	100.0	--	--	--	100.0
1993					
Number of Utilities	4	--	--	--	4
Number of Retail Customers	390,280	--	--	--	390,280
Retail Sales (MWh)	8,657,911	--	--	--	8,657,911
Percentage of Retail Sales	100.0	--	--	--	100.0
Revenue from Retail Sales (million 1998 dollars) ^d	1,016				1,016
Percentage of Revenue	100.0	--	--	--	100.0
1998					
Number of Utilities	4	--	--	--	4
Number of Retail Customers	417,344	--	--	--	417,344
Retail Sales (MWh)	9,261,071	--	--	--	9,261,071
Percentage of Retail Sales	100.0	--	--	--	100.0
Revenue from Retail Sales (million 1998 dollars) ^d	1,070				1,070
Percentage of Revenue	100.0	--	--	--	100.0