

Table 1. 1998 Summary Statistics

Item	Value	U.S. Rank	Item	Value	U.S. Rank
NERC Region(s) .....			WSCC		
Net Exporter or Importer .....			Exporter		
Primary Generating Fuel .....			Coal		
Population (as of 7/98) .....	4,667,277	21	Average Age of Plants (years)		
Average Electricity Price (cents/kWh) <sup>a</sup>	7.33	37	Coal-fired .....	20	
Industrial .....	5.12	40	Petroleum-fired .....	27	
Commercial .....	7.76	36	Gas-fired .....	32	
Residential .....	8.68	35	Nuclear .....	11	
<b>Industry</b>			Hydroelectric .....	42	
Capability (MW) .....	15,254	21	Renewable .....	1	
Generation (MWh) .....	82,080,348	19	<b>Nonutility</b>		
Capability/person (KWe/person) .....	3.27	23	Capability (MW) .....	171	41
Generation/person (MWh/person) .....	17.59	15	Share of Capability (Percent) ...	1.1	45
Emissions (Thousand Short Tons)			Generation (MWh) .....	781,107	41
Sulfur Dioxide .....	96	27	Share of Generation (Percent) ..	1	45
Nitrogen Oxide .....	135	22			
Carbon Dioxide .....	41,642	22			
Sulfur Dioxide/sq. mile (Tons) .....	0.85	39			
Nitrogen Oxides/sq. mile (Tons) .....	1.19	40			
Carbon Dioxide/sq. mile (Tons) .....	366.43	39			

**Table 2. Five Largest Plants, 1998**

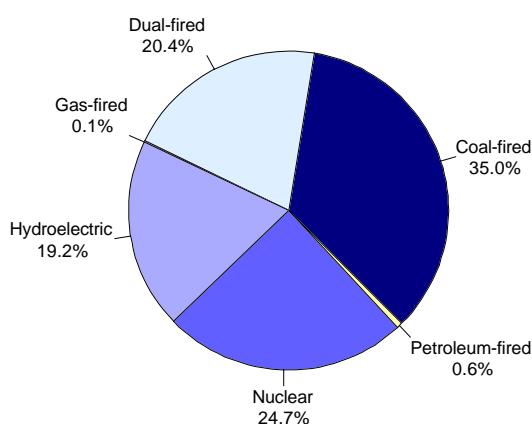
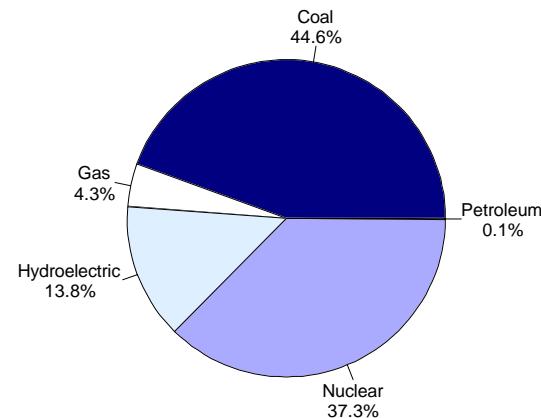
Plant	Energy Source <sup>b</sup>	Operating Company	Net Capability (MW)	Age (Years)
1. Palo Verde .....	Nuclear	Arizona Public Service Co	3,733	12
2. Navajo .....	Coal	Salt River Proj Ag I & P Dist	2,255	24
3. Glen Canyon .....	Hydro	Bureau of Reclamation	1,296	34
4. Hoover .....	Hydro	Bureau of Reclamation	1,042	62
5. Cholla .....	Coal	Arizona Public Service Co	995	36

**Table 3. Top Five Utilities Ranked by Retail Sales Revenue Within the State, 1998  
(Million Dollars)**

Utility	All Sectors	Residential	Commercial	Industrial	Other
A. Arizona Public Service Company .....	1,655	767	699	179	11
B. Salt River Project .....	1,355	688	468	153	46
C. Tucson Electric Power Company .....	623	249	146	210	18
D. Citizens Utilities Company .....	88	42	30	10	6
E. Sulphur Springs Valley E C Inc .....	46	25	16	2	3
Total .....	3,768	1,770	1,360	554	84
Percentage of Utility Sales .....	92	94	95	86	59

**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 .....	14,448	15,034	15,084	0.4	100.0	100.0	100.0
Coal-fired .....	4,762	5,108	5,286	1.0	33.0	34.0	35.0
Petroleum-fired .....	75	97	85	1.3	0.5	0.6	0.6
Gas-fired .....	10	10	10	0.0	0.1	0.1	0.1
Dual-fired .....	3,287	3,229	3,077	-0.7	22.7	21.5	20.4
Nuclear .....	3,663	3,810	3,733	0.2	25.4	25.3	24.7
Hydroelectric .....	2,652	2,781	2,893	0.9	18.4	18.5	19.2
Renewable .....	--	--	*	0.0	--	--	*
Total Nonutility .....	W	W	171	1.5	--	--	--
Industry .....	W	W	15,254	0.4	--	--	--

**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)

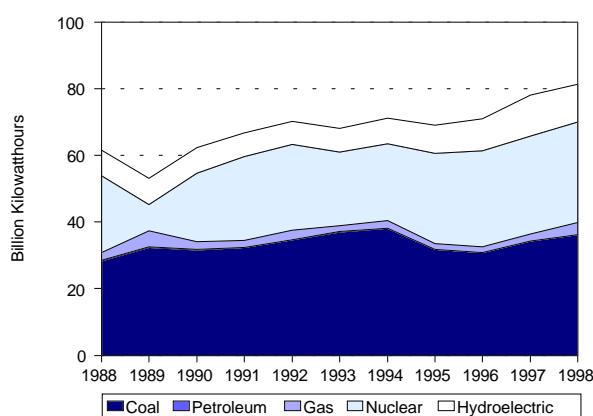
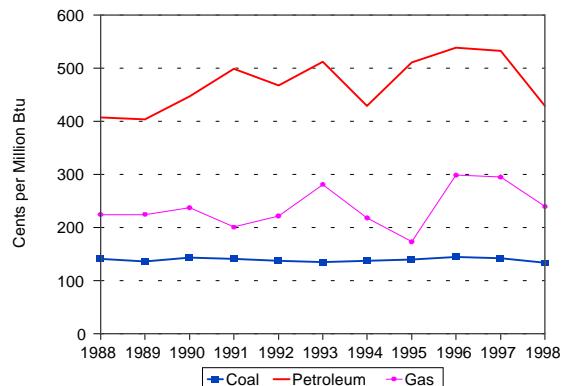
Fuel	1988	1993	1998	Annual Growth Rate 1988-1998 (Percent)	Percentage Share 1988	Percentage Share 1993	Percentage Share 1998
Total Utility .....	61,562,300	68,025,039	81,299,241	2.8	100.0	100.0	100.0
Coal .....	28,390,913	37,020,817	36,225,373	2.5	46.1	54.4	44.6
Petroleum .....	118,954	59,875	61,227	-6.4	0.2	0.1	0.1
Gas .....	2,340,952	1,872,396	3,472,416	4.0	3.8	2.8	4.3
Nuclear .....	22,940,487	22,048,880	30,301,045	2.8	37.3	32.4	37.3
Hydroelectric .....	7,770,995	7,023,071	11,239,180	3.8	12.6	10.3	13.8
Total Nonutility .....	W	W	781,107	4.9	--	--	--
Industry .....	W	W	82,080,348	2.8	--	--	--

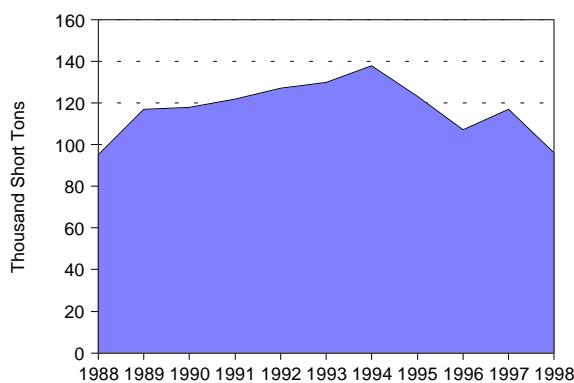
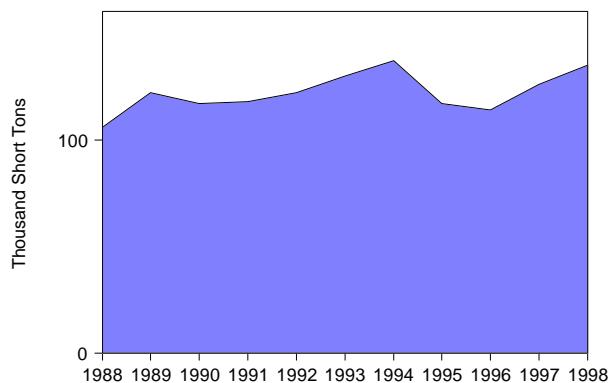
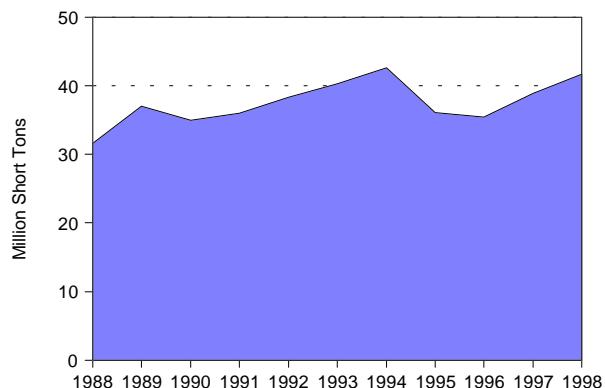
**Table 6. Utility Delivered Fuel Prices for Coal, Petroleum, and Gas, 1988, 1993, and 1998**  
(Cents per Million Btu, 1998 Dollars)

Fuel	1988	1993	1998	Annual Growth Rate 1988-1998 (Percent)
Coal .....	140.5	135.2	133.1	-0.5
Petroleum .....	407.0	511.4	429.0	0.5
Gas .....	224.1	280.7	239.1	0.6

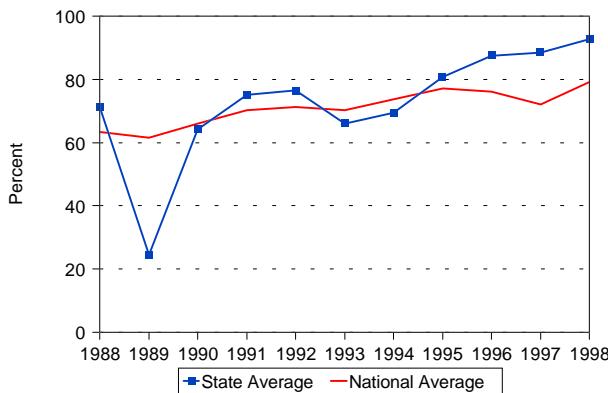
**Table 7. Electric Power Industry Emissions Estimates, 1988, 1993, and 1998**  
(Thousand Short Tons)

Emission Type	1988	1993	1998	Annual Growth Rate 1988-1998 (Percent)
Sulfur Dioxide .....	95	130	96	0.1
Nitrogen Oxides <sup>c</sup> .....	106	130	135	2.3
Carbon Dioxide <sup>c</sup> .....	31,593	40,245	41,642	2.7

**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 . . .	14,730,969	16,705,090	21,610,888	3.9	37.8	37.6	38.7
Commercial . .	12,345,694	14,813,140	18,439,797	4.1	31.7	33.4	33.0
Industrial . . . .	9,261,483	10,989,057	12,548,978	3.1	23.8	24.8	22.5
Other . . . . .	2,578,195	1,900,567	3,243,614	2.3	6.6	4.3	5.8
Total . . . . .	38,916,338	44,407,854	55,843,277	3.7	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
<b>1988</b>					
Number of Utilities .....	5	21	1	13	40
Number of Retail Customers .....	868,518	567,903	37	97,757	1,534,215
Retail Sales (MWh) .....	20,603,129	15,439,242	637,395	2,236,572	38,916,338
Percentage of Retail Sales .....	52.9	39.7	1.6	5.7	100.0
Revenue from Retail Sales (million 1998 dollars) <sup>d</sup> .....	2,145	1,306	8	196	3,654
Percentage of Revenue .....	58.7	35.7	0.2	5.4	100.0
<b>1993</b>					
Number of Utilities .....	5	23	2	11	41
Number of Retail Customers .....	978,325	624,653	14,408	107,705	1,725,091
Retail Sales (MWh) .....	23,783,521	17,204,642	801,612	2,618,079	44,407,854
Percentage of Retail Sales .....	53.6	38.7	1.8	5.9	100.0
Revenue from Retail Sales (million 1998 dollars) <sup>d</sup> .....	2,371	1,422	28	192	4,013
Percentage of Revenue .....	59.1	35.4	0.7	4.8	100.0
<b>1998</b>					
Number of Utilities .....	5	27	3	10	45
Number of Retail Customers .....	1,164,538	746,206	18,196	129,572	2,058,512
Retail Sales (MWh) .....	29,848,381	21,763,707	1,174,223	3,056,966	55,843,277
Percentage of Retail Sales .....	53.5	39	2.1	5.5	100.0
Revenue from Retail Sales (million 1998 dollars) <sup>d</sup> .....	2,387	1,467	34	204	4,092
Percentage of Revenue .....	58.3	35.8	0.8	5	100.0