Maryland

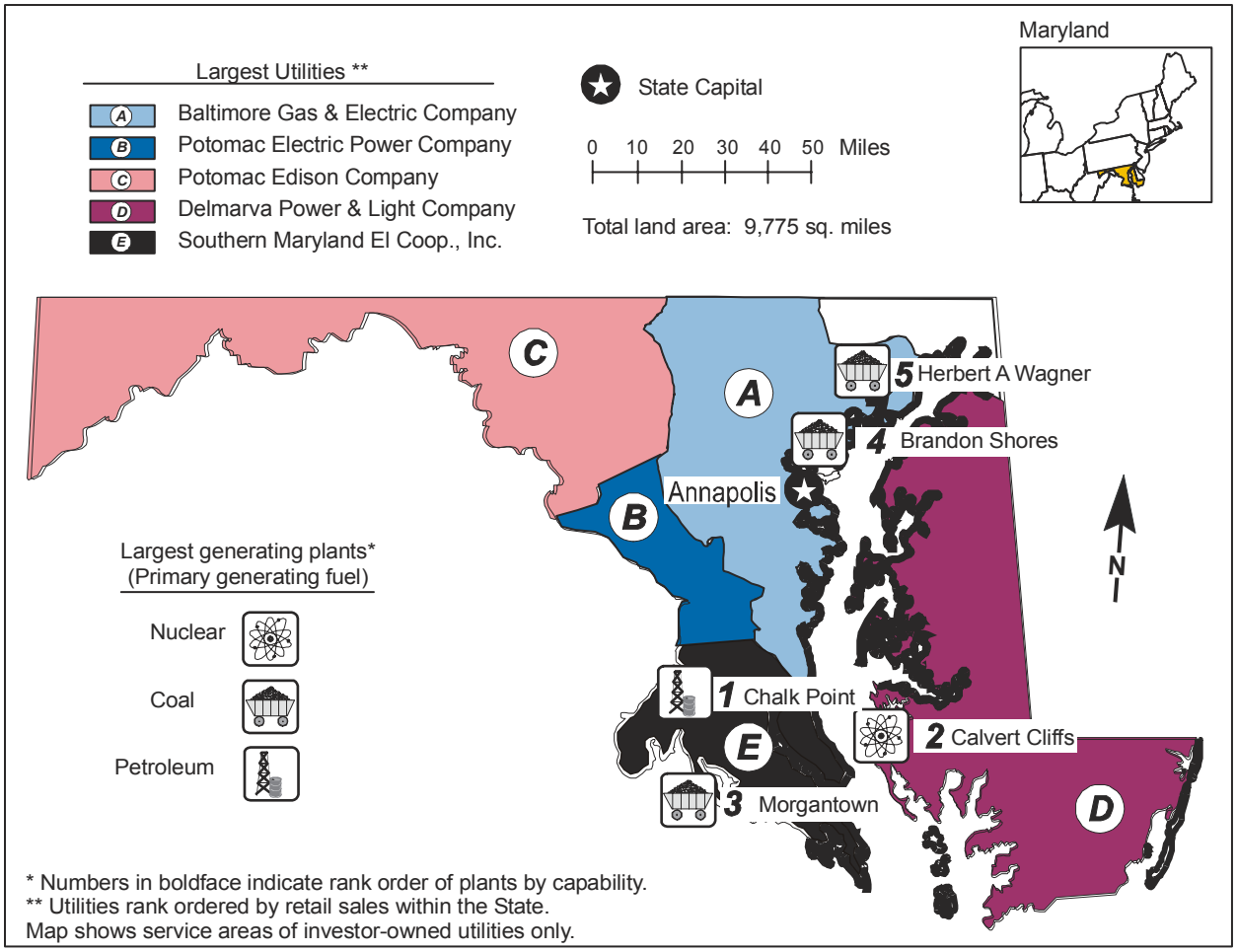
Largest Utilities **
A Baltimore Gas & Electric Company
B Potomac Electric Power Company
C Potomac Edison Company
D Delmarva Power & Light Company
E Southern Maryland El Coop., Inc.
State Capital
0 10 20 30 40 50 Miles
Total land area: 9,775 sq. miles
Maryland
Largest generating plants*
(Primary generating fuel)
Nuclear
Coal
Petroleum
5 Herbert A Wagner
4 Brandon Shores
Annapolis
1 Chalk Point
2 Calvert Cliffs
3 Morgantown
N
* Numbers in boldface indicate rank order of plants by capability.
** Utilities rank ordered by retail sales within the State.
Map shows service areas of investor-owned utilities only.

Table 1. 1999 Summary Statistics

Item	Value	U.S. Rank
NERC Region(s)		ECAR/MACC
Primary Energy Source		Coal
Net Summer Capability (megawatts)	11,789	26
Utility	10,955	25
Nonutility	834	28
Net Generation (megawatthours)	51,733,460	26
Utility	49,323,828	25
Nonutility	2,409,632	34
Emissions (thousand short tons)		
Sulfur Dioxide	306	14
Nitrogen Oxide	97	32
Carbon Dioxide	36,040	29
Sulfur Dioxide/sq. mile	31	2
Nitrogen Oxide/sq. mile	10	5
Carbon Dioxide/sq. mile	3,687	5
Electricity Consumption (MWh) (excludes line losses)	59,683,571	23
Utility Retail Electricity Sales (megawatthours)	59,086,225	22
Nonutility Retail Sales and Direct Use (megawatthours)	597,346	35
Utility Average Retail Price (cents/kWh)	7.04	17

Table 2. Ten Largest Plants by Generating Capability, 1999

Plant	Primary Energy Source(s)	Operating Company	Net Summer Capability (MW)
1. Chalk Point	Gas, Petroleum, Coal	Potomac Electric Power Co	2,423
2. Calvert Cliffs	Nuclear	Baltimore Gas & Electric Co	1,675
3. Morgantown	Petroleum, Coal	Potomac Electric Power Co	1,412
4. Brandon Shores	Petroleum, Coal	Baltimore Gas & Electric Co	1,296
5. Herbert A Wagner	Gas, Petroleum, Coal	Baltimore Gas & Electric Co	1,020
6. Dickerson	Petroleum, Gas, Coal	Potomac Electric Power Co	837
7. Conowingo	Hydro	PECO Energy Co	512
8. C P Crane	Petroleum, Coal	Baltimore Gas & Electric Co	399
9. Perryman	Petroleum, Gas	Baltimore Gas & Electric Co	350
10. Panda Brandywine LP	Gas	Panda Brandywine LP	256

Table 3. Five Largest Utilities by Retail Sales within the State, 1999
(Megawatthours)

Utility	Total	Residential	Commercial	Industrial	Other
A. Baltimore Gas & Electric Co	29,264,078	11,349,276	13,194,090	4,350,108	370,604
B. Potomac Electric Power Company	13,791,429	5,370,933	7,743,494	451,766	225,236
C. The Potomac Edison Company	8,256,426	2,529,570	1,541,123	4,172,085	13,648
D. Delmarva Power & Light Company	3,772,336	1,797,562	1,438,409	523,576	12,789
E. Southern Maryland El Coop, Inc	2,630,164	1,554,631	711,694	186,285	177,554
Total	57,714,433	22,601,972	24,628,810	9,683,820	799,831
Percentage of Utility Sales	98	97	99	97	98

Table 4. Electric Power Industry Generating Capability by Primary Energy Source, 1990, 1994, and 1999
(Megawatts)

Plant Type	1990	1994	1999	Average Annual Rate of Growth (Percent)	Percentage Share 1990	Percentage Share 1994	Percentage Share 1999
Total Utility	9,758	10,837	10,955	1.3	97.1	97.3	92.9
Coal	3,975	4,631	4,647	1.8	39.6	41.6	39.4
Petroleum	2,479	2,648	2,673	0.8	24.7	23.8	22.7
Gas	1,225	1,353	1,448	1.9	12.2	12.2	12.3
Nuclear	1,650	1,675	1,675	0.2	16.4	15.0	14.2
Hydroelectric	428	530	512	2.0	4.3	4.8	4.3
Total Nonutility	290	299	834	12.5	2.9	2.7	7.1
Coal	W	W	246	W	W	W	2.1
Petroleum	W	W	2	W	W	W	0.0
Gas	W	W	146	W	W	W	1.2
Petroleum/Gas Combined	W	W	348	W	W	W	3.0
Hydroelectric	0	0	19	0.0	0.0	0.0	0.2
Other	65	65	74	1.5	0.6	0.6	0.6
Total Industry	10,047	11,137	11,789	1.8	100.0	100.0	100.0
Coal	W	W	4,893	W	W	W	41.5
Petroleum	W	W	2,675	W	W	W	22.7
Gas	W	W	1,594	W	W	W	13.5
Petroleum/Gas Combined	W	W	348	W	W	W	3.0
Nuclear	1,650	1,675	1,675	0.2	16.4	15.0	14.2
Hydroelectric	428	530	531	2.4	4.3	4.8	4.5
Other	65	65	74	1.5	0.6	0.6	0.6

Figure 1. Industry Generating Capability by Primary Energy Source, 1999

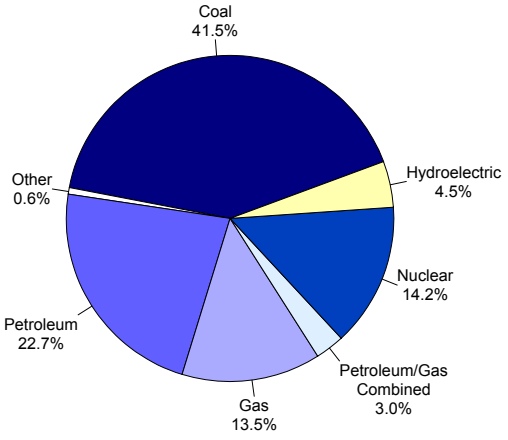

Figure 2. Industry Generation by Energy Source, 1999

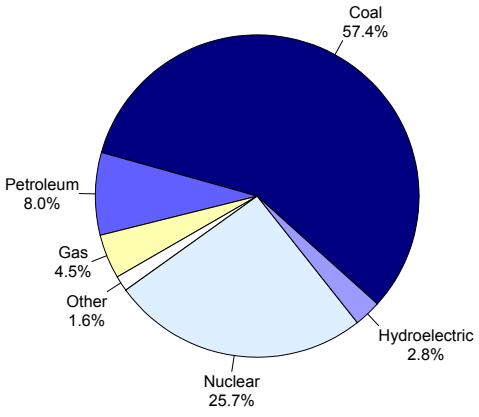

Table 5. Electric Power Industry Generation of Electricity by Energy Source, 1990, 1994, and 1999
(Megawatthours)

Fuel	1990	1994	1999	Average Annual Rate of Change (Percent)	Percentage Share 1990	Percentage Share 1994	Percentage Share 1999
Total Utility	31,497,406	43,765,565	49,323,828	5.1	95.1	96.5	95.3
Coal	23,299,412	25,394,481	29,352,347	2.6	70.3	56.0	56.7
Petroleum	3,328,080	4,133,533	3,897,208	1.8	10.0	9.1	7.5
Gas	1,319,588	992,607	1,339,520	0.2	4.0	2.2	2.6
Nuclear	1,251,416	11,235,408	13,312,335	30.0	3.8	24.8	25.7
Hydroelectric	2,298,910	2,009,536	1,422,418	-5.2	6.9	4.4	2.7
Total Nonutility	1,629,073	1,575,545	2,409,632	4.4	4.9	3.5	4.7
Coal	W	W	349,170	W	W	W	0.7
Petroleum	W	W	266,441	W	W	W	0.5
Gas	W	W	976,049	W	W	W	1.9
Hydroelectric	0	0	1,779	0.0	0.0	0.0	0.0
Other	531,881	522,379	816,193	4.9	1.6	1.2	1.6
Total Industry	33,126,479	45,341,110	51,733,460	5.1	100.0	100.0	100.0
Coal	W	W	29,701,517	W	W	W	57.4
Petroleum	W	W	4,163,649	W	W	W	8.0
Gas	W	W	2,315,569	W	W	W	4.5
Nuclear	1,251,416	11,235,408	13,312,335	30.0	3.8	24.8	25.7
Hydroelectric	2,298,910	2,009,536	1,424,197	-5.2	6.9	4.4	2.8
Other	531,881	522,379	816,193	4.9	1.6	1.2	1.6

Table 6. Utility Delivered Fuel Costs and Quality for Coal, Petroleum, and Gas, 1990, 1994, and 1999

Fuel	1990	1994	1999	Average Annual Rate of Change (Percent)
Coal (cents per million Btu) (1999 dollars)	199.7	169.6	137.9	-4.0
Average heat value (Btu per pound)	12734	12824	12943	0.2
Average sulfur Content (percent)	1.4	1.2	1.1	-2.8
Petroleum (cents per million Btu) (1999 dollars)	382.7	266.9	257.4	-4.3
Average heat value (Btu per gallon)	149603	150636	151073	0.1
Average sulfur Content (percent)	1.2	1.4	1.0	-2.1
Gas (cents per million Btu) (1999 dollars)	296.6	269.2	307.6	0.4
Average heat value (Btu per cubic foot)	1042	1043	1040	*

Table 7. Electric Power Industry Emissions Estimates by Fuel, 1990, 1994, and 1999
(Thousand Short Tons)

Emission Type	1990	1994	1999	Average Annual Rate of Change (Percent)
Sulfur Dioxide				
Coal	250	218	284	1.4
Petroleum	26	32	22	-1.7
Other	0	0	0	0.0
Total	276	249	306	1.1
Nitrogen Oxide				
Coal	83	88	83	0.1
Petroleum	6	5	5	-1.6
Gas	2	18	6	13.2
Other	0	1	2	0.0
Total	91	113	97	0.7
Carbon Dioxide				
Coal	23,104	26,424	29,946	2.9
Petroleum	3,662	4,163	4,027	1.1
Gas	1,051	1,262	1,632	5.0
Other	0	549	435	0.0
Total	27,816	32,398	36,040	2.9

Figure 3. Industry Generation of Electricity by Energy Source, 1990-1999

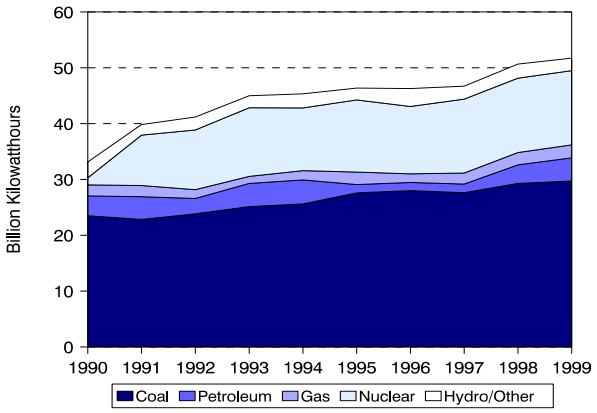

Figure 4. Utility Delivered Fuel Costs for Coal, Petroleum, and Gas, 1990-1999 (1999 Dollars)

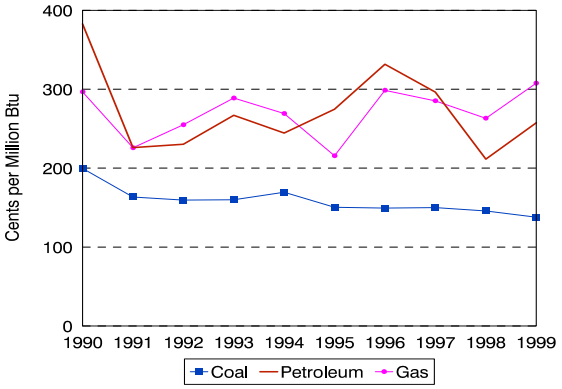

Figure 5. Estimated Sulfur Dioxide Emissions, 1990-1999

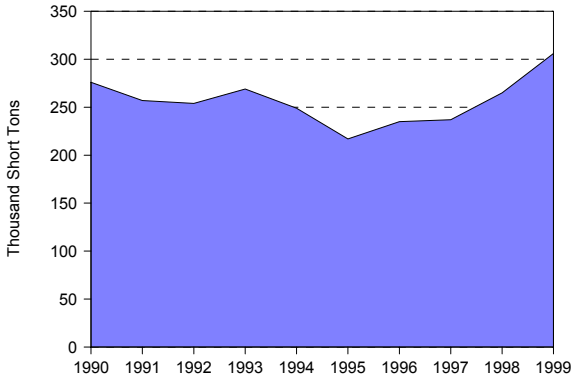

Figure 6. Estimated Nitrogen Oxide Emissions, 1990-1999

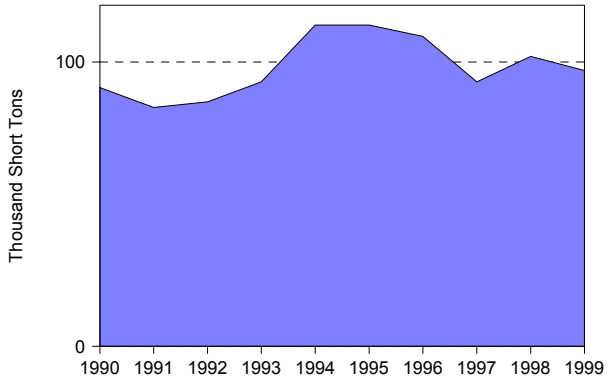

Figure 7. Estimated Carbon Dioxide Emissions, 1990-1999

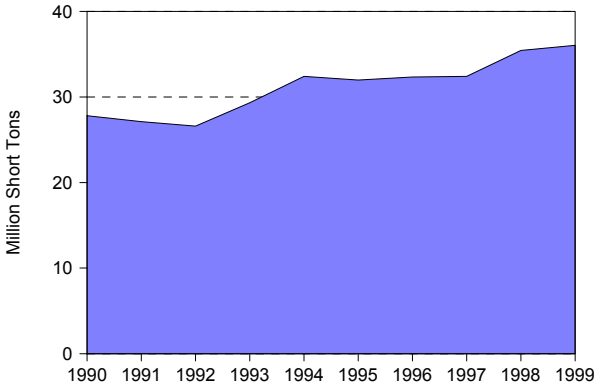

Figure 8. Nuclear Power Capacity Factor Comparison, 1990-1999

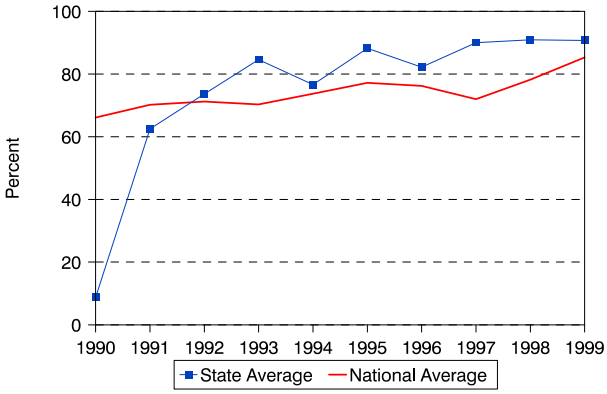

Table 8. Utility Retail Sales, Revenue, and Average Revenue per Kilowatthour by Sector, 1990, 1994, and 1999

	1990	1994	1999	Average Annual Rate of Change (Percent)	Percentage Share 1990	Percentage Share 1994	Percentage Share 1999
Utility Retail Sales							
(thousand megawatthours)							
Residential	19,102	21,666	23,342	2.3	38.6	39.6	39.5
Commercial	10,452	13,254	24,988	10.2	21.1	24.2	42.3
Industrial	19,308	19,037	9,936	-7.1	39.0	34.8	16.8
Other	672	794	819	2.2	1.4	1.4	1.4
Total	49,534	54,752	59,086	2.0	100.0	100.0	100.0
Retail Sales Revenue							
(million 1999 dollars)							
Residential	1,671	1,983	1,959	1.8	44.2	47.2	47.1
Commercial	850	1,040	1,703	8.0	22.5	24.8	41.0
Industrial	1,192	1,100	423	-10.9	31.5	26.2	10.2
Other	68	74	72	0.7	1.8	1.8	1.7
Total	3,780	4,198	4,158	1.1	100.0	100.0	100.0
Average Revenue per Kilowatthour							
(cents/kWh) (1999 dollars)							
Residential	8.75	9.15	8.39	NA	NA	NA	NA
Commercial	8.13	7.85	6.82	NA	NA	NA	NA
Industrial	6.17	5.78	4.26	NA	NA	NA	NA
Other	10.07	9.36	8.77	NA	NA	NA	NA
Total	7.63	7.67	7.04	NA	NA	NA	NA

Table 9. Utility Retail Sales, Revenue, and Number of Customers by Type of Utility, 1999

Item	Investor-Owned	Public	Federal	Cooperative	Total
Number of Utilities	4	5	0	3	12
Number of Retail Customers	1,986,771	30,895	0	157,223	2,174,889
Retail Sales (thousand megawatthours)	55,084	692	0	3,310	59,086
Percentage of Retail Sales	93.2	1.2	0.0	5.6	100.0
Revenue from Retail Sales (million dollars)	3,859	40	0	259	4,158
Percentage of Revenue	92.8	1.0	0.0	6.2	100.0
Average Revenue per Kilowatthour (cents/kWh)	7.00	5.83	0.00	7.82	7.04