

Table 1. 2002 Summary Statistics

Item	Value	U.S. Rank
Virginia		
NERC Region(s).....		ECAR/SERC/MAAC
Primary Energy Source		Coal
Net Summer Capability (megawatts).....	20,205	17
Electric Utilities	15,818	14
Independent Power Producers & Combined Heat and Power	4,387	17
Net Generation (megawatthours).....	75,005,651	21
Electric Utilities	62,880,125	17
Independent Power Producers & Combined Heat and Power	12,125,526	20
Emissions (thousand short tons)		
Sulfur Dioxide.....	251	15
Nitrogen Oxide.....	103	17
Carbon Dioxide.....	46,487	22
Sulfur Dioxide/sq. mile.....	6	18
Nitrogen Oxide/sq. mile.....	3	20
Carbon Dioxide/sq. mile.....	1,174	24
Utility and ESP Retail Electricity Sales (megawatthours).....	100,540,736	12
Utility Retail Electricity Sales (megawatthours)	100,305,309	12
ESP Retail Electricity Sales (megawatthours).....	235,427	17
Direct Use (megawatthours).....	1,862,173	20
Average Retail Price (cents/kWh).....	6.23	30

See footnotes at end of tables.

Table 2. Ten Largest Plants by Generating Capability, 2002

Plant	Energy Sources	Operating Company	Net Capability (MW)
Virginia			
1. Bath County.....	Hydro	Virginia Electric & Power Co	2,400
2. North Anna	Nuclear	Virginia Electric & Power Co	1,843
3. Chesterfield	Petroleum, Gas, Coal	Virginia Electric & Power Co	1,631
4. Surry.....	Nuclear	Virginia Electric & Power Co	1,625
5. Possum Point	Petroleum, Coal	Virginia Electric & Power Co	1,186
6. Yorktown	Gas, Coal, Petroleum	Virginia Electric & Power Co	1,144
7. Clover.....	Petroleum, Coal	Virginia Electric & Power Co	882
8. Doswell Combined Cycl	Petroleum, Gas	Doswell Ltd Partnership	820
9. Chesapeake.....	Petroleum, Coal	Virginia Electric & Power Co	739
10. Clinch River	Petroleum, Coal	Appalachian Power Co	690

See footnotes at end of tables.

Table 3. Top Five Utilities Ranked by Retail Sales, 2002
(Megawatthours)

Utility	All Sectors	Residential	Commercial	Industrial	Other
Virginia					
A. Virginia Electric & Power Co.....	67,616,714	25,526,415	23,497,176	9,211,471	9,381,652
B. Appalachian Power Company	15,507,106	6,061,620	3,043,817	5,667,007	734,662
C. The Potomac Edison Company	2,674,073	1,075,661	565,932	1,028,331	4,149
D. Northern Virginia Elec Coop.....	2,533,321	1,575,816	653,549	300,992	2,964
E. Rappahannock Electric Coop.....	2,253,515	1,152,634	101,685	993,406	5,790
Total	90,584,729	35,392,146	27,862,159	17,201,207	10,129,217
Percentage of Utility Sales.....	90	88	93	88	95

See footnotes at end of tables.

Table 4. Electric Power Industry Generating Capability by Primary Energy Source, 1993, 1997, and 2002
(Megawatts)

Energy Source	1993	1997	2002	Annual Growth Rate 1993-2002 (Percent)	Percentage Share 1993	Percentage Share 1997	Percentage Share 2002
Virginia							
Coal	4,217	5,099	4,789	1.4	24.8	27.2	23.7
Petroleum	1,204	2,025	1,917	5.3	7.1	10.8	9.5
Natural Gas	593	545	1,244	8.6	3.5	2.9	6.2
Dual Fired	1,582	1,146	1,019	-4.8	9.3	6.1	5.0
Nuclear	3,349	3,392	3,467	.4	19.7	18.1	17.2
Hydroelectric	3,109	3,085	3,383	.9	18.3	16.5	16.7
Other Renewables	*	*	0	NM	.0	.0	.0
Total Electric Utilities	14,054	15,291	15,818	1.3	82.5	81.6	78.3
Coal	895	1,150	1,328	4.5	5.3	6.1	6.6
Petroleum	5	8	358	61.2	.0	.0	1.8
Natural Gas	79	99	434	20.9	.5	.5	2.1
Dual Fired	1,475	1,547	1,663	1.3	8.7	8.3	8.2
Hydroelectric	22	21	20	-1.2	.1	.1	.1
Other Renewables	508	614	584	1.5	3.0	3.3	2.9
Total IPP's & Combined Heat and Power	2,983	3,439	4,387	4.4	17.5	18.4	21.7
Coal	5,112	6,249	6,117	2.0	30.0	33.4	30.3
Petroleum	1,209	2,034	2,275	7.3	7.1	10.9	11.3
Natural Gas	672	644	1,678	10.7	3.9	3.4	8.3
Dual Fired	3,057	2,693	2,682	-1.4	17.9	14.4	13.3
Nuclear	3,349	3,392	3,467	.4	19.7	18.1	17.2
Hydroelectric	3,131	3,106	3,402	.9	18.4	16.6	16.8
Other Renewables	508	614	584	1.5	3.0	3.3	2.9
Total Electric Industry	17,037	18,731	20,205	1.9	100.0	100.0	100.0

See footnotes at end of tables.

Table 5. Electric Power Industry Generation of Electricity by Primary Energy Source, 1993, 1997, and 2002
(Megawatthours)

Energy Source	1993	1997	2002	Annual Growth Rate 1993-2002 (Percent)	Percentage Share 1993	Percentage Share 1997	Percentage Share 2002
Virginia							
Coal	24,722,481	29,676,411	31,099,307	2.6	40.4	43.3	41.5
Petroleum	2,157,896	857,789	3,454,714	5.4	3.5	1.3	4.6
Natural Gas	2,139,635	1,291,954	2,128,402	-1	3.5	1.9	2.8
Nuclear	22,688,763	27,084,059	27,346,163	2.1	37.0	39.5	36.5
Hydroelectric	473,123	75,778	-1,148,461	NM	.8	.1	-1.5
Other Renewables	8	0	0	NM	.0	.0	.0
Total Electric Utilities	52,181,906	58,985,991	62,880,125	2.1	85.2	86.1	83.8
Coal	4,687,521	4,483,521	6,983,074	4.5	7.7	6.5	9.3
Petroleum	342,913	1,912,253	337,890	-2	.6	2.8	.5
Natural Gas	2,238,431	588,096	2,258,525	.1	3.7	.9	3.0
Other Gases	0	67	0	NM	.0	.0	.0
Hydroelectric	66,095	80,707	27,842	-9.2	.1	.1	.0
Other Renewables	1,726,645	2,464,699	2,518,195	4.3	2.8	3.6	3.4
Total IPP's & Combined Heat and Power	9,061,605	9,529,343	12,125,526	3.3	14.8	13.9	16.2
Coal	29,410,002	34,159,932	38,082,381	2.9	48.0	49.9	50.8
Petroleum	2,500,809	2,770,042	3,792,604	4.7	4.1	4.0	5.1
Natural Gas	4,378,066	1,880,050	4,386,927	.0	7.1	2.7	5.8
Other Gases	0	67	0	NM	.0	.0	.0
Nuclear	22,688,763	27,084,059	27,346,163	2.1	37.0	39.5	36.5
Hydroelectric	539,218	156,485	-1,120,619	NM	.9	.2	-1.5
Other Renewables	1,726,653	2,464,699	2,518,195	4.3	2.8	3.6	3.4
Total Electric Industry	61,243,511	68,515,334	75,005,651	2.3	100.0	100.0	100.0

See footnotes at end of tables.

Table 6. Electric Power Delivered Fuel Prices for Coal, Petroleum, and Natural Gas, 1993, 1997, and 2002

Fuel	1993	1997	2002	Annual Growth Rate 1993-2002 (Percent)
Virginia				
Coal (2002 cents per million Btu)	163.4	143.2	169.2	0.4
Average heat value (Btu per pound)	12,817	12,554	12,757	*
Average sulfur Content(percent)	1.0	1.0	1.2	1.7
Petroleum (2002 cents per million Btu)	237.1	289.7	380.3	5.4
Average heat value (Btu per gallon)	150,319	148,219	148,645	-1
Average sulfur Content(percent)	1.0	1.1	1.0	.0
Gas (2002 cents per million Btu)	310.5	281.6	413.4	3.2
Average heat value (Btu per cubic foot)	1,038	1,069	1,019	-2

See footnotes at end of tables.

Table 7. Electric Power Industry Emissions Estimates, 1993, 1997, and 2002
(Thousand Short Tons)

Emission Type	1993	1997	2002	Annual Growth Rate 1993-2002 (Percent)
Virginia				
Sulfur Dioxide				
Coal	207	232	230	1.2
Petroleum	12	11	19	5.3
Gas.....*	*	0	0	NM
Other.....	3	3	3	-5
Total	221	246	251	1.4
Nitrogen Oxide				
Coal	97	122	95	-2
Petroleum	2	2	3	3.3
Gas.....	3	2	2	-4.8
Other.....	3	3	3	.9
Total	105	129	103	-2
Carbon Dioxide				
Coal	30,126	34,840	40,762	3.4
Petroleum	2,093	1,901	3,121	4.5
Gas.....	2,341	1,055	2,367	.1
Other.....	155	183	237	4.9
Total	34,715	37,978	46,487	3.3

See footnotes at end of tables.

Table 8. Retail Sales, Revenue, and Average Revenue per Kilowatthour by Sector, 1993, 1997, and 2001

Sector	1993	1997	2002	Annual Growth Rate 1993-2002 (Percent)	Percentage Share 1993	Percentage Share 1997	Percentage Share 2002
Virginia							
Retail Sales (thousand megawatthours)							
Residential.....	32,472	33,923	40,389	2.4	39.9	38.8	40.2
Commercial.....	22,727	24,905	29,993	3.1	27.9	28.5	29.8
Industrial	17,390	19,249	19,489	1.3	21.4	22.0	19.4
Other	8,783	9,342	10,669	2.2	10.8	10.7	10.6
Total	81,372	87,420	100,541	2.4	100.0	100.0	100.0
Retail Sales Revenue (million 2002 dollars)							
Residential.....	2,739	2,701	3,146	1.5	48.5	49.0	50.2
Commercial.....	1,554	1,528	1,761	1.4	27.5	27.7	28.1
Industrial	812	792	805	-1	14.4	14.4	12.9
Other	544	494	549	.1	9.6	9.0	8.8
Total	5,650	5,514	6,262	1.1	100.0	100.0	100.0
Average Revenue per Kilowatthour (2002 cents/kWh)							
Residential.....	8.43	7.96	7.79	-9	NA	NA	NA
Commercial.....	6.84	6.13	5.87	-1.7	NA	NA	NA
Industrial	4.67	4.11	4.13	-1.3	NA	NA	NA
Other	6.20	5.29	5.15	-2.0	NA	NA	NA
Total	6.94	6.31	6.23	-1.2	NA	NA	NA

See footnotes at end of tables.

Table 9. Utility Retail Sales Statistics, 2002

Item	Investor-Owned	Public	Federal	Cooperative	Energy Service Providers	Total
Virginia						
Number of Entities	1	24	0	10	2	37
Number of Retail Customers	489,192	2,397,099	0	351,884	22,824	3,260,999
Retail Sales (thousand megawatthours).....	15,507	77,199	0	7,599	235	100,541
Percentage of Retail Sales.....	15.42	76.78	.00	7.56	.23	100.00
Revenue from Retail Sales (million 2002 dollars)	689	4,918	0	645	10	6,262
Percentage of Revenue.....	11.00	78.54	.00	10.29	.17	100.00
Revenue per Kilowatthour (2002 cents/kWh).....	4.44	6.37	.00	8.48	0	6.23

IPP = Independent Power Producer.

NA = Not available.

NM = Not meaningful.

* = 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 "**".)