Florida

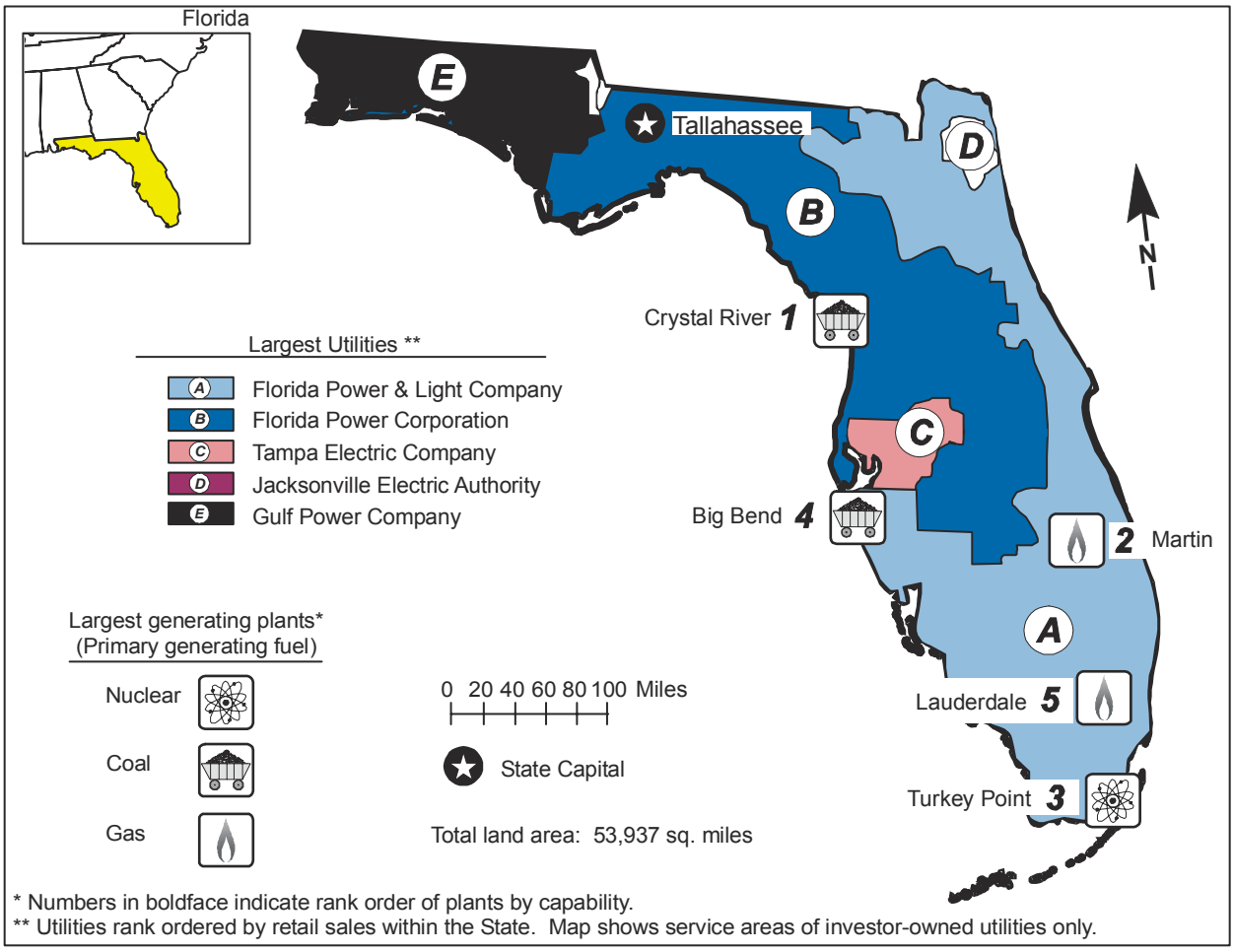
Florida
E
Tallahassee
D
B
N
Crystal River 1
Largest Utilities **
A Florida Power & Light Company
B Florida Power Corporation
C Tampa Electric Company
D Jacksonville Electric Authority
E Gulf Power Company
C
Big Bend 4
2 Martin
A
Largest generating plants*
(Primary generating fuel)
Nuclear
Coal
Gas
0 20 40 60 80 100 Miles
State Capital
Total land area: 53,937 sq. miles
Lauderdale 5
Turkey Point 3
* 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)		FRCC/SERC
Primary Energy Source		Coal
Net Summer Capability (megawatts)	40,940	3
Utility	36,536	2
Nonutility	4,404	8
Net Generation (megawatthours)	186,928,382	4
Utility	166,914,264	2
Nonutility	20,014,118	7
Emissions (thousand short tons)		
Sulfur Dioxide	646	6
Nitrogen Oxide	357	6
Carbon Dioxide	126,408	4
Sulfur Dioxide/sq. mile	12	10
Nitrogen Oxide/sq. mile	7	11
Carbon Dioxide/sq. mile	2,344	13
Electricity Consumption (MWh) (excludes line losses)	193,394,452	3
Utility Retail Electricity Sales (megawatthours)	187,270,257	3
Nonutility Retail Sales and Direct Use (megawatthours)	6,124,195	7
Utility Average Retail Price (cents/kWh)	6.85	19

Table 2. Ten Largest Plants by Generating Capability, 1999

Plant	Primary Energy Source(s)	Operating Company	Net Summer Capability (MW)
1. Crystal River	Petroleum, Nuclear, Coal	Florida Power Corp	3,116
2. Martin	Petroleum, Gas	Florida Power & Light Co	2,581
3. Turkey Point	Gas, Petroleum, Nuclear	Florida Power & Light Co	2,208
4. Big Bend	Petroleum, Coal	Tampa Electric Co	1,843
5. Lauderdale	Petroleum, Gas	Florida Power & Light Co	1,700
6. St Lucie	Nuclear	Florida Power & Light Co	1,678
7. Port Everglades	Gas, Petroleum	Florida Power & Light Co	1,662
8. Manatee	Petroleum	Florida Power & Light Co	1,625
9. Seminole	Petroleum, Coal	Seminole Electric Coop Inc	1,316
10. St Johns River Power	Petroleum, Coal	Jacksonville Electric Authority	1,262

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

Utility	Total	Residential	Commercial	Industrial	Other
A. Florida Power & Light Company	84,450,082	44,108,106	35,456,942	3,940,575	944,459
B. Florida Power Corporation	33,441,029	16,244,772	10,326,848	4,333,709	2,535,700
C. Tampa Electric Company	15,804,958	6,967,174	5,336,395	2,223,266	1,278,123
D. Jacksonville Electric Authority	10,768,701	4,514,824	3,340,441	2,827,874	85,562
E. Gulf Power Company	9,559,183	4,471,118	3,222,532	1,846,237	19,296
Total	154,023,953	76,305,994	57,683,158	15,171,661	4,863,140
Percentage of Utility Sales	82	81	84	82	84

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	32,714	35,487	36,536	1.2	94.2	91.5	89.2
Coal	9,971	10,037	10,770	0.9	28.7	25.9	26.3
Petroleum	11,161	14,862	12,153	0.9	32.1	38.3	29.7
Gas	7,721	6,719	9,665	2.5	22.2	17.3	23.6
Nuclear	3,813	3,822	3,898	0.2	11.0	9.9	9.5
Hydroelectric	48	47	47	-0.1	0.1	0.1	0.1
Other	0	0	3	0.0	0.0	0.0	0.0
Total Nonutility	2,004	3,287	4,404	9.1	5.8	8.5	10.8
Coal	W	W	793	W	W	W	1.9
Petroleum	47	22	25	-6.9	0.1	0.1	0.1
Gas	426	1,148	719	6.0	1.2	3.0	1.8
Petroleum/Gas Combined	270	362	1,500	21.0	0.8	0.9	3.7
Other	W	W	1,367	W	W	W	3.3
Total Industry	34,718	38,774	40,940	1.8	100.0	100.0	100.0
Coal	W	W	11,564	W	W	W	28.2
Petroleum	11,208	14,883	12,177	0.9	32.3	38.4	29.7
Gas	8,146	7,867	10,384	2.7	23.5	20.3	25.4
Petroleum/Gas Combined	270	362	1,500	21.0	0.8	0.9	3.7
Nuclear	3,813	3,822	3,898	0.2	11.0	9.9	9.5
Hydroelectric	48	47	47	-0.1	0.1	0.1	0.1
Other	W	W	1,370	W	W	W	3.3

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

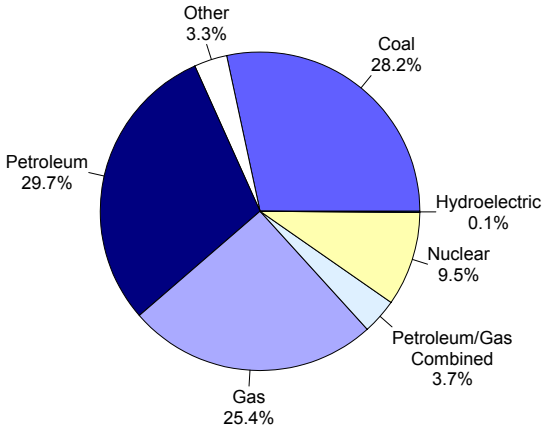

Figure 2. Industry Generation by Energy Source, 1999

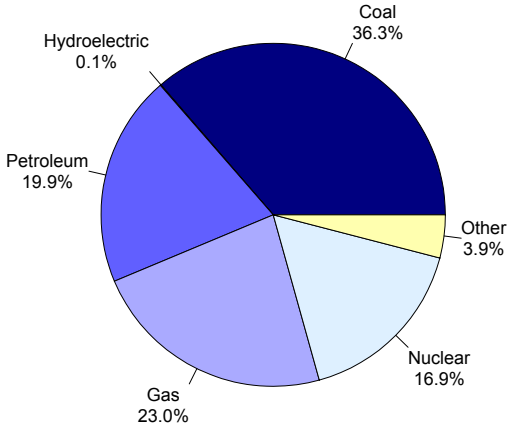

Table 5. Electric Power Industry Generation of Electricity by Energy Source, 1990, 1994, and 1999
(Megawatthours)

Fuel	1990	1994	1999	Average Annual Rate of Change (Percent)	Percentage Share 1990	Percentage Share 1994	Percentage Share 1999
Total Utility	123,623,905	141,790,885	166,914,264	3.4	92.3	89.4	89.3
Coal	59,073,203	60,770,030	62,680,522	0.7	44.1	38.3	33.5
Petroleum	25,092,296	33,330,039	36,697,343	4.3	18.7	21.0	19.6
Gas	17,504,242	20,734,235	35,853,511	8.3	13.1	13.1	19.2
Nuclear	21,779,560	26,682,107	31,526,285	4.2	16.3	16.8	16.9
Hydroelectric	174,604	274,474	140,175	-2.4	0.1	0.2	0.1
Other	0	0	16,428	0.0	0.0	0.0	0.0
Total Nonutility	10,317,255	16,759,592	20,014,118	7.6	7.7	10.6	10.7
Coal	1,034,667	2,986,968	5,133,563	19.5	0.8	1.9	2.7
Petroleum	506,858	587,502	453,215	-1.2	0.4	0.4	0.2
Gas	2,190,356	6,072,683	7,081,069	13.9	1.6	3.8	3.8
Other	6,585,374	7,112,439	7,346,272	1.2	4.9	4.5	3.9
Total Industry	133,941,160	158,550,477	186,928,382	3.8	100.0	100.0	100.0
Coal	60,107,870	63,756,998	67,814,085	1.3	44.9	40.2	36.3
Petroleum	25,599,154	33,917,541	37,150,558	4.2	19.1	21.4	19.9
Gas	19,694,598	26,806,918	42,934,580	9.0	14.7	16.9	23.0
Nuclear	21,779,560	26,682,107	31,526,285	4.2	16.3	16.8	16.9
Hydroelectric	174,604	274,474	140,175	-2.4	0.1	0.2	0.1
Other	6,585,374	7,112,439	7,362,700	1.2	4.9	4.5	3.9

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)	224.1	194.1	158.9	-3.8
Average heat value (Btu per pound)	12364	12293	12299	*
Average sulfur Content(percent)	1.7	1.6	1.5	-1.4
Petroleum (cents per million Btu) (1999 dollars)	365.9	247.0	245.6	-4.3
Average heat value (Btu per gallon)	151011	151378	152090	0.1
Average sulfur Content(percent)	1.2	1.4	1.4	1.6
Gas (cents per million Btu) (1999 dollars)	307.1	235.3	297.2	-0.4
Average heat value (Btu per cubic foot)	1011	1010	1044	0.3

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	469	446	356	-3.0
Petroleum	160	264	290	6.9
Other	0	*	*	0.0
Total	629	710	646	0.3
Nitrogen Oxide				
Coal	219	236	245	1.2
Petroleum	35	44	51	4.3
Gas	24	41	52	8.8
Other	0	9	9	0.0
Total	279	330	357	2.8
Carbon Dioxide				
Coal	59,495	64,089	68,325	1.5
Petroleum	22,008	29,828	33,258	4.7
Gas	11,124	14,622	22,446	8.1
Other	0	5,151	2,380	0.0
Total	92,628	113,690	126,408	3.5

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

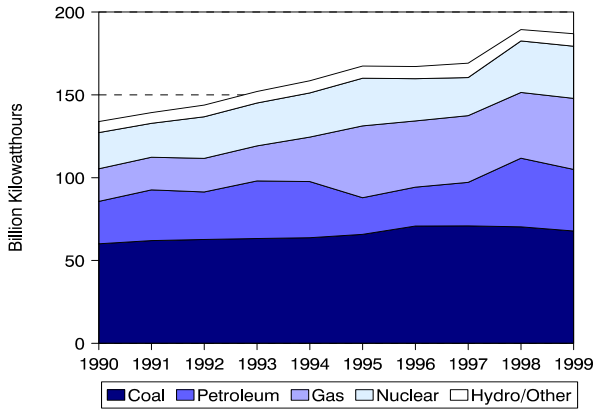

Figure 4. Utility Delivered Fuel Costs for Coal, Petroleum, and Gas, 1990-1999 (1999 Dollars)

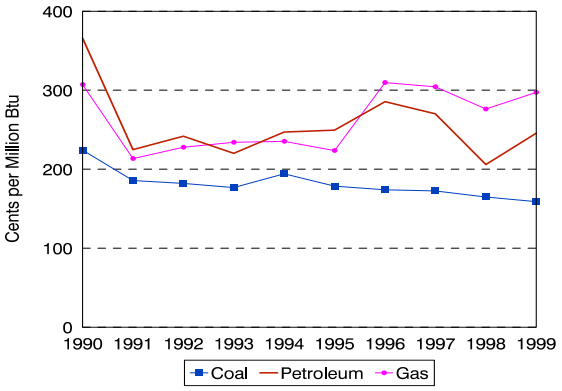

Figure 5. Estimated Sulfur Dioxide Emissions, 1990-1999

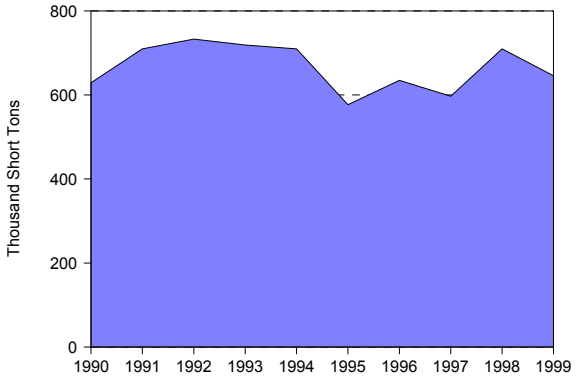

Figure 6. Estimated Nitrogen Oxide Emissions, 1990-1999

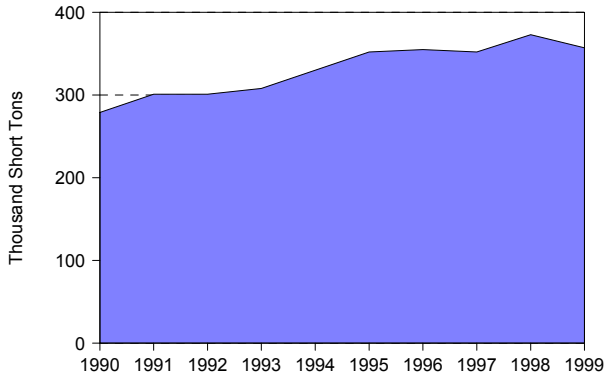

Figure 7. Estimated Carbon Dioxide Emissions, 1990-1999

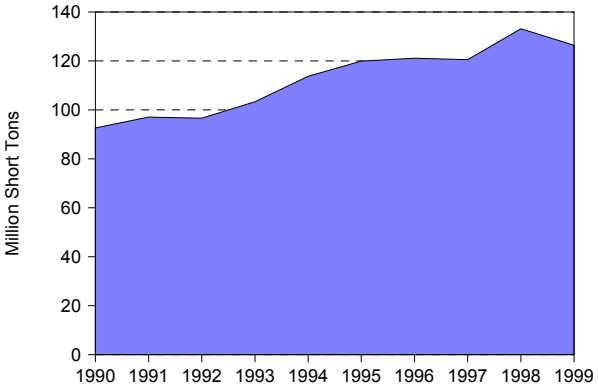

Figure 8. Nuclear Power Capacity Factor Comparison, 1990-1999

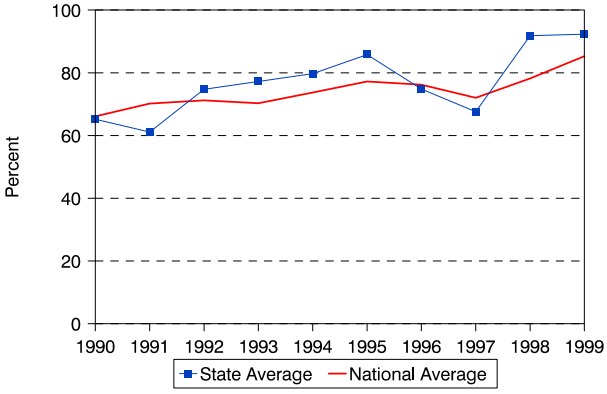

Table 8. Utility Retail Sales, Revenue, and Average Revenue per Kilowatthour by Sector, 1990, 1994, and 1999

	1990	1994	1999	Average Annual Rate of Change (Percent)	Percentage Share 1990	Percentage Share 1994	Percentage Share 1999
Utility Retail Sales							
(thousand megawatthours)							
Residential	71,115	80,595	93,846	3.1	49.5	50.5	50.1
Commercial	51,342	57,447	69,055	3.3	35.8	36.0	36.9
Industrial	16,605	16,513	18,579	1.3	11.6	10.3	9.9
Other	4,473	4,989	5,790	2.9	3.1	3.1	3.1
Total	143,535	159,544	187,270	3.0	100.0	100.0	100.0
Retail Sales Revenue							
(million 1999 dollars)							
Residential	6,694	6,843	7,253	0.9	54.7	56.5	56.6
Commercial	4,143	3,982	4,297	0.4	33.9	32.9	33.5
Industrial	1,022	925	886	-1.6	8.4	7.6	6.9
Other	370	366	383	0.4	3.0	3.0	3.0
Total	12,229	12,116	12,819	0.5	100.0	100.0	100.0
Average Revenue per Kilowatthour							
(cents/kWh) (1999 dollars)							
Residential	9.41	8.49	7.73	NA	NA	NA	NA
Commercial	8.07	6.93	6.22	NA	NA	NA	NA
Industrial	6.16	5.6	4.77	NA	NA	NA	NA
Other	8.27	7.34	6.61	NA	NA	NA	NA
Total	8.52	7.59	6.85	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	5	32	0	16	53
Number of Retail Customers	6,055,612	1,117,516	0	788,233	7,961,361
Retail Sales (thousand megawatthours)	143,974	30,135	0	13,161	187,270
Percentage of Retail Sales	76.9	16.1	0.0	7.0	100.0
Revenue from Retail Sales (million dollars)	9,843	2,013	0	963	12,819
Percentage of Revenue	76.8	15.7	0.0	7.5	100.0
Average Revenue per Kilowatthour (cents/kWh)	6.84	6.68	0.00	7.32	6.85