

Notes and Sources

Map Notes

Note: Most of the data contained in the maps are from EIA. However, utility service territories are based on the following:

Source: Electric Light and Power, Electric Power Generating and Transmission Systems Map of the U.S. and Canada, Third Edition, Rennwell Publishing Co. (Tulsa, OK, 1996).

Table Notes

Table 1:

^aThe rankings for Average electricity prices are in ascending order, unlike the other rankings, which are in descending order. Average electricity price does not include sales by power marketers and traditional electric utilities in deregulated markets.

Notes: Emissions of carbon dioxide (CO₂), nitrogen oxides (NO_x), and sulfur dioxide (SO₂) incorporate the August 1998 Air Pollutant Emissions Factors (AP-42 5th release) of the Environmental Protection Agency (see Technical Notes Appendix D). Estimates are for steam-electric plants 1 megawatts and larger, based on fuel consumption data. "Renewable" is electricity produced from wind, photovoltaic, geothermal, wood and woodwaste, municipal solid waste, landfill gases, and other renewable sources connected to electric utility distribution systems. Average age by fuel is capability

weighted and is based on commercial operation date.

Sources: Population - U.S. Bureau of the Census "Internet Release," December 29, 1999. Utility Capability -Energy Information Administration (EIA), Form EIA-860A, "Annual Electricity Generator Report - Utility." Utility Generation -EIA, Form EIA-759, "Monthly Power Plant Report." Nonutility Capability EIA, Form EIA-860B, "Annual Electricity Generator Report - Nonutility. Nonutility Generation - EIA, Form EIA-867, "Annual Nonutility Power Producer Report." Emissions - EIA, Form EIA-767, "Steam-Electric Plant Operation and Design Report." Export/Import - EIA, "State Energy Data Report 1997 - Consumption Estimates, DOE/EIA-0214(97) (Washington DC, September 1999) p. 9. Average Revenue - EIA, Form EIA-861, "Annual Electric Utility Report."

* = The absolute value is less than 0.5; for percentage calculation the absolute value is less than 0.05 percent.

Table 2:

^bFuels used in more than 10 percent of capability are also listed, in descending order. Jet fuel and kerosene are included as "petroleum." Plant age is based on oldest unit and refers to its commercial operation date.

Source: Energy Information Administration (EIA), Form EIA-860A, "Annual Electric Generator Report - Utility and EIA, Form EIA-860B, "Annual Electric Generator Report - Nonutility."

Table 3:

Note: Total may not equal sum of components due to independent rounding.

Source: Energy Information Administration (EIA), Form EIA-861, "Annual Electric Utility Report."

* = The absolute value is less than 0.5; for percentage calculation the absolute value is less than 0.05 percent.

Table 4:

Note: Percentage share by plant type is based on industry data except for States with "W;" for those States (five in total) percentage share of fuel is based on utility data. Totals may not equal sum of components due to independent rounding. "Renewable" is capability that may use either wind, photovoltaic, geothermal, wood and woodwaste, municipal solid waste, landfill gases, or other renewable sources and it connected to electric utility distribution systems. 1988 nonutility data are estimates based on 1989 nameplate capacity.

Source: Energy Information Administration (EIA), Form EIA-860A, "Annual Electric Generator Report - Utility," EIA 860B, "Annual Electric Generator Report - Nonutility," and EIA-867, "Annual Nonutility Power Producers Report," for 1998 forward.

* = The absolute value is less than 0.5; for percentage calculation the absolute value is less than 0.05 percent.

Table 5:

Note: Percentage share by fuel is based on industry data except for States with "W", for those States (five in total) percentage share is based on total utility data. Totals may not equal sum of components due to independent rounding. "Renewable" is electricity produced from wind, photovoltaic, geothermal, wood and woodwaste, municipal solid waste, landfill gases and other renewable sources connected to electric utility distribution systems. Hydroelectricity includes pumped storage. 1988 nonutility data are estimates based on 1989 and 1992 gross generation.

Source: Energy Information Administration (EIA), Form EIA-759, "Monthly Power Plant Report," Form EIA-867, "Annual Nonutility Power Producers Report."

* = The absolute value is less than 0.5; for percentage calculation the absolute value is less than 0.05 percent.

Table 6:

Source: Federal Energy Regulatory Commission (FERC), FERC Form-423, "Monthly Report of Cost and Quality of Fuels for Electric Plants."

* = The absolute value is less than 0.5; for percentage calculation the absolute value is less than 0.05 percent.

Table 7:

^c As of 1993, CO₂ emissions data from the emission factor for light oil and NO_x emissions reduction from control technologies have been revised due to a software problem-- (see Technical Notes Appendix D)-- historical data were revised to reflect these changes. Note: Emissions of CO₂, NO_x, and SO₂ incorporate the August 1998 Air Pollutant Emissions Factors (AP-42 5th release) of the Environmental Protection Agency (see Technical Notes Appendix C). Estimates are for steam-electric plants 1 megawatt and larger, based on fuel consumption data. Nonutility emissions were not collected until 1989; therefore, the emissions presented for 1988 are estimates based on 1989 and 1992 data. Source: Energy Information Administration (EIA), Form EIA-767, "Steam-Electric Plant Operation and Design Report," and Form EIA-867, "Annual Nonutility Power Producers Report," and EIA 860B, "Annual Electric Generator Report - Nonutility".

Table 8:

Note: Retail sales does not include sales by power marketers and traditional electric utilities in deregulated markets. Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration (EIA), Form EIA-861, "Annual Electric Utility Report."

* = The absolute value is less than 0.5; for percentage calculation the absolute value is less than 0.05 percent.

Table 9:

^d Sales include Residential, Commercial, Industrial, and Other, which include sales for public street and highway lighting, other sales to public authorities, sales to railroads and railways, and interdepartmental sales.

Note: Total may not equal sum of components due to independent rounding.

Source: Energy Information Administration (EIA), Form EIA-861, "Annual Electric Utility Report."

* = The absolute value is less than 0.5; for percentage calculation the absolute value is less than 0.05 percent.

Figure Notes

Figure 1:

Note: "Renewable" is capability that uses either wind, photovoltaic, geothermal, wood and woodwaste, municipal solid waste, landfill gases or other renewable sources and is connected to electric utility distribution systems.

Source: Energy Information Administration (EIA), Form EIA-860, "Annual Electric Generator Report."

Figure 2:

Note: "Renewable" is electricity produced from wind, photovoltaic, geothermal, wood and woodwaste, municipal solid waste, landfill gases, and other renewable sources connected to electric utility distribution systems.

Source: Energy Information Administration (EIA), Form EIA-759, "Monthly Power Plant Report."

Figure 3:

Note: "Renewable" is electricity produced from wind, photovoltaic, geothermal, wood and woodwaste, municipal solid waste, landfill gases, and other renewable sources connected to electric utility distribution systems.

Source: Energy Information Administration (EIA), Form EIA-759, "Monthly Power Plant Report;" Federal Energy Regulatory Commission, FERC Form 423, "Monthly Report of Coal and Quality of Fuels for Energy Plants."

Figure 4:

Source: Energy Information Administration (EIA), Federal Energy Regulatory Commission, FERC Form 423, "Monthly Report of Coal and Quality of Fuels for Energy Plants."

Figure 5:

Source: Energy Information Administration (EIA), Form EIA-767, "Steam-Electric Plant Operation and Design Report," and Form EIA-867, "Annual Nonutility Power Producer Report." Nonutility emissions were not collected until 1989; therefore, the emissions presented for 1988 are based on 1989 and 1992 data.

Figure 6:

Source: Energy Information Administration (EIA), Form EIA-767, "Steam-Electric Plant Operation and Design Report," and Form EIA-867, "Annual Nonutility Power Producer Report." Nonutility emissions were not collected until 1989; therefore, the emissions presented for 1988 are based on 1989 and 1992 data.

Figure 7:

Source: Energy Information Administration (EIA), Form EIA-767, "Steam-Electric Plant Operation and Design Report," and Form EIA-867, "Annual Nonutility Power Producer Report." Nonutility emissions were not collected until 1989; therefore, the emissions presented for 1988 are based on 1989 and 1992 data.

Figure 8:

Note: The annual capacity factors are calculated as the actual yearly net generation divided by the maximum possible generation for the year. That fraction is then multiplied by 100 to obtain a percentage. The maximum possible generation is the number of hours in a year multiplied by the net summer capability at the end of the year.

Source: Energy Information Administration (EIA), Form EIA-759, "Monthly Power Plant Report;" and Form EIA-860, "Annual Electric Generator Report."

Figure 9:

Note: The annual capacity factors are calculated as the actual yearly net generation divided by the maximum possible generation for the year. That fraction is then multiplied by 100 to obtain a percentage. The maximum possible generation is the number of hours in a year multiplied by the net summer capability at the end of the year.

Source: Energy Information Administration (EIA), Form EIA-759, "Monthly Power Plant Report;" and Form EIA-860, "Annual Electric Generator Report."

Figure 10:

Note: The annual capacity factors are calculated as the actual yearly net generation divided by the maximum possible generation for the year. That fraction is then multiplied by 100 to obtain a percentage. The maximum possible generation is the number of hours in a year multiplied by the net summer capability at the end of the year.

Source: Energy Information Administration (EIA), Form EIA-759, "Monthly Power Plant Report;" and Form EIA-860, "Annual Electric Generator Report."