

**Table A9. Electricity generating capacity
(gigawatts)**

| Net summer capacity ¹ | Reference case | | | | | | | Annual growth 2012-2040 (percent) |
|--|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---|
| | 2011 | 2012 | 2020 | 2025 | 2030 | 2035 | 2040 | |
| Electric power sector² | | | | | | | | |
| Power only³ | | | | | | | | |
| Coal | 307.9 | 301.9 | 254.9 | 254.0 | 254.0 | 254.0 | 254.1 | -0.6% |
| Oil and natural gas steam ⁴ | 103.4 | 99.2 | 84.9 | 77.2 | 70.9 | 68.7 | 68.5 | -1.3% |
| Combined cycle | 178.8 | 186.2 | 205.1 | 224.1 | 259.6 | 291.0 | 316.2 | 1.9% |
| Combustion turbine/diesel | 135.4 | 136.4 | 146.3 | 166.1 | 180.6 | 199.5 | 220.4 | 1.7% |
| Nuclear power ⁵ | 101.5 | 102.1 | 97.8 | 97.8 | 98.2 | 98.8 | 102.0 | 0.0% |
| Pumped storage | 22.3 | 22.4 | 22.4 | 22.4 | 22.4 | 22.4 | 22.4 | 0.0% |
| Fuel cells | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 1.9% |
| Renewable sources ⁶ | 133.0 | 147.6 | 173.1 | 175.0 | 178.2 | 184.2 | 199.2 | 1.1% |
| Distributed generation (natural gas) ⁷ | 0.0 | 0.0 | 1.6 | 3.3 | 4.6 | 6.2 | 8.9 | -- |
| Total | 982.4 | 996.0 | 986.1 | 1,020.0 | 1,068.6 | 1,124.7 | 1,191.7 | 0.6% |
| Combined heat and power⁸ | | | | | | | | |
| Coal | 4.8 | 4.7 | 4.4 | 4.4 | 4.4 | 4.4 | 4.3 | -0.3% |
| Oil and natural gas steam ⁴ | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 0.0% |
| Combined cycle | 25.6 | 25.7 | 26.0 | 26.0 | 26.0 | 26.0 | 26.0 | 0.0% |
| Combustion turbine/diesel | 3.3 | 3.3 | 3.3 | 3.3 | 3.3 | 3.3 | 3.3 | 0.0% |
| Renewable sources ⁶ | 1.3 | 1.3 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 0.1% |
| Total | 36.1 | 36.1 | 36.2 | 36.2 | 36.2 | 36.2 | 36.1 | 0.0% |
| Cumulative planned additions⁹ | | | | | | | | |
| Coal | -- | -- | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | -- |
| Oil and natural gas steam ⁴ | -- | -- | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -- |
| Combined cycle | -- | -- | 9.7 | 9.7 | 9.7 | 9.7 | 9.7 | -- |
| Combustion turbine/diesel | -- | -- | 3.7 | 3.7 | 3.7 | 3.7 | 3.7 | -- |
| Nuclear power | -- | -- | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | -- |
| Pumped storage | -- | -- | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -- |
| Fuel cells | -- | -- | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -- |
| Renewable sources ⁶ | -- | -- | 9.0 | 9.0 | 9.0 | 9.0 | 9.0 | -- |
| Distributed generation ⁷ | -- | -- | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -- |
| Total | -- | -- | 30.1 | 30.1 | 30.1 | 30.1 | 30.1 | -- |
| Cumulative unplanned additions⁹ | | | | | | | | |
| Coal | -- | -- | 0.3 | 0.3 | 0.3 | 0.3 | 0.5 | -- |
| Oil and natural gas steam ⁴ | -- | -- | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -- |
| Combined cycle | -- | -- | 9.8 | 28.8 | 64.3 | 95.7 | 120.9 | -- |
| Combustion turbine/diesel | -- | -- | 14.1 | 34.5 | 49.2 | 68.5 | 89.4 | -- |
| Nuclear power | -- | -- | 0.0 | 0.0 | 0.3 | 0.9 | 4.2 | -- |
| Pumped storage | -- | -- | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -- |
| Fuel cells | -- | -- | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -- |
| Renewable sources ⁶ | -- | -- | 17.4 | 19.3 | 22.5 | 28.5 | 43.5 | -- |
| Distributed generation ⁷ | -- | -- | 1.6 | 3.3 | 4.6 | 6.2 | 8.9 | -- |
| Total | -- | -- | 43.2 | 86.3 | 141.4 | 200.2 | 267.4 | -- |
| Cumulative electric power sector additions⁹ | -- | -- | 73.3 | 116.4 | 171.5 | 230.3 | 297.5 | -- |
| Cumulative retirements¹⁰ | | | | | | | | |
| Coal | -- | -- | 49.9 | 50.7 | 50.7 | 50.7 | 50.8 | -- |
| Oil and natural gas steam ⁴ | -- | -- | 14.4 | 22.1 | 28.3 | 30.6 | 30.8 | -- |
| Combined cycle | -- | -- | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | -- |
| Combustion turbine/diesel | -- | -- | 7.8 | 8.5 | 8.7 | 9.1 | 9.2 | -- |
| Nuclear power | -- | -- | 4.8 | 4.8 | 4.8 | 4.8 | 4.8 | -- |
| Pumped storage | -- | -- | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -- |
| Fuel cells | -- | -- | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -- |
| Renewable sources ⁶ | -- | -- | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | -- |
| Total | -- | -- | 78.0 | 87.3 | 93.8 | 96.4 | 96.7 | -- |
| Total electric power sector capacity | 1,018.5 | 1,032.0 | 1,022.2 | 1,056.2 | 1,104.8 | 1,160.9 | 1,227.8 | 0.6% |

Table A9. Electricity generating capacity (continued)
(gigawatts)

| Net summer capacity ¹ | Reference case | | | | | | | Annual growth 2012-2040 (percent) |
|--|----------------|-------------|-------------|-------------|-------------|-------------|-------------|-----------------------------------|
| | 2011 | 2012 | 2020 | 2025 | 2030 | 2035 | 2040 | |
| End-use generators¹¹ | | | | | | | | |
| Coal | 3.6 | 3.4 | 3.4 | 3.4 | 3.4 | 3.4 | 3.4 | 0.0% |
| Petroleum | 0.7 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | -0.3% |
| Natural gas | 14.9 | 16.3 | 19.2 | 22.3 | 27.3 | 33.7 | 38.9 | 3.2% |
| Other gaseous fuels ¹² | 2.0 | 2.1 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 1.0% |
| Renewable sources ⁶ | 8.6 | 10.5 | 20.5 | 23.8 | 28.5 | 34.3 | 41.3 | 5.0% |
| Other ¹³ | 0.4 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.1% |
| Total | 30.2 | 33.8 | 47.2 | 53.7 | 63.4 | 75.6 | 87.7 | 3.5% |
| Cumulative capacity additions⁹ | -- | -- | 13.5 | 20.0 | 29.7 | 41.8 | 53.9 | -- |

¹Net summer capacity is the steady hourly output that generating equipment is expected to supply to system load (exclusive of auxiliary power), as demonstrated by tests during summer peak demand.

²Includes electricity-only and combined heat and power plants that have a regulatory status.

³Includes plants that only produce electricity and that have a regulatory status. Includes capacity increases (uprates) at existing units.

⁴Includes oil-, gas-, and dual-fired capacity.

⁵Nuclear capacity includes 0.7 gigawatts of uprates and 5.7 gigawatts of derates through 2020.

⁶Includes conventional hydroelectric, geothermal, wood, wood waste, all municipal waste, landfill gas, other biomass, solar, and wind power. Facilities co-firing biomass and coal are classified as coal.

⁷Primarily peak load capacity fueled by natural gas.

⁸Includes combined heat and power plants whose primary business is to sell electricity and heat to the public (i.e., those that report North American Industry Classification System code 22 or that have a regulatory status).

⁹Cumulative additions after December 31, 2012.

¹⁰Cumulative retirements after December 31, 2012.

¹¹Includes combined heat and power plants and electricity-only plants in the commercial and industrial sectors that have a non-regulatory status; and small on-site generating systems in the residential, commercial, and industrial sectors used primarily for own-use generation, but which may also sell some power to the grid.

¹²Includes refinery gas and still gas.

¹³Includes batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, and miscellaneous technologies.

-- = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. Data for 2011 and 2012 are model results and may differ from official EIA data reports.

Sources: 2011 and 2012 capacity and projected planned additions: U.S. Energy Information Administration (EIA), Form EIA-860, "Annual Electric Generator Report" (preliminary). Projections: EIA, AEO2014 National Energy Modeling System run REF2014.D102413A.