

Table A9. Electricity generating capacity
(gigawatts)

Net summer capacity ¹	Reference case							Annual growth 2010-2035 (percent)
	2009	2010	2015	2020	2025	2030	2035	
Electric power sector²								
Power only³								
Coal	305.9	308.1	276.7	269.8	269.8	269.9	270.4	-0.5%
Oil and natural gas steam ⁴	109.1	107.4	90.0	89.4	88.9	88.0	87.2	-0.8%
Combined cycle	167.7	171.7	187.4	187.7	197.6	218.3	246.0	1.4%
Combustion turbine/diesel	133.1	134.8	138.7	145.6	152.7	158.6	169.0	0.9%
Nuclear power ⁵	101.1	101.2	103.6	111.2	114.7	114.3	110.9	0.4%
Pumped storage	22.2	22.2	22.2	22.2	22.2	22.2	22.2	0.0%
Fuel cells	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7%
Renewable sources ⁶	120.3	125.2	144.4	145.8	151.2	156.1	169.3	1.2%
Distributed generation ⁷	0.0	0.0	0.2	0.5	0.8	1.3	2.1	--
Total	959.5	970.6	963.2	972.1	997.8	1028.7	1077.0	0.4%
Combined heat and power⁸								
Coal	5.3	5.2	4.8	4.8	4.8	4.8	4.8	-0.3%
Oil and natural gas steam ⁴	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.0%
Combined cycle	25.8	26.3	26.3	26.3	26.3	26.3	26.3	-0.0%
Combustion turbine/diesel	2.8	2.8	2.8	2.8	2.8	2.8	2.8	-0.0%
Renewable sources ⁶	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.2%
Total	35.4	35.9	35.5	35.5	35.5	35.5	35.5	-0.0%
Cumulative planned additions⁹								
Coal	0.0	0.0	9.3	9.3	9.3	9.3	9.3	--
Oil and natural gas steam ⁴	0.0	0.0	0.0	0.0	0.0	0.0	0.0	--
Combined cycle	0.0	0.0	14.3	14.3	14.3	14.3	14.3	--
Combustion turbine/diesel	0.0	0.0	5.0	5.0	5.0	5.0	5.0	--
Nuclear power	0.0	0.0	1.1	6.8	6.8	6.8	6.8	--
Pumped storage	0.0	0.0	0.0	0.0	0.0	0.0	0.0	--
Fuel cells	0.0	0.0	0.0	0.0	0.0	0.0	0.0	--
Renewable sources ⁶	0.0	0.0	14.0	14.0	14.0	14.0	14.0	--
Distributed generation ⁷	0.0	0.0	0.0	0.0	0.0	0.0	0.0	--
Total	0.0	0.0	43.7	49.3	49.3	49.3	49.3	--
Cumulative unplanned additions⁹								
Coal	0.0	0.0	0.0	0.9	0.9	1.0	1.7	--
Oil and natural gas steam ⁴	0.0	0.0	0.0	0.0	0.0	0.0	0.0	--
Combined cycle	0.0	0.0	1.4	1.9	11.8	32.5	60.2	--
Combustion turbine/diesel	0.0	0.0	5.2	12.9	23.2	30.2	41.5	--
Nuclear power	0.0	0.0	0.0	0.0	0.0	0.1	1.8	--
Pumped storage	0.0	0.0	0.0	0.0	0.0	0.0	0.0	--
Fuel cells	0.0	0.0	0.0	0.0	0.0	0.0	0.0	--
Renewable sources ⁶	0.0	0.0	5.7	7.0	12.4	17.4	30.5	--
Distributed generation ⁷	0.0	0.0	0.2	0.5	0.8	1.3	2.1	--
Total	0.0	0.0	12.4	23.2	49.1	82.5	137.8	--
Cumulative electric power sector additions	0.0	0.0	56.1	72.5	98.5	131.8	187.1	--
Cumulative retirements¹⁰								
Coal	0.0	0.0	41.0	48.9	48.9	48.9	49.0	--
Oil and natural gas steam ⁴	0.0	0.0	17.4	18.0	18.5	19.4	20.3	--
Combined cycle	0.0	0.0	0.0	0.2	0.2	0.2	0.2	--
Combustion turbine/diesel	0.0	0.0	6.4	7.2	10.4	11.4	12.4	--
Nuclear power	0.0	0.0	0.0	0.6	0.6	1.1	6.1	--
Pumped storage	0.0	0.0	0.0	0.0	0.0	0.0	0.0	--
Fuel cells	0.0	0.0	0.0	0.0	0.0	0.0	0.0	--
Renewable sources ⁶	0.0	0.0	0.4	0.4	0.4	0.4	0.4	--
Total	0.0	0.0	65.2	75.2	78.9	81.4	88.4	--
Total electric power sector capacity	994.9	1006.5	998.7	1007.6	1033.3	1064.2	1112.5	0.4%

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

Net summer capacity ¹	Reference case							Annual growth 2010-2035 (percent)
	2009	2010	2015	2020	2025	2030	2035	
End-use generators¹¹								
Coal	3.6	4.3	4.2	6.6	7.7	8.8	9.9	3.4%
Petroleum	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.3%
Natural gas	14.7	14.7	17.7	19.8	22.9	27.4	33.2	3.3%
Other gaseous fuels ¹²	1.8	1.7	2.5	2.5	2.5	2.5	2.5	1.5%
Renewable sources ⁶	6.7	7.6	17.6	21.1	23.4	27.1	30.6	5.7%
Other ¹³	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.0%
Total	28.0	29.6	43.3	51.3	57.8	67.1	77.5	3.9%
Cumulative capacity additions⁹	0.0	0.0	13.7	21.7	28.2	37.4	47.9	- -

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 whose primary business is to sell electricity, or electricity and heat, to the public.

³Includes plants that only produce electricity. Includes capacity increases (uprates) at existing units.

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

⁵Nuclear capacity includes 7.3 gigawatts of uprates through 2035.

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).

⁹Cumulative additions after December 31, 2010.

¹⁰Cumulative retirements after December 31, 2010.

¹¹Includes combined heat and power plants and electricity-only plants in the commercial and industrial sectors; 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 2009 and 2010 are model results and may differ slightly from official EIA data reports.

Sources: 2009 and 2010 capacity and projected planned additions: U.S. Energy Information Administration (EIA), Form EIA-860, "Annual Electric Generator Report" (preliminary). Projections: EIA, AEO2012 National Energy Modeling System run REF2012.D020112C.