Table A6. Approximate Heat Rates for Electricity, and Heat Content of Electricity, Selected Years, 1949-2007

(Btu per Kilowatthour)

Year	Approximate Heat Rates [1] for Electricity Net Generation			Heat Content [6] of Electricity [7]
	Fossil-Fueled Plants [2,3]	Nuclear Plants [4]	Geothermal Energy Plants [5]	
1949	15,033	– –	– –	3,412
1950	14,030	– –	– –	3,412
1955	11,699	– –	– –	3,412
1960	10,760	11,629	23,200	3,412
1965	10,453	11,804	22,182	3,412
1970	10,494	10,977	21,606	3,412
1971	10,478	10,837	21,655	3,412
1972	10,379	10,792	21,668	3,412
1973	10,389	10,903	21,674	3,412
1974	10,442	11,161	21,674	3,412
1975	10,406	11,013	21,611	3,412
1976	10,373	11,047	21,611	3,412
1977	10,435	10,769	21,611	3,412
1978	10,361	10,941	21,611	3,412
1979	10,353	10,879	21,545	3,412
1980	10,388	10,908	21,639	3,412
1981	10,453	11,030	21,639	3,412
1982	10,454	11,073	21,629	3,412
1983	10,520	10,905	21,290	3,412
1984	10,440	10,843	21,303	3,412
1985	10,447	10,622	21,263	3,412
1986	10,446	10,579	21,263	3,412
1987	10,419	10,442	21,263	3,412
1988	10,324	10,602	21,096	3,412
1989	10,432	10,583	21,096	3,412
1990	10,402	10,582	21,096	3,412
1991	10,436	10,484	20,997	3,412
1992	10,342	10,471	20,914	3,412
1993	10,309	10,504	20,914	3,412
1994	10,316	10,452	20,914	3,412
1995	10,312	10,507	20,914	3,412
1996	10,340	10,503	20,960	3,412
1997	10,213	10,494	20,960	3,412
1998	10,197	10,491	21,017	3,412
1999	10,226	10,450	21,017	3,412
2000	10,201	10,429	21,017	3,412
2001	[2]10,333	10,448	21,017	3,412
2002	10,173	10,439	21,017	3,412
2003	10,241	10,421	21,017	3,412
2004	10,022	10,427	21,017	3,412
2005	9,999	10,435	21,017	3,412
2006	[R]9,919	[R]10,434	21,017	3,412
2007	[E]9,919	[E]10,434	[E]21,017	3,412

[1] The values in columns 1-3 of this table are for net heat rates. See "Heat Rate" in Glossary.

[2] Used as the thermal conversion factor for hydro, solar/photovoltaic, and wind electricity net generation to approximate the quantity of fossil fuels replaced by these sources. Through 2000, also used as the thermal conversion factor for wood and waste electricity net generation at electric utilities; beginning in 2001, Btu data for wood and waste at electric utilities are available from surveys.

[3] Through 2000, heat rates are for fossil-fueled steam-electric plants at electric utilities. Beginning in 2001, heat rates are for all fossil-fueled plants at electric utilities and independent power producers.

[4] Used as the thermal conversion factor for nuclear electricity net generation.

[5] Used as the thermal conversion factor for geothermal electricity net generation.

[6] See "Heat Content" in Glossary.

[7] The value of 3,412 Btu per kilowatthour is a constant. It is used as the thermal conversion factor for electricity retail sales, and electricity imports and exports.

R=Revised. E=Estimate. – – = Not applicable.

Web Page: For all data beginning in 1949, see http://www.eia.doe.gov/emeu/aer/append_a.html.

Sources: See "Thermal Conversion Factor Source Documentation," which follows this table.