Diagram 5. Electricity Flow, 2007
(Quadrillion Btu)

Coal 20.99
Natural Gas 7.72
Petroleum 0.72
Nuclear Electric Power 8.41
Renewable Energy 3.92

Conversion Losses 27.15
Gross Generation of Electricity 14.94
Net Generation of Electricity 14.19
End Use 13.28
Retail Sales 12.79
Direct Use 0.49
Transportation 0.03
Plant Use 0.75
T & D Losses 1.34
Residential 4.75
Commercial 4.58
Industrial 3.43

Notes:
• Data are preliminary.
• See Note, “Electrical System Energy Losses,” at the end of Section 2.
• Values are derived from source data prior to rounding for publication.
• Totals may not equal sum of components due to independent rounding.

Sources: Tables 8.1, 8.4a, 8.9, and A6 (column 4).

* Blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels.
* Batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, miscellaneous technologies, and non-renewable waste (municipal solid waste from non-biogenic sources, and tire-derived fuels).
* Estimated as net generation divided by 0.95.
* Data collection frame differences and nonsampling error. Derived for the diagram by subtracting the “T & D Losses” estimate from “T & D Losses and Unaccounted for” derived from Table 8.1.
* Electric energy used in the operation of power plants, estimated as 5 percent of gross generation.

Transmitter and distribution losses (electricity losses that occur between the point of generation and delivery to the customer) are estimated as 9 percent of gross generation.

Use of electricity that is 1) self-generated, 2) produced by either the same entity that consumes the power or an affiliate, and 3) used in direct support of a service or industrial process located within the same facility or group of facilities that house the generating equipment. Direct use is exclusive of station use.

Notes: Data are preliminary. See Note, “Electrical System Energy Losses,” at the end of Section 2. Values are derived from source data prior to rounding for publication. Totals may not equal sum of components due to independent rounding. Sources: Tables 8.1, 8.4a, 8.9, and A6 (column 4).