## Table B16. Coal Supply, Disposition, and Prices

(Million Short Tons per Year, Unless Otherwise Noted)

| Supply, Disposition, and Prices | 1996 | Projections | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | 2005 | | | | | | |
| | | Reference Case | 24 Percent Above | 14 Percent Above | 9 Percent Above | 1990 Level | 3 Percent Below | 7 Percent Below |
| **Production**[1] | | | | | | | | |
| Appalachia | 452 | 465 | 451 | 440 | 415 | 398 | 396 | 378 |
| Interior | 173 | 148 | 147 | 137 | 142 | 146 | 134 | 129 |
| West | 439 | 629 | 584 | 513 | 432 | 402 | 394 | 360 |
| East of the Mississippi | 564 | 551 | 537 | 524 | 516 | 498 | 494 | 480 |
| West of the Mississippi | 500 | 691 | 645 | 565 | 473 | 447 | 429 | 387 |
| **Total** | **1064** | **1242** | **1182** | **1090** | **989** | **946** | **924** | **867** |
| **Net Imports** | | | | | | | | |
| Imports | 7 | 8 | 6 | 6 | 6 | 4 | 4 | 4 |
| Exports | 90 | 104 | 89 | 89 | 89 | 83 | 83 | 83 |
| **Total** | **-83** | **-96** | **-83** | **-83** | **-83** | **-78** | **-78** | **-78** |
| **Total Supply**[2] | **981** | **1146** | **1099** | **1006** | **906** | **867** | **845** | **789** |
| **Consumption by Sector** | | | | | | | | |
| Residential and Commercial | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| Industrial[3] | 70 | 77 | 76 | 63 | 56 | 54 | 53 | 52 |
| Coke Plants | 32 | 28 | 28 | 28 | 28 | 28 | 28 | 28 |
| Electric Generators[4] | 896 | 1034 | 989 | 905 | 829 | 786 | 761 | 729 |
| **Total** | **1003** | **1146** | **1099** | **1002** | **918** | **873** | **847** | **814** |
| **Discrepancy and Stock Change**[5] | **-23** | **0** | **-0** | **4** | **-12** | **-6** | **-2** | **-25** |
| **Average Minemouth Price** | | | | | | | | |
| (1996 dollars per short ton) | 18.50 | 15.03 | 15.39 | 15.78 | 16.10 | 16.13 | 16.17 | 16.36 |
| (1996 dollars per million Btu) | 0.87 | 0.72 | 0.74 | 0.75 | 0.76 | 0.76 | 0.76 | 0.76 |
| **Delivered Prices (1996 dollars per short ton)**[6] | | | | | | | | |
| Industrial | 32.28 | 28.68 | 31.28 | 56.50 | 72.61 | 78.62 | 83.09 | 87.93 |
| Coke Plants | 47.33 | 43.77 | 47.09 | 77.15 | 96.41 | 103.35 | 108.84 | 114.62 |
| Electric Generators | | | | | | | | |
| (1996 dollars per short ton) | 26.45 | 23.37 | 25.96 | 49.51 | 64.24 | 69.51 | 74.07 | 79.18 |
| (1996 dollars per million Btu) | 1.29 | 1.17 | 1.28 | 2.42 | 3.13 | 3.39 | 3.60 | 3.81 |
| **Average** | **27.52** | **24.23** | **26.87** | **50.73** | **65.73** | **71.15** | **75.78** | **80.95** |
| **Exports**[7] | **40.77** | **36.27** | **37.03** | **36.96** | **36.96** | **37.30** | **37.21** | **37.15** |

## Table B16. Coal Supply, Disposition, and Prices (Continued)

(Million Short Tons per Year, Unless Otherwise Noted)

| Projections | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2010 | | | | | | | 2020 | | | | | | |
| Reference Case | 24 Percent Above | 14 Percent Above | 9 Percent Above | 1990 Level | 3 Percent Below | 7 Percent Below | Reference Case | 24 Percent Above | 14 Percent Above | 9 Percent Above | 1990 Level | 3 Percent Below | 7 Percent Below |
| 479 | 401 | 357 | 306 | 240 | 222 | 196 | 458 | 385 | 295 | 238 | 146 | 129 | 111 |
| 135 | 122 | 112 | 89 | 57 | 46 | 35 | 128 | 72 | 59 | 45 | 19 | 14 | 11 |
| 673 | 510 | 316 | 229 | 121 | 101 | 82 | 791 | 349 | 184 | 123 | 42 | 30 | 21 |
| 555 | 479 | 442 | 378 | 292 | 264 | 228 | 545 | 442 | 344 | 274 | 160 | 139 | 119 |
| 732 | 553 | 343 | 246 | 126 | 104 | 85 | 831 | 364 | 194 | 131 | 46 | 33 | 24 |
| **1287** | **1032** | **785** | **624** | **418** | **369** | **313** | **1376** | **805** | **538** | **405** | **207** | **172** | **144** |
| 8 | 4 | 4 | 4 | 1 | 1 | 1 | 8 | 4 | 4 | 4 | 1 | 1 | 1 |
| 113 | 89 | 89 | 89 | 76 | 76 | 76 | 130 | 93 | 93 | 93 | 75 | 75 | 75 |
| **-105** | **-85** | **-85** | **-85** | **-75** | **-75** | **-75** | **-122** | **-89** | **-89** | **-89** | **-74** | **-74** | **-74** |
| **1181** | **948** | **700** | **539** | **344** | **294** | **238** | **1254** | **716** | **449** | **316** | **133** | **98** | **70** |
| 7 | 6 | 5 | 5 | 5 | 5 | 4 | 7 | 6 | 5 | 5 | 5 | 5 | 4 |
| 79 | 61 | 51 | 48 | 41 | 39 | 37 | 82 | 61 | 59 | 57 | 50 | 45 | 41 |
| 26 | 24 | 23 | 23 | 22 | 22 | 22 | 22 | 16 | 15 | 15 | 14 | 14 | 14 |
| 1065 | 854 | 614 | 460 | 276 | 227 | 172 | 1144 | 630 | 373 | 235 | 66 | 34 | 11 |
| **1177** | **946** | **694** | **537** | **344** | **293** | **235** | **1254** | **713** | **452** | **312** | **134** | **99** | **71** |
| **4** | **2** | **7** | **3** | **-0** | **1** | **3** | **0** | **3** | **-3** | **4** | **-1** | **-0** | **-1** |
| 14.29 | 14.72 | 15.81 | 16.42 | 17.53 | 17.90 | 18.29 | 12.53 | 14.29 | 15.51 | 16.24 | 18.58 | 19.63 | 20.50 |
| 0.69 | 0.70 | 0.73 | 0.75 | 0.77 | 0.78 | 0.79 | 0.61 | 0.67 | 0.70 | 0.72 | 0.79 | 0.82 | 0.84 |
| 27.58 | 65.34 | 100.54 | 119.45 | 171.05 | 193.69 | 224.73 | 25.83 | 81.21 | 94.49 | 104.28 | 136.65 | 159.35 | 195.43 |
| 42.45 | 87.78 | 129.91 | 152.49 | 213.80 | 240.69 | 277.69 | 40.36 | 107.18 | 123.32 | 135.28 | 175.42 | 202.70 | 246.16 |
| 22.20 | 57.03 | 90.53 | 109.56 | 162.69 | 185.47 | 214.75 | 19.56 | 71.95 | 85.72 | 95.33 | 129.43 | 156.60 | 197.61 |
| 1.11 | 2.81 | 4.37 | 5.23 | 7.53 | 8.55 | 9.95 | 1.00 | 3.48 | 4.07 | 4.52 | 6.04 | 7.10 | 8.80 |
| **23.02** | **58.36** | **92.59** | **112.28** | **167.07** | **190.84** | **222.39** | **20.33** | **73.57** | **88.15** | **98.93** | **137.30** | **164.92** | **206.64** |
| **34.98** | **35.97** | **35.66** | **35.51** | **36.21** | **36.13** | **36.01** | **32.52** | **33.40** | **33.07** | **32.82** | **34.20** | **34.04** | **33.84** |

[1]Includes anthracite, bituminous coal, and lignite.
[2]Production plus net imports and net storage withdrawals.
[3]Includes consumption by cogenerators.
[4]Includes all electric power generators except cogenerators, which produce electricity and other useful thermal energy.
[5]Balancing item: the sum of production, net imports, and net storage minus total consumption.
[6]Sectoral prices weighted by consumption tonnage; weighted average excludes residential/ commercial prices and export free-alongside-ship (f.a.s.) prices.
[7] F.a.s. price at U.S. port of exit.
Btu = British thermal unit.
Note: Totals may not equal sum of components due to independent rounding.
**Sources:** 1996 data derived from: Energy Information Administration (EIA), *Coal Industry Annual 1996*, DOE/EIA-0584(96) (Washington, DC, November 1997). **Projections:** EIA, AEO98 National Energy Modeling System runs KYBASE.D080398A, FD24ABV.D080398B, FD1998.D080398B, FD09ABV.D080398B, FD1990.D080398B, FD03BLW.D080398B, and FD07BLW.D080398B.

## Table B17. Renewable Energy Generating Capability and Generation

(Thousand Megawatts, Unless Otherwise Noted)

| Capacity and Generation | 1996 | Projections | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | 2005 | | | | | | |
| | | Reference Case | 24 Percent Above | 14 Percent Above | 9 Percent Above | 1990 Level | 3 Percent Below | 7 Percent Below |
| **Electric Generators[1] (excluding cogenerators)** | | | | | | | | |
| **Net Summer Capability** | | | | | | | | |
| Conventional Hydropower | 77.66 | 79.73 | 79.73 | 79.74 | 79.74 | 79.74 | 80.69 | 80.70 |
| Geothermal[2] | 3.02 | 2.76 | 2.92 | 2.99 | 3.11 | 3.32 | 3.39 | 3.74 |
| Municipal Solid Waste[3] | 3.26 | 3.66 | 3.66 | 3.66 | 3.66 | 3.66 | 3.66 | 3.66 |
| Wood and Other Biomass[4] | 1.64 | 1.76 | 1.76 | 2.25 | 1.93 | 2.25 | 2.18 | 2.18 |
| Solar Thermal | 0.36 | 0.38 | 0.38 | 0.38 | 0.38 | 0.38 | 0.38 | 0.38 |
| Solar Photovoltaic | 0.01 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 |
| Wind | 1.85 | 2.75 | 2.75 | 3.44 | 4.22 | 5.35 | 5.32 | 6.27 |
| **Total** | **87.81** | **91.10** | **91.26** | **92.53** | **93.12** | **94.78** | **95.69** | **97.00** |
| **Generation (billion kilowatthours)** | | | | | | | | |
| Conventional Hydropower | 346.28 | 312.51 | 312.50 | 312.55 | 312.53 | 312.54 | 317.00 | 317.03 |
| Geothermal[2] | 15.70 | 16.12 | 17.25 | 17.76 | 18.61 | 20.02 | 20.52 | 23.01 |
| Municipal Solid Waste[3] | 18.85 | 24.54 | 24.54 | 24.53 | 24.53 | 24.53 | 24.53 | 24.53 |
| Wood and Other Biomass[4] | 7.27 | 8.72 | 17.72 | 21.00 | 18.30 | 20.20 | 19.67 | 19.51 |
| Solar Thermal | 0.82 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Solar Photovoltaic | 0.00 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 |
| Wind | 3.17 | 6.17 | 6.17 | 8.03 | 10.14 | 13.40 | 13.26 | 15.80 |
| **Total** | **392.09** | **369.22** | **379.33** | **385.03** | **385.27** | **391.84** | **396.14** | **401.04** |
| **Cogenerators[5]** | | | | | | | | |
| **Net Summer Capability** | | | | | | | | |
| Municipal Solid Waste | 0.43 | 0.44 | 0.44 | 0.44 | 0.44 | 0.44 | 0.44 | 0.44 |
| Biomass | 5.44 | 6.42 | 6.41 | 6.38 | 6.35 | 6.34 | 6.34 | 6.32 |
| **Total** | **5.87** | **6.86** | **6.85** | **6.83** | **6.80** | **6.78** | **6.78** | **6.77** |
| **Generation (billion kilowatthours)** | | | | | | | | |
| Municipal Solid Waste | 2.21 | 2.27 | 2.27 | 2.27 | 2.27 | 2.27 | 2.27 | 2.27 |
| Biomass | 39.40 | 44.47 | 44.42 | 44.37 | 44.21 | 44.12 | 44.09 | 44.01 |
| **Total** | **41.61** | **46.74** | **46.69** | **46.64** | **46.48** | **46.39** | **46.36** | **46.28** |

## Table B17. Renewable Energy Generating Capability and Generation (Continued)

Thousand Megawatts, Unless Otherwise Noted)

| Projections | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2010 | | | | | | | 2020 | | | | | | |
| Reference Case | 24 Percent Above | 14 Percent Above | 9 Percent Above | 1990 Level | 3 Percent Below | 7 Percent Below | Reference Case | 24 Percent Above | 14 Percent Above | 9 Percent Above | 1990 Level | 3 Percent Below | 7 Percent Below |
| 79.78 | 79.78 | 79.80 | 79.80 | 80.74 | 80.74 | 81.84 | 79.78 | 79.79 | 79.80 | 79.80 | 80.74 | 80.78 | 81.92 |
| 2.80 | 2.98 | 3.13 | 3.51 | 3.76 | 4.68 | 4.75 | 3.02 | 3.77 | 4.26 | 4.95 | 5.76 | 6.94 | 7.81 |
| 4.02 | 4.01 | 3.99 | 3.99 | 3.96 | 3.95 | 3.95 | 4.42 | 4.42 | 4.42 | 4.41 | 4.42 | 4.43 | 4.44 |
| 1.76 | 1.80 | 2.91 | 2.70 | 4.54 | 4.93 | 5.32 | 1.76 | 2.74 | 11.81 | 11.95 | 26.13 | 35.27 | 43.99 |
| 0.44 | 0.44 | 0.44 | 0.44 | 0.44 | 0.44 | 0.44 | 0.54 | 0.54 | 0.54 | 0.54 | 0.54 | 0.54 | 0.54 |
| 0.22 | 0.22 | 0.22 | 0.22 | 0.22 | 0.27 | 0.39 | 0.56 | 0.56 | 0.56 | 0.56 | 0.56 | 0.71 | 0.91 |
| 2.75 | 4.47 | 7.54 | 9.44 | 12.47 | 13.19 | 18.17 | 3.52 | 15.87 | 31.31 | 38.08 | 43.57 | 44.06 | 51.37 |
| **91.77** | **93.71** | **98.01** | **100.10** | **106.14** | **108.20** | **114.85** | **93.60** | **107.68** | **132.69** | **140.29** | **161.72** | **172.72** | **190.97** |
| 313.01 | 312.97 | 312.99 | 312.96 | 317.40 | 317.38 | 321.93 | 313.15 | 313.10 | 313.12 | 313.12 | 317.57 | 317.66 | 322.35 |
| 16.79 | 18.04 | 19.04 | 21.72 | 23.48 | 29.88 | 30.37 | 19.87 | 25.08 | 28.49 | 33.35 | 39.02 | 47.23 | 53.35 |
| 27.05 | 26.96 | 26.81 | 26.78 | 26.59 | 26.53 | 26.49 | 29.83 | 29.76 | 29.77 | 29.75 | 29.76 | 29.83 | 29.88 |
| 8.72 | 17.64 | 23.63 | 21.01 | 31.91 | 34.73 | 36.40 | 8.72 | 22.52 | 83.48 | 83.07 | 180.64 | 244.44 | 305.05 |
| 1.15 | 1.15 | 1.15 | 1.15 | 1.15 | 1.15 | 1.15 | 1.47 | 1.47 | 1.47 | 1.47 | 1.47 | 1.47 | 1.47 |
| 0.60 | 0.60 | 0.60 | 0.60 | 0.60 | 0.73 | 1.01 | 1.45 | 1.45 | 1.45 | 1.45 | 1.45 | 1.81 | 2.30 |
| 6.17 | 11.20 | 19.38 | 24.73 | 33.54 | 35.72 | 48.87 | 8.70 | 43.58 | 89.81 | 108.33 | 122.06 | 123.41 | 142.77 |
| **373.50** | **388.56** | **403.61** | **408.95** | **434.68** | **446.12** | **466.22** | **383.19** | **436.96** | **547.60** | **570.54** | **691.97** | **765.86** | **857.17** |
| 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 |
| 6.70 | 6.68 | 6.62 | 6.60 | 6.49 | 6.48 | 6.44 | 6.84 | 6.96 | 6.94 | 6.93 | 6.92 | 6.93 | 6.94 |
| **7.14** | **7.13** | **7.07** | **7.05** | **6.93** | **6.92** | **6.89** | **7.29** | **7.41** | **7.39** | **7.38** | **7.37** | **7.38** | **7.39** |
| 2.30 | 2.30 | 2.29 | 2.29 | 2.29 | 2.29 | 2.29 | 2.32 | 2.32 | 2.32 | 2.32 | 2.32 | 2.32 | 2.32 |
| 47.26 | 47.40 | 47.04 | 46.94 | 45.96 | 45.90 | 45.62 | 48.89 | 50.23 | 50.30 | 50.20 | 50.22 | 50.36 | 50.49 |
| **49.56** | **49.69** | **49.34** | **49.23** | **48.25** | **48.19** | **47.91** | **51.21** | **52.55** | **52.62** | **52.51** | **52.53** | **52.68** | **52.80** |

[1]Includes grid-connected utilities and nonutilities other than cogenerators. These nonutility facilities include small power producers, exempt wholesale generators and generators at industrial and commercial facilities which do not produce steam for other uses.

[2]Includes hydrothermal resources only (hot water and steam).

[3]Includes landfill gas.

[4]Includes projections for energy crops after 2010.

[5]Cogenerators produce electricity and other useful thermal energy.

Notes: Totals may not equal sum of components due to independent rounding. Net summer capability has been estimated for nonutility generators for AEO98. Net summer capability is used to be consistent with electric utility capacity estimates. Data for electric utility capacity are the most recently available as of August 25, 1997. Additional retirements are also determined on the basis of the size and age of the units. Therefore, capacity estimates may differ from other Energy Information Administration sources.

**Sources:** 1996 electric utility capability: Energy Information Administration (EIA), Form EIA-860 "Annual Electric Utility Report," 1996 nonutility and cogenerator capability: Form EIA-867, "Annual Nonutility Power Producer Report." 1996 generation: EIA, *Annual Energy Review 1996*, DOE/EIA-0384(96) (Washington, DC, July 1997). **Projections:** EIA, AEO98 National Energy Modeling System runs KYBASE.D080398A, FD24ABV.D080398B, FD1998.D080398B, FD09ABV.D080398B, FD1990.D080398B, FD03BLW.D080398B, and FD07BLW.D080398B.

## Table B18. Renewable Energy Consumption by Sector and Source[1]

(Quadrillion Btu per Year)

| Sector and Source | 1996 | Projections | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | 2005 | | | | | | |
| | | Reference Case | 24 Percent Above | 14 Percent Above | 9 Percent Above | 1990 Level | 3 Percent Below | 7 Percent Below |
| **Marketed Renewable Energy[2]** | | | | | | | | |
| **Residential** | **0.61** | **0.61** | **0.61** | **0.61** | **0.61** | **0.61** | **0.61** | **0.61** |
| Wood | 0.61 | 0.61 | 0.61 | 0.61 | 0.61 | 0.61 | 0.61 | 0.61 |
| **Commercial[3]** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |
| Biomass | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| **Industrial[4]** | **1.82** | **2.11** | **2.11** | **2.11** | **2.10** | **2.09** | **2.09** | **2.09** |
| Conventional Hydroelectric | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 |
| Municipal Solid Waste | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Biomass | 1.78 | 2.08 | 2.07 | 2.07 | 2.06 | 2.06 | 2.06 | 2.05 |
| **Transportation** | **0.10** | **0.18** | **0.18** | **0.18** | **0.13** | **0.13** | **0.13** | **0.13** |
| Ethanol used in E85[5] | 0.00 | 0.05 | 0.05 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 |
| Ethanol used in Gasoline Blending | 0.10 | 0.13 | 0.13 | 0.12 | 0.07 | 0.07 | 0.07 | 0.07 |
| **Electric Generators[6]** | **4.40** | **4.22** | **4.33** | **4.40** | **4.42** | **4.52** | **4.58** | **4.68** |
| Conventional Hydroelectric | 3.56 | 3.21 | 3.21 | 3.21 | 3.21 | 3.21 | 3.26 | 3.26 |
| Geothermal | 0.43 | 0.46 | 0.49 | 0.51 | 0.54 | 0.59 | 0.61 | 0.68 |
| Municipal Solid Waste | 0.30 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 |
| Biomass | 0.06 | 0.08 | 0.16 | 0.19 | 0.16 | 0.18 | 0.18 | 0.17 |
| Solar Thermal | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| Solar Photovoltaic | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Wind | 0.03 | 0.06 | 0.06 | 0.08 | 0.10 | 0.14 | 0.14 | 0.16 |
| **Total Marketed Renewable Energy** | **6.94** | **7.12** | **7.23** | **7.29** | **7.26** | **7.35** | **7.41** | **7.51** |
| **Non-Marketed Renewable Energy[7] Selected Consumption** | | | | | | | | |
| **Residential** | **0.02** | **0.02** | **0.02** | **0.02** | **0.02** | **0.02** | **0.02** | **0.02** |
| Solar Hot Water Heating | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| Geothermal Heat Pumps | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| **Commercial** | **0.01** | **0.03** | **0.03** | **0.03** | **0.03** | **0.03** | **0.03** | **0.03** |
| Solar Thermal | 0.01 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 |

## Table B18. Renewable Energy Consumption by Sector and Source[1] (Continued)

(Quadrillion Btu per Year)

| Projections | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2010 | | | | | | | 2020 | | | | | | |
| Reference Case | 24 Percent Above | 14 Percent Above | 9 Percent Above | 1990 Level | 3 Percent Below | 7 Percent Below | Reference Case | 24 Percent Above | 14 Percent Above | 9 Percent Above | 1990 Level | 3 Percent Below | 7 Percent Below |
| **0.61** | **0.61** | **0.62** | **0.62** | **0.63** | **0.63** | **0.63** | **0.62** | **0.63** | **0.64** | **0.64** | **0.65** | **0.66** | **0.67** |
| 0.61 | 0.61 | 0.62 | 0.62 | 0.63 | 0.63 | 0.63 | 0.62 | 0.63 | 0.64 | 0.64 | 0.65 | 0.66 | 0.67 |
| **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |
| 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| **2.25** | **2.25** | **2.24** | **2.23** | **2.19** | **2.18** | **2.17** | **2.35** | **2.39** | **2.39** | **2.39** | **2.39** | **2.39** | **2.40** |
| 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 |
| 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2.21 | 2.21 | 2.20 | 2.20 | 2.15 | 2.15 | 2.13 | 2.31 | 2.35 | 2.36 | 2.35 | 2.35 | 2.36 | 2.36 |
| **0.23** | **0.19** | **0.23** | **0.22** | **0.23** | **0.39** | **0.53** | **0.31** | **0.29** | **0.38** | **0.40** | **0.57** | **0.69** | **0.69** |
| 0.09 | 0.09 | 0.10 | 0.10 | 0.09 | 0.09 | 0.09 | 0.13 | 0.14 | 0.14 | 0.14 | 0.13 | 0.13 | 0.13 |
| 0.13 | 0.09 | 0.13 | 0.12 | 0.13 | 0.30 | 0.45 | 0.18 | 0.15 | 0.24 | 0.26 | 0.44 | 0.56 | 0.56 |
| **4.30** | **4.47** | **4.63** | **4.75** | **5.05** | **5.31** | **5.53** | **4.47** | **5.11** | **6.23** | **6.58** | **7.85** | **8.71** | **9.72** |
| 3.22 | 3.22 | 3.22 | 3.22 | 3.26 | 3.26 | 3.31 | 3.22 | 3.22 | 3.22 | 3.22 | 3.26 | 3.27 | 3.31 |
| 0.49 | 0.53 | 0.56 | 0.64 | 0.72 | 0.93 | 0.95 | 0.59 | 0.75 | 0.85 | 1.01 | 1.23 | 1.50 | 1.71 |
| 0.43 | 0.43 | 0.43 | 0.43 | 0.43 | 0.42 | 0.42 | 0.48 | 0.48 | 0.48 | 0.48 | 0.48 | 0.48 | 0.48 |
| 0.08 | 0.16 | 0.21 | 0.19 | 0.28 | 0.31 | 0.32 | 0.08 | 0.20 | 0.74 | 0.74 | 1.61 | 2.18 | 2.72 |
| 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 |
| 0.06 | 0.12 | 0.20 | 0.25 | 0.34 | 0.37 | 0.50 | 0.09 | 0.45 | 0.92 | 1.11 | 1.25 | 1.27 | 1.47 |
| **7.39** | **7.52** | **7.71** | **7.83** | **8.10** | **8.52** | **8.87** | **7.75** | **8.42** | **9.65** | **10.01** | **11.47** | **12.45** | **13.47** |
| **0.03** | **0.03** | **0.03** | **0.03** | **0.03** | **0.03** | **0.03** | **0.05** | **0.05** | **0.05** | **0.05** | **0.05** | **0.06** | **0.06** |
| 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.05 | 0.05 |
| **0.03** | **0.03** | **0.03** | **0.03** | **0.03** | **0.03** | **0.03** | **0.04** | **0.04** | **0.04** | **0.04** | **0.04** | **0.04** | **0.04** |
| 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 |

[1]Actual heat rates used to determine fuel consumption for all renewable fuels except hydropower, solar, and wind. Consumption at hydroelectric, solar, and wind facilities determined by using the fossil fuel equivalent of 10,280 Btu per kilowatthour.

[2]Includes nonelectric renewable energy groups for which the energy source is bought and sold in the marketplace, although all transactions may not necessarily be marketed, and marketed renewable energy inputs for electricity entering the marketplace on the electric power grid. Excludes electricity imports; see Table B8.

[3]Value is less than 0.005 quadrillion Btu per year and rounds to zero.

[4]Includes all electricity production by industrial and other cogenerators for the grid and for own use.

[5]Excludes motor gasoline component of E85.

[6]Includes renewable energy delivered to the grid from electric utilities and nonutilities. Renewable energy used in generating electricity for own use is included in the individual sectoral electricity energy consumption values.

[7]Includes selected renewable energy consumption data for which the energy is not bought or sold, either directly or indirectly as an input to marketed energy. The Energy Information Administration does not estimate or project total consumption of nonmarketed renewable energy.

Btu = British thermal unit.

Notes: Totals may not equal sum of components due to independent rounding.

**Sources:** 1996 electric generators: Energy Information Administration (EIA), Form EIA-860, "Annual Electric Utility Report" and EIA, Form EIA-867, "Annual Nonutility Power Producer Report." 1996 ethanol: EIA, *Petroleum Supply Annual 1996*, DOE/EIA-0340(96/1) (Washington, DC, June 1997). Other 1996: EIA, Office of Integrated Analysis and Forecasting. **Projections:** EIA, AEO98 National Energy Modeling System runs KYBASE.D080398A, FD24ABV.D080398B, FD1998.D080398B, FD09ABV.D080398B, FD1990.D080398B, FD03BLW.D080398B, and FD07BLW.D080398B.