## Table F5. Key Results for Advanced Nuclear Cost Case
(Gigawatts, Unless Otherwise Noted)

| Net Summer Capacity, Generation, Emissions, and Fuel Prices | 2001 | Projections | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 2010 | | 2015 | | 2020 | | 2025 | |
| | | Reference | Advanced Nuclear | Reference | Advanced Nuclear | Reference | Advanced Nuclear | Reference | Advanced Nuclear |
| **Capacity** | | | | | | | | | |
| Coal Steam | 310.5 | 311.5 | 311.6 | 328.1 | 328.1 | 348.4 | 346.7 | 375.8 | 367.7 |
| Other Fossil Steam | 135.0 | 84.6 | 84.6 | 79.5 | 79.5 | 78.3 | 78.3 | 77.3 | 77.0 |
| Combined Cycle | 66.2 | 176.1 | 176.0 | 228.8 | 229.7 | 259.3 | 259.0 | 301.4 | 299.2 |
| Combustion Turbine/Diesel | 102.6 | 133.5 | 133.3 | 144.9 | 144.0 | 157.9 | 157.4 | 179.1 | 176.8 |
| Nuclear Power | 98.2 | 99.3 | 99.3 | 99.5 | 99.5 | 99.6 | 101.3 | 99.6 | 113.9 |
| Pumped Storage | 19.9 | 20.3 | 20.3 | 20.3 | 20.3 | 20.3 | 20.3 | 20.3 | 20.3 |
| Fuel Cells | 0.0 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| Renewable Sources | 90.9 | 97.6 | 97.7 | 100.1 | 100.1 | 102.2 | 102.3 | 104.6 | 104.3 |
| Distributed Generation (Natural Gas) | 0.0 | 1.7 | 1.7 | 4.9 | 5.0 | 10.1 | 10.0 | 15.8 | 15.5 |
| Combined Heat and Power[1] | 28.8 | 34.6 | 34.6 | 37.6 | 37.6 | 41.7 | 41.7 | 47.4 | 47.6 |
| **Total** | **851.9** | **959.3** | **959.1** | **1043.9** | **1044.0** | **1118.2** | **1117.2** | **1221.5** | **1222.5** |
| **Cumulative Additions** | | | | | | | | | |
| Coal Steam | 0.0 | 6.8 | 6.9 | 23.9 | 23.9 | 45.5 | 43.8 | 74.0 | 65.9 |
| Other Fossil Steam | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Combined Cycle | 0.0 | 109.2 | 109.2 | 161.9 | 162.8 | 192.5 | 192.1 | 234.5 | 232.3 |
| Combustion Turbine/Diesel | 0.0 | 40.1 | 39.7 | 52.6 | 51.6 | 67.7 | 67.2 | 89.7 | 87.1 |
| Nuclear Power | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.7 | 0.0 | 14.3 |
| Pumped Storage | 0.0 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 |
| Fuel Cells | 0.0 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| Renewable Sources | 0.0 | 6.3 | 6.4 | 8.8 | 8.9 | 11.0 | 11.0 | 13.3 | 13.1 |
| Distributed Generation | 0.0 | 1.7 | 1.7 | 4.9 | 5.0 | 10.1 | 10.0 | 15.8 | 15.5 |
| Combined Heat and Power[1] | 0.0 | 5.8 | 5.8 | 8.8 | 8.8 | 12.9 | 12.9 | 18.7 | 18.8 |
| **Total** | **0.0** | **170.3** | **170.1** | **261.5** | **261.4** | **340.2** | **339.2** | **446.4** | **447.5** |
| **Cumulative Retirements** | **0.0** | **66.5** | **66.3** | **74.1** | **74.0** | **78.7** | **78.8** | **81.7** | **81.6** |
| **Generation by Fuel (billion kilowatthours)** | | | | | | | | | |
| Coal | 1881 | 2222 | 2223 | 2368 | 2368 | 2530 | 2517 | 2736 | 2670 |
| Petroleum | 120 | 43 | 42 | 47 | 47 | 46 | 46 | 55 | 51 |
| Natural Gas | 535 | 875 | 874 | 1087 | 1086 | 1293 | 1292 | 1481 | 1445 |
| Nuclear Power | 769 | 800 | 800 | 805 | 805 | 807 | 818 | 807 | 920 |
| Pumped Power | -9 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 |
| Renewable Sources | 263 | 396 | 397 | 409 | 409 | 420 | 421 | 432 | 432 |
| Distributed Generation | 0 | 1 | 1 | 3 | 3 | 5 | 5 | 7 | 7 |
| Combined Heat and Power[1] | 164 | 207 | 207 | 227 | 227 | 255 | 255 | 294 | 295 |
| **Total** | **3723** | **4544** | **4544** | **4944** | **4944** | **5355** | **5354** | **5813** | **5819** |
| **Carbon Dioxide Emissions by Electric Generators (million metric tons carbon equivalent)[2]** | | | | | | | | | |
| Petroleum | 27.5 | 8.8 | 8.7 | 9.8 | 9.9 | 9.7 | 9.8 | 10.9 | 10.3 |
| Natural Gas | 77.7 | 99.9 | 99.7 | 117.5 | 117.3 | 137.8 | 137.7 | 155.0 | 151.4 |
| Coal | 506.4 | 579.9 | 580.0 | 613.3 | 613.3 | 649.5 | 646.9 | 694.2 | 679.6 |
| **Total** | **611.6** | **688.5** | **688.5** | **740.6** | **740.4** | **796.9** | **794.3** | **860.1** | **841.2** |
| **Prices to Electric Generators (2001 dollars per million Btu)** | | | | | | | | | |
| Petroleum | 4.73 | 4.27 | 4.27 | 4.43 | 4.42 | 4.60 | 4.61 | 4.98 | 4.98 |
| Natural Gas | 4.78 | 3.79 | 3.79 | 4.14 | 4.14 | 4.30 | 4.30 | 4.60 | 4.43 |
| Coal | 1.25 | 1.17 | 1.17 | 1.15 | 1.15 | 1.12 | 1.12 | 1.10 | 1.10 |

[1] Includes combined heat and power plants and electricity-only plants in commercial and industrial sectors. Includes 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. Excludes off-grid photovoltaics and other generators not connected to the distribution or transmission systems.

[2] Excludes combined heat and power and other generators

Note: Totals may not equal sum of components due to independent rounding. Data for 2001 are model results and may differ slightly from official EIA data reports. Net summer capacity has been estimated for nonutility generators to be consistent with electric utility capacity estimates.

**Source:** Energy Information Administration, AEO2003 National Energy Modeling System runs AEO2003.D110502C, and ADVNUC03.D110602A.