

6.2.7 Characteristics of New and Stock Generating Capacities, by Plant Type

<u>New Plant Type</u>	<u>Heat rate (1) in 2010 (Btu/kWh)</u>	<u>Size (MW)</u>	<u>Overnight Costs (2) (2010 \$/kW)</u>	<u>Total Capital Costs of Typical New Plant (\$2010 million)</u>		
Scrubbed Coal	8,800	1300	2809	3652		
Integrated Coal-Gasification Combined Cycle (IGCC)	8,700	1200	3182	3818		
IGCC w/Carbon Sequestration	10,700	520	5287	2749		
Conv. Gas/Oil Combined Cycle	7,050	540	967	522		
Adv. Gas/Oil Combined Cycle	6,430	400	991	396		
Conv. Combustion Turbine	10,745	85	961	82		
Adv. Combustion Turbine	9,750	210	658	138		
Fuel Cell	9,500	10	6752	68		
Advanced Nuclear	10,453	2236	5275	11795		
Municipal Solid Waste	13,648	50	8237	412		
Conventional Hydropower (3)	9,854	500	2221	1111		
Wind	9,854	100	2409	241		
<u>Stock Plant Type</u>	<u>2010</u>	<u>2015</u>	<u>2020</u>	<u>2025</u>	<u>2030</u>	<u>2035</u>
Fossil Fuel Steam Heat Rate (Btu/kWh)	9,787	9,441	9,509	9,557	9,440	9,341
Nuclear Energy Heat Rate (Btu/kWh)	10,460	10,460	10,460	10,460	10,460	10,460

Note(s): 1) Plant use of electricity is included in heat rate calculations; however, transmission and distribution losses of the electric grid are excluded.
 2) Overnight costs represent the capital costs of new projects initiated in 2009. Includes contingency factors and excludes interest charges. 3)
 Hydro costs and performance characteristics are site-specific. This table provides the cost of the least expensive plant that could be built in the Northwest Power Pool region, where most proposed sites are located.

Source(s): EIA, Assumptions to the AEO 2011, July 2011, Table 8.2. p. 97 for 2010 plant characteristics; EIA, Annual Energy Outlook 2012 Early Release, Jan. 2012, Table A2 for consumption and Table A8 for electricity supply.