

Table 2. Cost and Performance Characteristics for Renewable Energy Generating Technologies: Reference and High Renewable Technology Case

Technology/ Decision Year	Total Overnight Costs ¹			Best Available Capacity Factors	
	Overnight Costs in 2001 (Reference) (\$2000/kw)	Reference (\$2000/kw)	High Renewable Technology (\$2000/kw)	Reference (%)	High Renewable Technology (%)
Dedicated Biomass					
2005	1,725	1,556	1,510	80	80
2010		1,424	1,429	80	80
2015		1,376	1,379	80	80
2020		1,303	1,315	80	80
MSW /Landfill Gas ²					
2005	1,429	1,417	1,417	90	90
2010		1,402	1,402	90	90
2015		1,387	1,387	90	90
2020		1,373	1,373	90	90
Geothermal ³					
2005	1,746	1,695	1,506	95	95
2010		1,586	1,292	95	95
2015		1,680	1,458	95	95
2020		2,026	1,709	95	95
Wind					
2005	982	921	932	39	44
2010		907	871	41	46
2015		876	811	42	47
2020		826	750	42	48
Solar Thermal					
2005	2,539	2,454	2,906	42	52
2010		2,348	2,990	42	63
2015		2,243	2,934	42	75
2020		2,137	2,877	42	77
Photovoltaic					
2005	3,830	2,722	3,260	30	30
2010		2,404	1,686	30	30
2015		2,293	1,466	30	30
2020		2,219	1,246	30	30

¹ Overnight capital cost (i.e. financing costs), plus contingency factors and learning, excluding regional multipliers.
² Provided to show evolution of landfill gas costs through 2020; for landfill gas, assumptions in the High Renewable Technology case are unchanged from the reference case.
³ Because geothermal cost and performance characteristics are specific for each site, the table entries represent the least cost units available in the Northwest Power Pool region, where most of the proposed sites are located.

Source: Capital Costs: Initial-year capital costs for renewable energy technologies are determined by the Energy Information Administration from analyses, reports, and discussions with various industry and government sources; forecast-year capital costs in each modeling run are uniquely determined in the run as a result of levels of demand and supply, previous investment, and other factors applied by the National Energy Modeling System (NEMS). The data in this table are output of the following runs: aeo2002.d102001b, hirenew02.d102301a; capacity factors: Energy Information Administration, Office of Integrated Analysis and Forecasting.