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Table 73. Capacity Factors[1] for Renewable Energy Generating Technologies in Three Cases

Technology	Year	Reference	High Renewable Cost	Low Renewable Cost
Geothermal[2]	2010	0.90	0.90	0.90
	2020	0.90	0.90	0.90
	2030	0.90	0.90	0.90
Hydrolectric[2]	2010	0.64	0.64	0.64
	2020	0.50	0.51	0.57
	2030	0.49	0.51	0.54
Landfill Gas	2010	0.90	0.90	0.90
	2020	0.90	0.90	0.90
	2030	0.90	0.90	0.90
Photovoltaic	2010	0.21	0.21	0.21
	2020	0.21	0.21	0.21
	2030	0.21	0.21	0.21
Solar Thermal	2010	0.31	0.31	0.31
	2020	0.31	0.31	0.31
	2030	0.31	0.31	0.31
Biomass	2010	0.83	0.83	0.83
	2020	0.83	0.83	0.83
	2030	0.83	0.83	0.83
Offshore Wind[3]	2010	0.40	0.40	0.46
	2020	0.40	0.40	0.46
	2030	0.40	0.40	0.46
Onshore Wind[3]	2010	0.43	0.42	0.44
	2020	0.45	0.42	0.48
	2030	0.45	0.42	0.50

[1]Capacity factor for units available to be built in specified year. Capacity factor represents maximum expected annual power output as a fraction of theoretical output if plant were operated at rated capacity for a full year.

[2]Hydroelectric capacity factors are specific for each site. The table entries represent the least-cost unit available in the specified year in the Northwest Power Pool region.

[3]Wind capacity factors are based on regional resource availability and generation characteristics. The table entries represent the least-cost resource available in the specified year in the Northwest Power Pool region.

Source: AEO2008 National Energy Modeling System runs: AEO2008.D030208F, HIRENCST.D030408A, and LORENCST.D030408A.