Table 55. Assumed Annual Rates of Technological Progress for Conventional Crude Oil and Natural Gas Sources
(Percent/Year)

Category	Slow	Reference	Rapid
Lower 48 Onshore			
Costs			
Drilling	0.94	1.87	2.81
Lease Equipment	0.60	1.20	1.80
Operating	0.27	0.54	0.81
Finding Rates			
New Field Discoveries	0.00	0.00	0.00
Known Fields	1.42	2.84	4.26
Success Rates			
Exploratory	0.25	0.50	0.75
Developmental	0.25	0.50	0.75
Lower 48 Offshore			
Exploration success rates	0.40	0.80	1.20
Delay to commence first exploration and between exploration (years)	0.30	0.60	0.90
Exploration and Development drilling costs	0.60	1.20	1.80
Operating costs	0.60	1.20	1.80
Time to construct production facility (years)	0.30	0.60	0.90
Production facility construction costs	0.60	1.20	1.80
Initial constant production rate	0.40	0.80	1.20
Production Decline rate	0.40	0.80	1.20
Alaska			
Costs			
Drilling	0.50	1.00	1.50
Lease Equipment	0.50	1.00	1.50
Operating	0.50	1.00	1.50
Finding Rates	1.50	3.00	4.50

Source: The values shown in this table are developed by the Energy Information Administration, Office of Integrated Analysis and Forecasting from econometric analysis for onshore costs and discussions with various industry and government sources for offshore and Alaska costs. Onshore drilling cost data are based on the American Petroleum Institute's *Joint Association Survey on Drilling Costs*. Onshore lease equipment and operating costs are based on the Energy Information Administration's *Costs and Indices for Domestic Oil & Gas Field Equipment and Production Operations*.