

Table 14. Coal production excluding waste coal, projected versus actual

Projected (million short tons)		1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021			
AEO1994	991	1,013	1,032	1,042	1,048	1,057	1,064	1,072	1,077	1,089	1,097	1,111	1,108	1,114	1,129	1,159	1,187	1,209															
AEO1995	998	1,001	1,002	1,008	1,008	1,012	1,018	1,023	1,031	1,041	1,055	1,063	1,069	1,076	1,094	1,108	1,123																
AEO1996		1,028	1,035	1,033	1,036	1,052	1,061	1,076	1,091	1,102	1,110	1,122	1,142	1,147	1,153	1,159	1,170	1,177	1,192	1,204	1,218	1,230											
AEO1997			1,019	1,044	1,063	1,079	1,096	1,100	1,106	1,113	1,122	1,133	1,157	1,168	1,176	1,179	1,187	1,196	1,212	1,220	1,238	1,258											
AEO1998			1,080	1,113	1,119	1,136	1,166	1,167	1,173	1,180	1,194	1,215	1,225	1,234	1,247	1,252	1,271	1,279	1,284	1,299	1,316	1,324	1,330	1,345	1,358	1,369							
AEO1999						1,116	1,145	1,159	1,177	1,184	1,188	1,188	1,187	1,199	1,206	1,218	1,222	1,239	1,248	1,257	1,270	1,284	1,296	1,313	1,320	1,339	1,350						
AEO2000							1,111	1,127	1,143	1,165	1,180	1,201	1,208	1,216	1,222	1,228	1,232	1,228	1,232	1,238	1,243	1,245	1,259	1,264	1,278	1,286	1,296	1,308					
AEO2001								1,102	1,126	1,172	1,188	1,198	1,213	1,219	1,247	1,255	1,254	1,259	1,264	1,271	1,276	1,280	1,284	1,293	1,304	1,305	1,312	1,323					
AEO2002									1,158	1,132	1,152	1,172	1,198	1,220	1,248	1,257	1,265	1,271	1,279	1,289	1,294	1,301	1,315	1,328	1,345	1,355	1,372	1,389					
AEO2003										1,076	1,089	1,091	1,111	1,141	1,174	1,186	1,200	1,217	1,226	1,235	1,246	1,256	1,276	1,289	1,309	1,319	1,337	1,351	1,356				
AEO2004											1,090	1,110	1,128	1,154	1,178	1,185	1,206	1,217	1,226	1,238	1,249	1,259	1,275	1,294	1,310	1,320	1,343	1,369	1,395				
AEO2005												1,114	1,165	1,164	1,193	1,211	1,223	1,225	1,228	1,238	1,243	1,249	1,260	1,270	1,283	1,296	1,315	1,337	1,356				
AEO2006												1,132	1,151	1,190	1,209	1,239	1,247	1,253	1,266	1,265	1,262	1,262	1,271	1,286	1,289	1,301	1,347	1,380					
AEO2007													1,134	1,129	1,130	1,145	1,175	1,201	1,214	1,226	1,248	1,256	1,262	1,270	1,269	1,287	1,315	1,349					
AEO2008														1,141	1,138	1,139	1,152	1,186	1,200	1,197	1,200	1,205	1,220	1,227	1,233	1,248	1,262	1,282					
AEO2009															1,144	1,096	1,131	1,169	1,194	1,205	1,213	1,203	1,202	1,205	1,202	1,211	1,215	1,222					
AEO2010																1,068	1,049	1,107	1,138	1,148	1,168	1,145	1,157	1,159	1,172	1,179	1,176	1,199					
AEO2011																		1,087	1,050	1,045	1,034	1,019	1,030	1,041	1,051	1,059	1,070	1,092	1,104				
AEO2012																			1,080	1,037	1,024	1,006	983	993	996	1,004	1,015	1,026	1,048				
AEO2013																				1,021	1,022	1,035	1,042	988	1,018	1,039	1,066	1,083	1,090				
AEO2014																					1,010	1,035	1,052	1,012	1,035	1,055	1,065	1,069	1,076				
AEO2015																						975	976	968	990	1,001	1,036	1,063	1,069				
AEO2016																							863	838	844	867	872	864	846				
AEO2017																								730	754	766	803	827	817				
AEO2018																									775	759	730	723	708				
AEO2019																										752	726	684	654				
AEO2020																											671	590	559				
AEO2021																													512	607			
AEO2022																																	
Actual		945	1,034	1,033	1,064	1,090	1,118	1,100	1,074	1,128	1,094	1,072	1,112	1,131	1,163	1,147	1,172	1,075	1,084	1,096	1,016	985	1,000	896	728	774	756	706	535	578			
Average absolute difference		45	28	12	39	47	52	38	40	41	45	62	40	39	36	46	41	112	110	111	181	207	191	287	424	375	381	425	459	192			

Table 14. Coal production excluding waste coal, projected versus actual (continued)

Projected versus actual (percentage difference)		1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021			
AEO1994																																	
AEO1995		4.8	-2.0	-0.1	-2.0	-3.9	-5.4	-3.3	-0.2	-4.5	-0.5	2.4	-0.1	-2.1	-4.2	-1.5	-1.1	10.5	11.5														
AEO1996			-3.5	-3.1	-5.8	-7.5	-9.8	-8.0	-5.2	-9.3	-5.8	-2.9	-5.2	-6.1	-8.1	-6.2	-6.7	3.1	3.6														
AEO1997				-0.4	-2.7	-5.2	-7.3	-4.4	-1.2	-4.6	-0.3	2.8	-0.2	-0.9	-1.8	0.0	-1.6	7.9	7.9	7.4	17.3	22.2	21.8	37.3									
AEO1998					-4.2	-4.2	-4.9	-1.9	2.1	-2.5	1.1	3.8	0.9	0.1	-0.5	1.9	0.3	9.7	9.5	9.1	19.2	23.8	23.8	40.4									
AEO1999					-0.9	-0.4	1.7	5.8	3.4	6.7	9.4	6.1	5.5	4.5	6.8	5.3	16.0	15.4	16.0	25.8	30.4	29.9	46.9	81.7	71.8	77.9	92.3	155.6					
AEO2000						-0.1	4.0	8.0	4.3	8.2	10.9	6.8	4.9	3.1	5.2	3.9	13.7	12.7	13.1	22.8	27.6	27.0	43.4	78.0	69.6	74.6	89.6	152.1					
AEO2001							1.0	5.0	1.4	6.5	10.1	8.0	6.7	4.6	6.5	4.8	14.6	13.3	12.5	21.8	26.2	24.5	40.5	73.6	65.1	70.0	83.5	144.3					
AEO2002								2.6	-0.2	7.1	10.9	7.7	7.2	4.9	8.8	7.1	16.7	16.1	15.4	25.0	29.6	28.0	43.3	77.5	68.5	72.5	85.7	147.1					
AEO2003									2.7	3.5	7.5	5.4	5.9	4.9	8.9	7.3	17.7	17.2	16.7	26.8	31.4	30.1	46.8	82.3	73.7	79.2	94.3	159.5					
AEO2004										-1.7	1.6	-1.9	-1.8	-1.9	2.4	1.2	11.7	12.2	11.9	21.5	26.6	25.5	42.4	76.9	69.1	74.5	89.2	152.3	134.6				
AEO2005											1.7	-0.2	-0.3	-0.8	2.8	1.2	12.2	12.2	11.9	21.8	26.8	25.9	42.3	77.7	69.3	74.6	90.2	155.6	141.4				
AEO2006												0.2	3.0	0.1	4.0	3.3	13.8	12.9	12.1	21.8	26.2	24.9	40.6	74.3	65.8	71.4	86.1	149.8	134.6				
AEO2007													0.0	-1.0	3.8	3.1	15.2	15.0	14.3	24.5	28.5	26.2	40.9	74.5	66.1	70.4	84.3	151.7	138.7				
AEO2008														-2.5	-1.5	-3.5	6.5	8.4	9.6	19.5	24.5	24.8	40.2	73.2	64.1	67.9	82.2	145.7	133.4				
AEO2009															-0.5	-2.9	1.9	6.0	6.2	8.2	18.1	21.6	20.0	34.5	67.5	58.5	63.1	76.7	135.7	121.8			
AEO2010																	-2.3	1.9	4.3	6.7	17.5	22.4	21.3	34.2	65.0	55.7	59.0	71.5	127.0	111.5			
AEO2011																		-0.6	-3.3	1.0	11.9	16.5	16.8	27.8	58.8	49.7	55.1	67.0	119.6	107.4			
AEO2012																		0.2	-4.2	2.8	5.0	1.9	15.0	42.9	35.7	40.1	51.5	104.0	90.9				
AEO2013																				-1.4	2.0	4.0	0.6	9.8	36.4	28.6	32.8	43.7	91.7	81.3			
AEO2014																					0.5	3.8	3.5	16.3	35.6	31.4	37.5	51.0	102.3	88.6			
AEO2015																						2.6	3.5	17.5	38.9	33.8	39.6	50.8	99.7	86.1			
AEO2016																							-2.5	8.9	32.9	27.9	32.3	46.7	98.5	85.0			
AEO2017																									-3.7	15.1	9.1	14.7	23.4	61.4	46.4		
AEO2018																									0.3	-2.6	1.3	13.8	54.4	41.3			
AEO2019																										0.1	0.4	3.3	35.0	22.4			
AEO2020																											-0.5	2.8	27.8	13.2			
AEO2021																												-5.0	10.2	-3.3			
AEO2022																													-4.4	5.0			
AEO 2022																																	
Average absolute percentage difference		4.8	2.7	1.2	3.7	4.4	4.6	3.5	3.7	3.6	4.1	5.8	3.6	3.4	3.1	4.0	3.5	10.5	10.1	10.1	17.8	21.0	19.1	32.0	58.2	48.4	50.4	60.2	107.7	79.4			

Data source: Historical data are from the U.S. Energy Information Administration open data API (accessed April 2022), <http://www.eia.gov/opa/data/>, series: TOTAL.CLPRPUS.A; projections: Annual Energy Outlook, Reference case projections from various editions
Notes: shading indicates overestimation (blue) or underestimation (green).