

Table 15a. Average Electricity Prices, Projected vs. Actual

Projected Price in Constant Dollars

(constant dollars, cents per kilowatt-hour in "dollar year" specific to each AEO)

AEO \$ Year	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	
AEO 1994	1992	6.80	6.80	6.90	6.90	6.90	6.90	7.00	7.00	7.10	7.10	7.20	7.20	7.30	7.30	7.40	7.50	7.60										
AEO 1995	1993	6.80	6.80	6.70	6.70	6.70	6.70	6.80	6.80	6.90	6.90	6.90	7.00	7.00	7.10	7.10	7.20											
AEO 1996	1994		7.09	6.99	6.94	6.93	6.96	6.96	6.96	6.96	6.97	6.98	6.97	6.98	6.95	6.95	6.94	6.96	6.95	6.91	6.87	6.84	6.89	6.99				
AEO 1997	1995		6.94	6.89	6.90	6.91	6.86	6.84	6.78	6.73	6.66	6.60	6.58	6.54	6.49	6.48	6.45	6.36	6.27	6.19	6.19	6.26						
AEO 1998	1996			6.80	6.60	6.57	6.46	6.36	6.29	6.26	6.18	6.12	6.05	6.01	5.97	5.94	5.91	5.81	5.71	5.69	5.65	5.58	5.55	5.52	5.49	5.46		
AEO 1999	1997				6.70	6.67	6.58	6.48	6.38	6.41	6.41	6.35	6.32	6.26	6.20	6.17	6.14	6.05	5.96	5.91	5.88	5.84	5.80	5.76	5.74	5.68		
AEO 2000	1998					6.60	6.57	6.45	6.31	6.25	6.19	6.09	6.09	6.07	6.03	5.95	5.97	5.90	5.86	5.85	5.87	5.88	5.86	5.86	5.86	5.86	5.83	
AEO 2001	1999						6.80	6.75	6.53	6.44	6.38	6.19	6.12	5.99	5.91	5.87	5.87	5.84	5.82	5.83	5.88	5.90	5.93	5.96	5.98	5.97		
AEO 2002	2000							7.06	6.71	6.52	6.50	6.43	6.35	6.32	6.32	6.32	6.34	6.37	6.33	6.34	6.32	6.32	6.36	6.39	6.43	6.45		
AEO 2003	2001								6.90	6.62	6.56	6.50	6.37	6.33	6.32	6.38	6.36	6.39	6.38	6.42	6.45	6.46	6.52	6.51	6.56	6.55		
AEO 2004	2002									7.13	6.96	6.84	6.73	6.63	6.63	6.67	6.64	6.64	6.71	6.71	6.76	6.82	6.86	6.84	6.87	6.83		
AEO 2005	2003										7.41	7.39	7.12	6.81	6.65	6.64	6.61	6.60	6.68	6.77	6.89	6.94	6.96	6.99	7.06	7.15		
AEO 2006	2004											8.34	8.21	7.82	7.56	7.42	7.31	7.19	7.14	7.21	7.19	7.12	7.13	7.14	7.18	7.25		
AEO 2007	2005												8.32	8.30	8.29	8.20	8.07	7.88	7.78	7.73	7.69	7.69	7.74	7.83	7.89	7.88		
AEO 2008	2006													8.90	9.06	9.35	9.18	8.93	8.82	8.67	8.56	8.53	8.54	8.58	8.60	8.64		
AEO 2009	2007														9.49	9.11	8.28	8.56	8.55	8.56	8.65	8.68	8.79	8.91	9.03	9.12		
AEO 2010	2008															9.58	9.14	8.60	8.90	8.93	8.86	8.86	8.94	8.99	9.00	8.98		
AEO 2011	2009																9.57	9.03	9.01	8.94	8.89	8.89	8.84	8.84	8.83	8.81		
AEO 2012	2010																	9.73	9.59	9.63	9.60	9.68	9.70	9.65	9.61	9.55		
AEO 2013	2011																		9.41	9.19	9.24	9.18	9.33	9.41	9.43	9.39		
AEO 2014	2012																			9.79	9.80	9.91	9.93	9.99	10.10	10.19		
AEO 2015	2013																				10.46	10.45	10.66	10.70	10.62	10.70		
AEO 2016	2014																					10.27	10.16	10.10	10.19	10.42		
AEO 2017	2016																						10.28	10.35	10.24	10.35		
AEO 2018	2017																								10.55	10.59	10.69	
AEO 2019	2018																									10.56	10.45	
AEO 2020	2019																										10.39	
Actual in Nominal\$		6.93	6.91	6.89	6.86	6.85	6.74	6.64	6.81	7.29	7.20	7.44	7.61	8.14	8.90	9.13	9.74	9.82	9.83	9.90	9.84	10.07	10.45	10.42	10.27	10.54	10.53	10.60
Average Absolute Difference		0.03	0.11	0.33	0.36	0.37	0.43	0.55	0.44	0.40	0.44	0.51	0.49	0.64	0.86	0.88	1.13	1.11	1.10	1.11	0.91	1.44	1.57	1.40	1.27	1.28	1.54	1.90

Table 15a. Average Electricity Prices, Projected vs. Actual (continued)

Projected vs. Actual

(percent 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		
AEO 1994		0.4	2.9	6.9	9.3	11.4	14.5	19.6	19.2	15.4	18.7	18.7	19.1	14.9	9.7	9.8	6.4	7.8	10.4										
AEO 1995			0.5	2.9	3.7	5.7	8.6	11.8	11.5	8.0	11.1	11.1	11.5	7.5	2.8	2.9	-0.3	-0.3	2.1										
AEO 1996				5.0	5.9	7.2	10.0	13.7	13.3	8.3	11.5	10.0	10.4	6.5	-0.1	0.0	-4.5	-4.3	-3.4	-2.7	-0.9	-1.8	-2.9	-0.3					
AEO 1997					3.0	4.2	7.2	10.7	9.4	4.2	6.2	4.0	3.2	-1.4	-7.3	-7.8	-12.6	-12.7	-12.3	-12.4	-11.4	-13.0	-14.6	-12.6					
AEO 1998						1.0	0.7	3.3	1.2	-4.8	-3.2	-5.1	-5.9	-10.2	-16.3	-16.7	-21.0	-21.5	-21.0	-21.4	-20.6	-21.4	-23.4	-23.4	-21.9	-22.9	-21.4	-21.0	
AEO 1999							0.5	3.1	1.3	-4.7	-3.6	-4.5	-4.1	-8.3	-14.1	-14.8	-19.3	-19.8	-19.3	-19.5	-18.6	-19.8	-21.6	-21.3	-19.8	-20.9	-19.2	-19.2	
AEO 2000								0.8	0.0	-6.2	-5.7	-7.9	-8.3	-13.1	-18.1	-18.3	-22.5	-23.6	-22.5	-22.3	-20.8	-21.5	-22.7	-21.5	-19.8	-20.4	-18.5	-18.0	
AEO 2001									2.1	-3.3	-3.8	-6.5	-6.9	-12.9	-18.9	-20.6	-25.1	-25.6	-24.9	-24.2	-22.6	-22.9	-23.7	-22.4	-20.0	-20.2	-18.0	-17.2	
AEO 2002										-1.1	-3.2	-7.4	-7.2	-11.6	-17.7	-18.0	-21.6	-21.7	-20.6	-19.2	-17.6	-18.0	-19.7	-18.7	-16.1	-16.3	-13.7	-12.5	
AEO 2003											-2.7	-7.9	-8.4	-12.5	-19.2	-19.6	-23.3	-22.6	-22.0	-20.6	-18.7	-18.7	-19.8	-18.7	-15.8	-16.6	-13.9	-13.0	
AEO 2004												-2.4	-4.3	-9.4	-16.0	-17.1	-20.8	-20.4	-19.9	-18.9	-15.8	-16.4	-17.2	-15.5	-12.8	-13.8	-11.2	-10.7	
AEO 2005													0.0	-3.9	-12.8	-16.5	-22.0	-22.2	-21.8	-20.8	-17.8	-17.2	-17.3	-15.6	-13.3	-13.4	-10.4	-8.3	
AEO 2006														5.7	-2.0	-6.6	-13.7	-15.3	-15.7	-16.0	-14.4	-14.0	-15.9	-15.6	-13.5	-13.9	-11.2	-9.4	
AEO 2007																-3.7	-3.9	-8.2	-9.3	-9.7	-10.7	-9.6	-10.6	-12.7	-11.6	-8.8	-8.5	-5.4	-4.6
AEO 2008															0.1	-2.6	0.4	-0.4	-1.7	-0.5	-2.8	-5.7	-4.9	-2.3	-2.7	0.0	1.6		
AEO 2009																-0.7	-4.7	-12.4	-8.2	-6.1	-6.5	-7.3	-5.7	-2.1	-1.6	2.3	4.5		
AEO 2010																	-1.7	-5.3	-9.6	-4.0	-4.3	-6.8	-5.7	-2.4	-2.5	-0.1	0.8		
AEO 2011																		-1.5	-5.8	-3.7	-4.9	-7.2	-6.1	-4.2	-4.9	-2.6	-1.7		
AEO 2012																			0.3	1.4	1.2	-1.0	1.2	3.9	2.6	4.8	5.3		
AEO 2013																					-2.5	-5.3	-6.6	-6.1	-2.1	-2.0	0.7	1.4	
AEO 2014																						-1.1	-2.8	-0.4	2.2	2.1	5.8	7.9	
AEO 2015																							2.0	3.1	7.8	7.5	9.3	11.3	
AEO 2016																								-0.5	0.9	-0.4	3.0	6.5	
AEO 2017																									0.1	0.0	1.4	3.7	
AEO 2018																										0.1	2.9	5.1	
AEO 2019																											0.2	0.4	
AEO 2020																												-2.0	
Average Absolute Percent Difference		0.4	1.7	4.9	5.5	5.9	6.9	9.0	7.2	6.2	7.0	7.8	7.5	9.1	11.3	11.5	14.0	13.8	13.6	13.8	11.5	11.6	12.5	11.0	9.5	9.2	8.0	8.1	

Sources: Projections: *Annual Energy Outlook*, Reference Case Projections, Various Editions.

Historical Data: U.S. Energy Information Administration open data API (<http://www.eia.gov/opendata/>) (Washington, DC). Retrieved September 24, 2020. Series: TOTAL. ESTCUUS.A Bureau of Economic Analysis, US Dept. of Commerce, August 2020. Shading indicates overestimation (blue) or underestimation (green).