

Table 8b. Natural gas price, electric power sector, actual versus projected

Projected price in nominal dollars

(nominal dollars per million British thermal units)

	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	2.49	2.60	2.76	2.93	3.05	3.24	3.39	3.60	3.86	4.15	4.40	4.70	5.08	5.39	5.65	6.27	6.59	7.01												
AEO1995		2.44	2.61	2.81	2.70	2.78	2.95	3.11	3.44	3.72	4.10	4.43	4.78	5.07	5.33	5.64	5.95	6.23												
AEO1996			2.08	2.19	2.20	2.39	2.47	2.54	2.64	2.74	2.84	2.95	3.09	3.21	3.37	3.54	3.76	3.96	4.26	4.57	4.87	5.27	5.70							
AEO1997				2.48	2.29	2.34	2.41	2.47	2.54	2.65	2.77	2.89	3.00	3.10	3.24	3.37	3.51	3.60	3.76	3.92	4.07	4.32	4.55							
AEO1998					2.72	2.54	2.60	2.72	2.85	2.95	3.03	3.16	3.29	3.45	3.62	3.79	3.96	4.13	4.33	4.50	4.69	4.90	5.11	5.33	5.58	5.85	6.13	6.48		
AEO1999						2.45	2.68	2.76	2.87	3.02	3.15	3.29	3.45	3.60	3.72	3.84	3.96	4.10	4.25	4.39	4.55	4.74	4.94	5.18	5.40	5.64	5.90	6.17		
AEO2000							2.67	2.71	2.79	2.88	3.02	3.16	3.34	3.50	3.64	3.77	3.89	4.01	4.13	4.25	4.38	4.53	4.68	4.85	5.02	5.23	5.49			
AEO2001							3.99	3.96	3.48	3.25	3.20	3.27	3.38	3.45	3.57	3.67	3.78	3.89	4.00	4.14	4.30	4.47	4.67	4.90	5.14	5.43	5.77			
AEO2002								4.49	2.70	3.13	3.44	3.61	3.74	3.88	4.04	4.18	4.32	4.53	4.74	4.94	5.13	5.33	5.52	5.75	6.01	6.28	6.60			
AEO2003									3.12	3.56	3.51	3.57	3.60	3.76	4.02	4.26	4.55	4.76	5.00	5.21	5.43	5.62	5.84	5.98	6.14	6.34	6.71	6.91		
AEO2004										5.71	4.64	4.39	4.39	4.53	4.74	4.71	4.75	5.06	5.41	5.80	6.11	6.50	6.75	6.97	7.17	7.36	7.78	8.30		
AEO2005											6.11	6.17	5.58	5.21	4.95	4.93	4.91	5.07	5.33	5.61	5.95	6.23	6.33	6.52	6.88	7.31	7.67	8.04		
AEO2006												8.29	7.58	6.96	6.76	6.40	6.18	6.10	6.23	6.53	6.60	6.51	6.65	6.88	7.30	7.70	7.90	8.30		
AEO2007													7.18	7.50	7.58	7.13	6.91	6.60	6.56	6.44	6.60	6.66	6.90	7.27	7.31	7.38	7.64	7.74		
AEO2008														7.08	7.56	7.86	7.52	7.31	7.26	7.11	7.02	7.00	7.07	7.27	7.48	7.71	7.76	7.73		
AEO2009															9.07	4.70	5.32	5.73	5.87	5.99	6.28	6.66	7.03	7.41	7.84	8.34	8.92	9.45		
AEO2010																4.20	4.99	6.07	6.53	6.40	6.47	6.77	6.99	7.13	7.32	7.53	7.85	8.13		
AEO2011																	5.12	4.82	4.81	4.87	4.92	5.10	5.25	5.40	5.57	5.76	6.05	6.34		
AEO2012																		4.76	4.51	4.61	4.65	4.90	4.92	5.00	5.13	5.33	5.55	5.89		
AEO2013																			3.38	3.85	3.94	4.09	4.64	4.89	5.25	5.47	5.65	5.87		
AEO2014																					3.38	4.39	4.62	4.65	4.77	5.07	5.56	5.77	6.03	
AEO2015																						5.33	4.82	5.05	5.20	5.56	6.31	7.10	7.71	
AEO2016																							3.39	3.67	4.21	4.55	4.93	5.39	5.50	
AEO2017																								3.06	3.66	4.02	4.51	5.00	5.15	
AEO2018																									3.53	3.72	4.17	4.54	4.59	
AEO2019																										3.34	3.28	3.50	3.54	
AEO2020																											2.86	2.72	2.96	
AEO2021																												2.45	3.59	
AEO2022																													5.15	
Actual in nominal dollars	2.54	2.22	1.97	2.62	2.71	2.32	2.55	4.27	4.48	3.59	5.41	5.96	8.24	6.92	7.12	9.02	4.81	5.15	4.78	3.45	4.37	5.03	3.27	2.88	3.39	3.55	2.88	2.40	4.98	
Average absolute difference	0.04	0.30	0.52	0.22	0.26	0.30	0.24	1.29	1.22	0.60	1.94	2.20	4.01	2.58	2.44	3.87	1.07	1.00	0.77	1.62	0.93	0.77	2.14	2.63	2.27	2.28	3.08	3.70	1.89	

Table 8b. Natural gas price, electric power sector, actual versus projected (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	-1.7	17.2	40.3	11.7	12.6	39.4	33.1	-15.7	-13.8	15.5	-18.6	-21.0	-38.3	-22.0	-17.9	-30.5	37.0	36.0												
AEO1995		10.3	32.7	-0.3	-0.1	19.5	15.7	-27.2	-23.2	3.7	-24.3	-25.6	-42.0	-26.6	-25.1	-37.4	23.6	20.9												
AEO1996			6.0	-16.3	-18.8	3.0	-3.3	-40.5	-41.1	-23.7	-47.6	-50.4	-62.5	-53.7	-52.6	-60.8	-21.9	-23.1	-11.0	32.4	11.5	4.8	74.4							
AEO1997				-5.4	-15.6	0.7	-5.5	-42.0	-43.3	-26.2	-48.8	-51.5	-63.6	-55.1	-54.5	-62.6	-27.1	-30.1	-21.5	13.5	-6.7	-14.2	39.4							
AEO1998					0.6	9.4	2.1	-36.2	-36.4	-17.8	-44.0	-46.9	-60.1	-50.2	-49.2	-58.0	-17.6	-19.8	-9.5	30.4	7.5	-2.6	56.5	85.0	64.3	64.9	113.1	170.2		
AEO1999						5.3	5.2	-35.4	-35.9	-16.0	-41.8	-44.7	-58.1	-48.0	-47.7	-57.4	-17.7	-20.3	-11.1	27.2	4.1	-5.7	51.4	79.6	59.1	59.2	104.9	157.3		
AEO2000							-1.3	-37.5	-39.6	-22.3	-46.8	-49.4	-61.6	-51.7	-50.9	-59.6	-21.7	-24.6	-16.3	19.6	-2.7	-12.8	38.6	62.5	42.8	41.6	81.8	129.0		
AEO2001								-6.5	-11.6	-3.0	-39.9	-46.3	-60.3	-51.2	-51.5	-60.5	-23.7	-26.7	-18.8	15.9	-5.2	-14.5	36.8	61.9	44.2	45.1	88.6	140.8		
AEO2002								0.2	-24.8	-42.2	-42.3	-56.2	-45.9	-45.5	-55.2	-13.2	-16.0	-5.2	37.4	13.0	1.9	63.2	91.5	69.4	69.6	118.4	175.6			
AEO2003									-13.2	-34.2	-41.0	-56.7	-47.9	-47.1	-55.4	-11.5	-11.7	-0.6	44.8	19.2	8.1	72.0	102.4	75.3	73.2	120.3	179.8	38.8		
AEO2004										5.4	-22.2	-46.8	-36.5	-36.4	-47.5	-2.0	-7.7	5.8	56.8	32.8	21.6	98.9	133.9	105.4	102.1	155.7	224.4	66.8		
AEO2005										2.6	-25.2	-19.3	-26.7	-45.1	2.5	-4.7	6.0	54.2	28.4	18.2	90.6	119.4	92.0	94.1	153.9	220.2	61.5			
AEO2006											0.7	9.5	-2.2	-25.0	33.1	20.0	27.5	80.4	49.5	31.2	99.3	130.5	102.8	105.8	167.7	229.7	66.8			
AEO2007												3.9	5.3	-15.9	48.2	34.2	37.8	89.9	47.5	31.3	104.1	139.3	114.1	106.3	156.5	218.8	55.5			
AEO2008														-0.5	-16.1	63.5	46.1	52.9	110.1	62.7	39.5	114.4	145.2	114.1	110.9	168.1	223.6	55.3		
AEO2009															0.6	-2.2	3.3	19.7	69.9	37.3	24.9	103.8	143.8	118.4	121.1	190.0	272.4	89.8		
AEO2010																	-12.7	-3.1	27.0	89.1	46.5	28.6	107.4	142.4	110.1	106.4	161.7	227.4	63.4	
AEO2011																		0.8	39.1	11.6	-2.2	56.1	81.9	59.1	57.2	100.3	152.4	27.4		
AEO2012																			-0.5	30.4	5.6	-7.6	50.1	70.7	47.2	44.6	85.2	131.5	18.3	
AEO2013																				-2.1	-11.9	-21.6	25.4	60.8	44.0	48.1	90.1	135.6	18.0	
AEO2014																				0.4	-8.2	42.3	65.4	49.4	56.7	100.6	139.8	21.3		
AEO2015																					6.0	47.5	75.0	53.3	56.7	119.2	196.3	54.9		
AEO2016																						3.7	27.4	23.9	28.3	71.4	124.9	10.6		
AEO2017																								6.1	7.8	13.4	56.6	108.7	3.6	
AEO2018																									3.9	4.8	45.1	89.5	-7.8	
AEO2019																										-5.8	14.0	46.1	-28.9	
AEO2020																											-0.7	13.3	-40.6	
AEO2021																												2.1	-27.9	
AEO2022																													3.5	
Average absolute percentage difference	1.7	13.8	26.3	8.4	9.5	12.9	9.4	30.1	27.2	16.6	35.8	37.0	48.6	37.3	34.2	43.0	22.3	19.4	16.0	46.8	21.3	15.3	65.5	91.2	66.7	64.4	107.1	154.6	38.0	

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_NGEIUS.A; projections: Annual Energy Outlook, Reference case projections from various editions
GDP data from the U.S. Bureau of Economic Analysis (accessed February 2022), <https://apps.bea.gov/national/xls/gdplex.xlsx>

Notes: shading indicates overestimation (blue) or underestimation (green).

Projected prices are calculated from real values.