

Table 13.Natural Gas Wellhead Prices, Actual vs. Forecasts

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
(dollars per thousand cubic feet)																		
AEO82	4.27	5.22	6.15	6.69	6.94	7.20												
AEO83	2.96	3.05	3.32	3.68	4.17	4.69												
AEO84	2.84	2.89	3.13	3.46	3.87	4.39												
AEO85	2.60	2.58	2.59	2.60	2.80	3.15	3.55	3.98	4.40	4.86	5.37							
AEO86		1.73	1.96	2.28	2.53	2.79	3.10	3.57	4.05	4.55	5.12	5.68	6.21	6.67	7.21	7.82		
AEO87			1.83	1.95	2.10	2.28	2.46	2.65	2.92	3.22	3.60							5.54
AEO89				1.62	1.70	1.89	2.08	2.45	2.81	3.12	3.42	4.01	4.27	4.57	4.91	5.21		
AEO90					1.78	1.88					2.65							4.15
AEO91						1.77	1.91	2.10	2.27	2.35	2.40	2.45	2.53	2.62	2.89	3.22	3.64	3.86
AEO92							1.69	1.85	2.02	2.12	2.29	2.40	2.58	2.77	3.05	3.36	3.68	3.72
AEO93								1.84	1.91	2.05	2.23	2.33	2.44	2.61	2.80	3.05	3.32	3.36
AEO94									1.99	2.12	2.25	2.38	2.54	2.64	2.72	2.82	2.94	3.08
AEO95										1.89	1.98	1.92	2.03	2.08	2.29	2.43	2.72	2.91
AEO96											1.63	1.74	1.85	1.96	2.04	2.10	2.18	2.23
AEO97												2.02	1.81	1.86	1.93	1.98	2.05	2.09
AEO98													2.29	2.17	2.21	2.26	2.32	2.99
AEO99														1.98	2.15	2.20	2.32	2.39
AEO2000															2.15	2.25	2.30	2.33
AEO2001																3.39	3.49	2.96
AEO2002																4.03	2.05	
AEO2003																	2.79	
Actual	2.51	1.94	1.67	1.69	1.69	1.71	1.64	1.74	2.04	1.85	1.55	2.17	2.32	1.96	2.19	3.69	4.0	3.0

Average																		
Absolute																		
Error																		
(Across																		
AEOS)	0.66	1.24	1.49	1.51	1.55	1.63	0.82	0.89	0.81	1.07	2.25	0.79	0.80	0.96	0.92	1.32	1.11	0.47

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
(percent error)																		
AEO82	70.0	169.2	268.5	295.6	310.6	320.9												
AEO83	17.9	57.0	99.0	117.6	146.5	174.4												
AEO84	13.1	49.0	87.6	104.8	128.9	157.0												
AEO85	3.6	32.8	55.1	54.0	65.8	84.0	116.6	128.5	115.8	162.7	246.1							
AEO86		-10.8	17.1	34.9	49.8	63.3	88.7	105.3	98.3	146.0	230.2	161.9	167.8	240.5	229.4	111.9		
AEO87			9.6	15.6	24.5	33.1	50.1	52.4	43.2	73.9	132.5						50.1	
AEO89				-4.1	0.7	10.4	26.8	40.8	37.9	68.8	120.8	85.0	84.0	133.0	124.1	41.2		
AEO90					5.3	10.0					71.0						12.4	
AEO91						3.5	16.3	20.8	11.3	27.1	55.1	12.9	9.2	33.9	32.0	-12.6	-9.4	31.0
AEO92							3.0	6.1	-0.9	14.5	47.8	10.8	11.2	41.2	39.2	-8.9	-8.5	26.1
AEO93								6.0	-6.4	10.5	44.0	7.4	5.4	33.3	28.0	-17.3	-17.4	13.9
AEO94									-2.6	14.6	45.4	9.9	9.6	34.7	24.4	-23.7	-26.8	4.4
AEO95										2.1	27.8	-11.3	-12.6	6.4	4.7	-34.1	-32.3	-1.2
AEO96											5.5	-19.8	-20.4	-0.2	-6.9	-43.0	-45.8	-24.4
AEO97												-7.0	-22.1	-5.0	-11.8	-46.3	-48.9	-29.1
AEO98													-1.1	10.6	0.9	-38.9	-42.3	1.5
AEO99														1.2	-2.0	-40.3	-42.3	-18.8
AEO2000															-1.8	-39.1	-42.8	-20.9
AEO2001																-8.2	-13.3	0.4
AEO2002																0.3	-30.4	
AEO2003																	-5.6	

Average																		
Absolute																		
Error																		
(Across																		
AEOS)	26.1	63.8	89.5	89.5	91.5	95.2	50.2	51.4	39.6	57.8	145.2	36.2	34.3	49.1	42.1	35.8	27.5	16.0

Table 13.Natural Gas Wellhead Prices, Actual vs. Forecasts

	Absolute Forecasting Errors as Compared to Actual Historical Figures														Average Absolute Error (Across Years)					
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002		
AEO82	1.76	3.28	4.48	5.00	5.25	5.49												4.21		
AEO83	0.45	1.11	1.65	1.99	2.48	2.98												2.63		
AEO84	0.33	0.95	1.46	1.77	2.18	2.68												2.14		
AEO85	0.09	0.64	0.92	0.91	1.11	1.44	1.91	2.24	2.36	3.01	3.82							1.68		
AEO86		0.21	0.29	0.59	0.84	1.08	1.46	1.83	2.01	2.70	3.57	3.51	3.89	4.71	5.02	4.13		2.39		
AEO87			0.16	0.26	0.41	0.57	0.82	0.91	0.88	1.37	2.05							0.83		
AEO89				0.07	0.01	0.18	0.44	0.71	0.77	1.27	1.87	1.84	1.95	2.61	2.72	1.52		1.23		
AEO90					0.09	0.17					1.10							0.45		
AEO91						0.06	0.27	0.36	0.23	0.50	0.85	0.28	0.21	0.66	0.70	0.47	0.38	0.91	0.45	
AEO92							0.05	0.11	0.02	0.27	0.74	0.23	0.26	0.81	0.86	0.33	0.34	0.77	0.40	
AEO93								0.10	0.13	0.20	0.68	0.16	0.12	0.65	0.61	0.64	0.70	0.41	0.40	
AEO94									0.05	0.27	0.70	0.21	0.22	0.68	0.53	0.87	1.08	0.13	0.48	
AEO95										0.04	0.43	0.25	0.29	0.12	0.10	1.26	1.30	0.04	0.43	
AEO96										0.08	0.43	0.47	0.00	0.15	1.59	1.84	0.72	0.66		
AEO97											0.15	0.51	0.10	0.26	1.71	1.97	0.86	0.79		
AEO98												0.03	0.21	0.02	1.43	1.70	0.04	0.57		
AEO99													0.02	0.04	1.49	1.70	0.56	0.76		
AEO200																0.04	1.44	1.72	0.62	0.95
AEO200																0.30	0.53	0.01	0.28	
AEO200																0.01	0.90	0.45		
AEO200																0.16	0.16			
Actual																				
Average Absolute Error (Across AEOs)																		1.14		
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	Average Absolute Percent	
	(absolute percent error)																			
AEO82	70.0	169.2	268.5	295.6	310.6	320.9												239.1		
AEO83	17.9	57.0	99.0	117.6	146.5	174.4												158.9		
AEO84	13.1	49.0	87.6	104.8	128.9	157.0												128.8		
AEO85	3.6	32.8	55.1	54.0	65.8	84.0	116.6	128.5	115.8	162.7	246.1							96.8		
AEO86		10.8	17.1	34.9	49.8	63.3	88.7	105.3	98.3	146.0	230.2	161.9	167.8	240.5	229.4	111.9		117.1		
AEO87			9.6	15.6	24.5	33.1	50.1	52.4	43.2	73.9	132.5							48.3		
AEO89				4.1	0.7	10.4	26.8	40.8	37.9	68.8	120.8	85.0	84.0	133.0	124.1	41.2		59.8		
AEO90					5.3	10.0					71.0							28.8		
AEO91						3.5	16.3	20.8	11.3	27.1	55.1	12.9	9.2	33.9	32.0	12.6	9.4	31.0	21.2	
AEO92							3.0	6.1	0.9	14.5	47.8	10.8	11.2	41.2	39.2	8.9	8.5	26.1	18.2	
AEO93								6.0	6.4	10.5	44.0	7.4	5.4	33.3	28.0	17.3	17.4	13.9	17.2	
AEO94									2.6	14.6	45.4	9.9	9.6	34.7	24.4	23.7	26.8	4.4	19.6	
AEO95										2.1	27.8	11.3	12.6	6.4	4.7	34.1	32.3	1.2	14.7	
AEO96											5.5	19.8	20.4	0.2	6.9	43.0	45.8	24.4	20.7	
AEO97												7.0	22.1	5.0	11.8	46.3	48.9	29.1	24.3	
AEO98													1.1	10.6	0.9	38.9	42.3	1.5	15.9	
AEO99														1.2	2.0	40.3	42.3	18.8	20.9	
AEO200															1.8	39.1	42.8	20.9	26.1	
AEO200																8.2	13.3	0.4	7.3	
AEO200																0.3	30.4	15.3		
AEO200																5.6	5.6			
Average Absolute Percent Error (Across AEOs)																		57.3		