

Table 18. Total Energy Consumption, Low Economic Growth Case: AEO Forecasts, Actual Values, and Absolute and Percent Errors, 1985-1997

Publication	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	Average Absolute Error	
(Quadrillion Btu)															
AEO84	75.3	76.4	77.9	78.8	79.6	83.5									1.4
AEO86		74.2	75.3	76.0	76.3	80.2									3.6
AEO87			76.2	76.6	77.8	81.6	82.2	83.1	84.0	85.1	85.8				3.1
AEO90					84.0	84.2									1.3
AEO92							84.5	86.6	87.5	88.7	90.0	90.7	91.5		1.3
AEO93								87.0	87.5	89.2	90.5	91.3	92.3		1.1
AEO94									87.8	89.0	89.9	90.6	91.4		1.6
AEO95										89.2	89.4	89.8	90.9		2.3
AEO96											90.3	90.5	91.4		2.3
AEO97												92.6	93.5		1.0
AEO98													94.7		0.5
Actual Value	74.0	74.3	76.9	80.2	81.4	84.1	84.0	85.6	87.4	89.3	90.9	93.9	94.2		
Average Absolute Error	1.3	1.1	1.1	3.1	3.3	1.8	1.2	1.6	1.0	1.1	2.1	3.0	2.1		2.0
(Percent Error)															
AEO84	1.8	2.8	1.2	-1.8	-2.3	-0.7									1.8
AEO86		-0.1	-2.1	-5.2	-6.2	-4.7									4.3
AEO87			-0.9	-4.5	-4.4	-3.0	-2.2	-2.9	-3.9	-4.7	-5.7				3.6
AEO90					3.2	0.1									1.5
AEO92							0.6	1.2	0.1	-0.7	-1.1	-3.4	-2.9		1.4
AEO93								1.6	0.1	-0.1	-0.4	-2.8	-2.0		1.2
AEO94									0.5	-0.3	-1.1	-3.5	-3.0		1.7
AEO95										-0.1	-1.7	-4.4	-3.5		2.4
AEO96											-0.7	-3.7	-3.0		2.4
AEO97												-1.4	-0.7		1.0
AEO98													0.5		0.5
Average Absolute Percent Error	1.8	1.5	1.4	3.8	4.0	2.1	1.4	1.9	1.1	1.2	2.3	3.2	2.2		2.3

AEO = Annual Energy Outlook.

Btu = British thermal unit.

Note: Includes nonelectric renewables.

Sources: **Actual Values:** Energy Information Administration (EIA), *Annual Energy Review 1997*, DOE/EIA-0384(97) (Washington, DC, July 1998).

Projections: EIA, *Annual Energy Outlook*, DOE/EIA-0383(84-98) (Washington, DC, January 1985 - December 1997).

Table 19. Total Coal Consumption, Low Economic Growth Case: AEO Forecasts, Actual Values, and Absolute and Percent Errors, 1985-1997

Publication	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	Average Absolute Error
(Million Short Tons)														
AEO84	843	847	859	869	890	922					1,060			33
AEO86		813	830	856	865	882					1,010			22
AEO87			837	838	851	873	887	902	921	943	962			16
AEO90					880	888					974			10
AEO92							905	932	915	921	931	941	948	39
AEO93								927	926	935	941	949	958	34
AEO94								918	922	925	929	932		53
AEO95									936	937	936	940		50
AEO96									937	938	947			58
AEO97										948	969			58
AEO98											1,008			19
Actual Value	818	804	837	884	890	896	888	908	944	952	962	1,006	1,027	
Average Absolute Error	25	26	10	30	19	18	9	16	24	21	33	66	70	34
(Percent Error)														
AEO84	3.1	5.3	2.6	-1.7	0.0	2.9					10.2			3.7
AEO86		1.1	-0.8	-3.2	-2.8	-1.6					5.0			2.4
AEO87			0.0	-5.2	-4.4	-2.6	-0.1	-0.7	-2.4	-0.9	0.0			1.8
AEO90					-1.1	-0.9					1.2			1.1
AEO92							1.9	2.6	-3.1	-3.3	-3.2	-6.5	-7.7	4.0
AEO93								2.1	-1.9	-1.8	-2.2	-5.7	-6.7	3.4
AEO94									-2.8	-3.2	-3.8	-7.7	-9.3	5.3
AEO95										-1.7	-2.6	-7.0	-8.5	4.9
AEO96											-2.6	-6.8	-7.8	5.7
AEO97												-5.8	-5.6	5.7
AEO98													-1.9	1.9
Average Absolute Percent Error	3.1	3.2	1.2	3.4	2.1	2.0	1.0	1.8	2.5	2.2	3.4	6.5	6.8	3.5

AEO = Annual Energy Outlook.

Sources: **Actual Values:** Energy Information Administration (EIA), *Annual Energy Review 1997*, DOE/EIA-0384(97) (Washington, DC, July 1998). **Projections:** EIA, *Annual Energy Outlook*, DOE/EIA-0383(84-98) (Washington, DC, January 1985 - December 1997).

Table 20. Total Electricity Sales, Low Economic Growth Case: AEO Forecasts, Actual Values, and Absolute and Percent Errors, 1985-1997

Publication	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	Average Absolute Error
(Billion Kilowatthours)														
AEO84	2,321	2,374	2,440	2,493	2,548	2,627					3,015			42
AEO86		2,360	2,409	2,470	2,520	2,590					3,004			71
AEO87			2,460	2,494	2,545	2,602	2,653	2,711	2,781	2,858	2,928			78
AEO90					2,607	2,653					3,012			34
AEO92						2,736	2,823	2,838	2,891	2,951	3,002	3,052		54
AEO93							2,803	2,824	2,877	2,920	2,958	3,002		81
AEO94								2,837	2,874	2,903	2,928	2,961		105
AEO95									2,951	2,945	2,958	2,993		88
AEO96										2,964	2,970	3,002		98
AEO97											3,075	3,115		14
AEO98												3,106		14
Actual Value	2,324	2,369	2,457	2,578	2,647	2,713	2,762	2,763	2,861	2,935	3,013	3,098	3,120	
Average Absolute Error	3	7	23	92	92	95	68	51	41	51	53	116	87	68
(Percent Error)														
AEO84	-0.1	0.2	-0.7	-3.3	-3.7	-3.2					0.1			1.6
AEO86		-0.4	-2.0	-4.2	-4.8	-4.5					-0.3			2.7
AEO87			0.1	-3.3	-3.9	-4.1	-3.9	-1.9	-2.8	-2.6	-2.8			2.8
AEO90					-1.5	-2.2					0.0			1.3
AEO92							-0.9	2.2	-0.8	-1.5	-2.1	-3.1	-2.2	1.8
AEO93								1.4	-1.3	-2.0	-3.1	-4.5	-3.8	2.7
AEO94									-0.8	-2.1	-3.7	-5.5	-5.1	3.4
AEO95										0.5	-2.3	-4.5	-4.1	2.8
AEO96											-1.6	-4.1	-3.8	3.2
AEO97												-0.7	-0.2	0.5
AEO98													-0.4	0.4
Average Absolute Percent Error	0.1	0.3	0.9	3.6	3.5	3.5	2.4	1.8	1.4	1.7	1.8	3.7	2.8	2.4

AEO = Annual Energy Outlook.

Sources: **Actual Values:** Energy Information Administration (EIA), *Annual Energy Review 1997*, DOE/EIA-0384(97) (Washington, DC, July 1998). **Projections:** EIA, *Annual Energy Outlook*, DOE/EIA-0383(84-98) (Washington, DC, January 1985 - December 1997).

Table 21. Gross Domestic Product, Low Economic Growth Case: AEO Forecasts, Actual Values, and Absolute and Percent Errors, 1985-1997

Publication	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	Average Absolute Error	
(Nominal Billion Dollars)															
AEO84	3,863	4,147	4,574	5,034	5,522	6,062					9,982				549
AEO86		4,196	4,422	4,734	5,002	5,356					7,808				363
AEO87			4,483	4,716	5,076	5,446	5,846	6,283	6,789	7,347	7,924				289
AEO90					5,216	5,472					8,212				480
AEO92						5,569	5,830	6,285	6,636	7,015	7,567	8,129			245
AEO93							5,941	6,204	6,605	6,974	7,408	7,946			275
AEO94								6,273	6,678	7,096	7,554	8,042			169
AEO95									6,755	7,096	7,526	8,065			122
AEO96										7,064	7,398	7,883			212
AEO97											7,583	7,919			107
AEO98												8,064			16
Actual Value	4,181	4,422	4,692	5,050	5,439	5,744	5,917	6,244	6,558	6,947	7,265	7,636	8,080		
Average Absolute Error	318	251	199	222	276	319	209	252	286	303	661	130	87	295	
(Percent Error)															
AEO84	-7.6	-6.2	-2.5	-0.3	1.5	5.5					37.4				8.7
AEO86		-5.1	-5.8	-6.3	-8.0	-6.8					7.5				6.6
AEO87			-4.5	-6.6	-6.7	-5.2	-1.2	0.6	3.5	5.8	9.1				4.8
AEO90					-4.1	-4.7					13.0				7.3
AEO92							-5.9	-6.6	-4.2	-4.5	-3.4	-0.9	0.6		3.7
AEO93								-4.9	-5.4	-4.9	-4.0	-3.0	-1.7		4.0
AEO94									-4.3	-3.9	-2.3	-1.1	-0.5		2.4
AEO95										-2.8	-2.3	-1.4	-0.2		1.7
AEO96											-2.8	-3.1	-2.4		2.8
AEO97												-0.7	-2.0		1.3
AEO98													-0.2		0.2
Average Absolute Percent Error	7.6	5.7	4.2	4.4	5.1	5.6	3.5	4.0	4.4	4.4	9.1	1.7	1.1	4.6	

AEO = Annual Energy Outlook.

Sources: **Actual Values:** 1985-1996—Council of Economic Advisors, *Economic Report of the President* (Washington, DC, February 1998). 1997—U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business* (Washington, DC, April 1998). **Projections:** EIA, *Annual Energy Outlook*, DOE/EIA-0383(84-98) (Washington, DC, January 1985 - December 1997).

Table 22. Total Energy Consumption, High Economic Growth Case: AEO Forecasts, Actual Values, and Absolute and Percent Errors, 1985-1997

Publication	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	Average Absolute Error
(Quadrillion Btu)														
AEO84	76.0	77.2	79.6	81.9	83.8	88.9					98.3			3.4
AEO86		74.3	77.2	78.3	79.0	83.2					88.2			1.4
AEO87			76.2	77.7	79.9	84.5	86.0	87.4	88.6	89.6	90.6			1.2
AEO89					84.3	86.4					93.7			2.7
AEO91						84.4	85.4	87.3	88.8	90.4	92.0	93.6	95.2	1.0
AEO92							84.7	87.1	88.2	89.5	91.1	92.6	93.9	0.7
AEO93								87.0	88.9	90.6	92.3	93.9	95.5	1.1
AEO94									88.2	90.2	91.7	93.0	94.2	0.7
AEO95										89.2	90.7	91.6	93.1	0.9
AEO96											90.8	92.1	93.8	0.8
AEO97												92.7	93.6	0.9
AEO98													94.7	0.5
Actual Value	74.0	74.3	76.9	80.2	81.4	84.1	84.0	85.6	87.4	89.3	90.9	93.9	94.2	
Average Absolute Error	2.0	1.5	1.3	2.0	2.3	1.7	1.4	1.6	1.1	0.6	1.7	1.1	0.6	1.4
(Percent Error)														
AEO84	2.7	3.9	3.6	2.1	3.0	5.7					8.1			4.2
AEO86		0.0	0.4	-2.4	-3.0	-1.1					-3.0			1.7
AEO87			-0.9	-3.2	-1.9	0.4	2.4	2.1	1.4	0.3	-0.3			1.4
AEO89					3.6	2.7					3.0			3.1
AEO91						0.4	1.7	2.0	1.6	1.2	1.2	-0.3	1.1	1.2
AEO92							0.8	1.8	0.9	0.2	0.2	-1.4	-0.3	0.8
AEO93								1.6	1.7	1.5	1.5	0.0	1.4	1.3
AEO94									0.9	1.0	0.8	-1.0	0.0	0.7
AEO95										-0.1	-0.3	-2.4	-1.2	1.0
AEO96											-0.2	-1.9	-0.4	0.8
AEO97												-1.3	-0.6	1.0
AEO98													0.5	0.5
Average Absolute Percent Error	2.7	2.0	1.6	2.6	2.9	2.1	1.6	1.9	1.3	0.7	1.9	1.2	0.7	1.6

AEO = Annual Energy Outlook.

Btu = British thermal unit.

Note: Includes nonelectric renewables.

Sources: **Actual Values:** Energy Information Administration (EIA), *Annual Energy Review 1997*, DOE/EIA-0384(97) (Washington, DC, July 1998). **Projections:** EIA, *Annual Energy Outlook*, DOE/EIA-0383(84-98) (Washington, DC, January 1985 - December 1997).

Table 23. Total Coal Consumption, High Economic Growth Case: AEO Forecasts, Actual Values, and Absolute and Percent Errors, 1985-1997

Publication	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	Average Absolute Error	
(Million Short Tons)															
AEO84	843	853	878	907	944	986								1,148	67
AEO86		813	833	856	875	896								1,031	21
AEO87			837	839	854	882	903	920	939	959	983				17
AEO90					886	900								988	11
AEO91						893	901	919	934	945	950	964	974		19
AEO92							905	933	920	926	936	949	958		35
AEO93								927	931	940	948	959	969		27
AEO94									921	933	941	949	954		39
AEO95										936	944	947	955		41
AEO96											940	947	964		48
AEO97												948	971		57
AEO98													1,009		18
Actual Value	818	804	837	884	890	896	888	908	944	952	962	1,006	1,027		
Average Absolute Error	25	29	15	32	27	22	15	17	15	15	42	54	58	32	
(Percent Error)															
AEO84	3.1	6.1	4.9	2.6	6.1	10.0								19.3	7.4
AEO86		1.1	-0.5	-3.2	-1.7	0.0								7.2	2.3
AEO87			0.0	-5.1	-4.0	-1.6	1.7	1.3	-0.5	0.7	2.2				1.9
AEO90					-0.4	0.4								2.7	1.2
AEO91						-0.3	1.5	1.2	-1.1	-0.7	-1.2	-4.2	-5.2		1.9
AEO92							1.9	2.8	-2.5	-2.7	-2.7	-5.7	-6.7		3.6
AEO93								2.1	-1.4	-1.3	-1.5	-4.7	-5.6		2.8
AEO94									-2.4	-2.0	-2.2	-5.7	-7.1		3.9
AEO95										-1.7	-1.9	-5.9	-7.0		4.1
AEO96											-2.3	-5.9	-6.1		4.8
AEO97												-5.8	-5.5		5.6
AEO98													-1.8		1.8
Average Absolute Percent Error	3.1	3.6	1.8	3.6	3.1	2.5	1.7	1.8	1.6	1.5	4.3	5.4	5.6	3.4	

AEO = Annual Energy Outlook.

Sources: **Actual Values:** Energy Information Administration (EIA), *Annual Energy Review 1997*, DOE/EIA-0384(97) (Washington, DC, July 1998). **Projections:** EIA, *Annual Energy Outlook*, DOE/EIA-0383(84-98) (Washington, DC, January 1985 - December 1997).

Table 24. Total Electricity Sales, High Economic Growth Case: AEO Forecasts, Actual Values, and Absolute and Percent Errors, 1985-1997

Publication	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	Average Absolute Error	
(Billion Kilowatthours)															
AEO84	2,321	2,387	2,497	2,608	2,717	2,838					3,376				93
AEO86		2,364	2,424	2,490	2,550	2,634					3,095				64
AEO87			2,460	2,496	2,568	2,647	2,720	2,790	2,867	2,942	3,022				36
AEO90					2,616	2,725					3,156				62
AEO91						2,700	2,764	2,833	2,903	2,971	3,041	3,112	3,183		34
AEO92							2,745	2,841	2,867	2,925	2,996	3,064	3,131		25
AEO93								2,803	2,855	2,918	2,983	3,046	3,111		26
AEO94									2,848	2,910	2,958	3,001	3,051		52
AEO95										2,951	2,988	3,017	3,069		43
AEO96											2,978	3,025	3,078		50
AEO97												3,075	3,115		14
AEO98													3,106		14
Actual Value	2,324	2,369	2,457	2,578	2,647	2,713	2,762	2,763	2,861	2,935	3,013	3,098	3,120		
Average Absolute Error	3	12	25	67	69	59	20	54	15	19	79	53	33	45	
(Percent Error)															
AEO84	-0.1	0.8	1.6	1.2	2.6	4.6					12.0				3.3
AEO86		-0.2	-1.3	-3.4	-3.7	-2.9					2.7				2.4
AEO87			0.1	-3.2	-3.0	-2.4	-1.5	1.0	0.2	0.2	0.3				1.3
AEO90					-1.2	0.4					4.7				2.1
AEO91						-0.5	0.1	2.5	1.5	1.2	0.9	0.5	2.0		1.1
AEO92							-0.6	2.8	0.2	-0.3	-0.6	-1.1	0.4		0.9
AEO93								1.4	-0.2	-0.6	-1.0	-1.7	-0.3		0.9
AEO94									-0.5	-0.9	-1.8	-3.1	-2.2		1.7
AEO95										0.5	-0.8	-2.6	-1.6		1.4
AEO96											-1.2	-2.4	-1.3		1.6
AEO97												-0.7	-0.2		0.5
AEO98													-0.4		0.4
Average Absolute Percent Error	0.1	0.5	1.0	2.6	2.6	2.2	0.7	1.9	0.5	0.6	2.6	1.7	1.1	1.6	

AEO = Annual Energy Outlook.

Sources: **Actual Values:** Energy Information Administration (EIA), *Annual Energy Review 1997*, DOE/EIA-0384(97) (Washington, DC, July 1998). **Projections:** EIA, *Annual Energy Outlook*, DOE/EIA-0383(84-98) (Washington, DC, January 1985 - December 1997).

Table 25. Gross Domestic Product, High Economic Growth Case: AEO Forecasts, Actual Values, and Absolute and Percent Errors, 1985-1997

Publication	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	Average Absolute Error
(Nominal Billion Dollars)														
AEO84	3,932	4,225	4,643	5,110	5,577	6,068					8,957			387
AEO86		4,209	4,448	4,745	5,020	5,380					7,934			369
AEO87			4,483	4,702	5,011	5,373	5,767	6,185	6,649	7,127	7,665			248
AEO90					5,257	5,630					7,492			174
AEO91						5,457	5,832	6,296	6,774	7,270	7,796	8,343	8,912	379
AEO92							5,670	6,068	6,459	6,859	7,293	7,734	8,158	116
AEO93								5,941	6,443	6,855	7,277	7,708	8,137	109
AEO94									6,268	6,637	6,952	7,283	7,636	
AEO95										6,780	7,141	7,469	7,861	
AEO96											7,066	7,399	7,804	237
AEO97												7,608	7,938	85
AEO98													8,061	19
Actual Value	4,181	4,422	4,692	5,050	5,439	5,744	5,917	6,244	6,558	6,947	7,265	7,636	8,080	
Average Absolute Error	249	205	168	238	291	292	160	148	130	171	470	228	234	252
(Percent Error)														
AEO84	-5.9	-4.5	-1.0	1.2	2.5	5.6					23.3			6.3
AEO86		-4.8	-5.2	-6.0	-7.7	-6.3					9.2			6.5
AEO87			-4.5	-6.9	-7.9	-6.5	-2.5	-1.0	1.4	2.6	5.5			4.3
AEO90					-3.3	-2.0					3.1			2.8
AEO91						-5.0	-1.4	0.8	3.3	4.6	7.3	9.3	10.3	5.3
AEO92							-4.2	-2.8	-1.5	-1.3	0.4	1.3	1.0	1.8
AEO93								-4.9	-1.8	-1.3	0.2	0.9	0.7	1.6
AEO94									-4.4	-4.5	-4.3	-4.6	-5.5	4.7
AEO95										-2.4	-1.7	-2.2	-2.7	2.3
AEO96											-2.7	-3.1	-3.4	3.1
AEO97												-0.4	-1.8	1.1
AEO98													-0.2	0.2
Average Absolute Percent Error . . .	5.9	4.6	3.6	4.7	5.4	5.1	2.7	2.4	2.5	2.8	5.8	3.1	3.2	3.9

AEO = Annual Energy Outlook.

Sources: **Actual Values:** 1985-1996—Council of Economic Advisors, *Economic Report of the President* (Washington, DC, February 1998). 1997—U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business* (Washington, DC, April 1998). **Projections:** EIA, *Annual Energy Outlook*, DOE/EIA-0383(84-98) (Washington, DC, January 1985 - December 1997).