

Table 18. Total Delivered Residential Energy Consumption, Projected vs. Actual

Projected (quadrillion Btu)	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	10.3	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.6	10.6										
AEO 1995		11.0	10.8	10.8	10.8	10.8	10.8	10.8	10.7	10.7	10.7	10.7	10.7	10.7	10.7	10.8	10.8	10.9										
AEO 1996			10.4	10.7	10.7	10.8	10.8	10.9	10.9	11.0	11.2	11.2	11.3	11.4	11.5	11.6	11.7	11.8	12.0	12.1	12.2	12.3						
AEO 1997				11.1	10.9	11.1	11.1	11.2	11.2	11.2	11.3	11.4	11.5	11.5	11.6	11.7	11.8	11.9	12.0	12.1	12.2	12.3	12.4					
AEO 1998					10.7	11.1	11.2	11.4	11.5	11.5	11.6	11.7	11.8	11.9	11.9	11.9	12.1	12.2	12.3	12.5	12.6	12.7	12.8	12.9	13.0	13.1		
AEO 1999						10.5	11.1	11.3	11.3	11.4	11.5	11.5	11.6	11.6	11.7	11.8	11.9	12.0	12.1	12.3	12.4	12.5	12.6	12.7	12.8	12.9		
AEO 2000							10.7	10.9	11.0	11.1	11.2	11.3	11.4	11.5	11.6	11.7	11.8	11.9	12.0	12.1	12.2	12.3	12.3	12.5	12.6	12.7		
AEO 2001								10.8	11.2	11.4	11.6	11.8	11.9	12.0	12.1	12.2	12.3	12.4	12.5	12.7	12.8	13.0	13.1	13.2	13.3	13.5	13.6	
AEO 2002									11.3	11.5	11.8	12.0	12.0	12.1	12.1	12.3	12.3	12.4	12.5	12.6	12.7	12.8	12.9	13.1	13.1	13.2	13.4	
AEO 2003										11.1	11.6	11.8	11.9	12.0	12.2	12.3	12.4	12.5	12.6	12.7	12.7	12.8	12.9	13.1	13.1	13.2	13.4	
AEO 2004											11.5	11.8	11.9	12.0	12.2	12.3	12.4	12.6	12.7	12.8	12.9	13.0	13.1	13.2	13.3	13.4	13.5	
AEO 2005												11.5	11.7	11.8	12.0	12.3	12.5	12.7	12.8	13.0	13.1	13.2	13.3	13.4	13.5	13.6	13.7	
AEO 2006													11.7	11.7	11.8	12.0	12.1	12.2	12.4	12.5	12.6	12.7	12.8	13.0	13.0	13.1	13.2	
AEO 2007														11.3	11.8	12.0	12.1	12.2	12.3	12.5	12.6	12.7	12.7	12.9	12.9	13.0	13.0	13.1
AEO 2008															11.5	11.7	11.7	11.7	11.8	11.9	11.8	11.9	11.9	12.1	12.1	12.2	12.2	12.2
AEO 2009																11.6	11.6	11.6	11.4	11.4	11.3	11.4	11.4	11.5	11.5	11.5	11.6	
AEO 2010																	11.2	11.3	11.1	11.1	11.1	11.0	11.1	11.1	11.2	11.2	11.3	
AEO 2011																		11.4	11.1	11.1	11.0	11.0	11.0	11.1	11.1	11.1	11.1	
AEO 2012																			11.6	11.6	11.3	11.3	11.2	11.2	11.3	11.3	11.3	
AEO 2013																				10.7	11.2	11.0	11.0	11.0	11.0	10.9	11.0	
AEO 2014																					11.3	11.0	10.8	10.8	10.8	10.8	10.8	
AEO 2015																						11.7	10.9	10.8	10.8	10.7	10.7	
AEO 2016																							10.9	10.9	11.1	11.1	11.0	
AEO 2017																								10.9	11.1	11.1	11.0	
AEO 2018																									11.1	11.1	11.0	
AEO 2019																										11.4	11.3	
AEO 2020																											11.6	
Actual	10.5	10.4	10.5	11.2	10.7	10.3	10.7	11.2	11.0	11.2	11.6	11.4	11.5	10.8	11.4	11.6	11.3	11.5	11.3	10.5	11.6	11.9	11.3	10.7	10.7	12.0	11.9	
Average Absolute Difference	0.2	0.3	0.2	0.4	0.1	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.8	0.5	0.4	0.7	0.6	0.8	1.6	0.7	0.7	1.0	1.3	1.3	1.0	1.0	

Table 18. Total Delivered Residential Energy Consumption, 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	-2.2	-0.6	-1.3	-7.1	-3.0	1.3	-2.6	-7.3	-4.9	7.1	-9.9	-8.3	-9.4	-2.7	-7.4	-9.4	-6.7	-8.0									
AEO 1995		5.2	2.9	3.1	1.0	5.1	0.8	-4.2	-2.2	4.5	7.7	-6.1	-7.4	-0.7	-5.6	-7.5	-4.6	-5.8									
AEO 1996			-0.9	-4.5	-0.1	4.3	0.8	-3.4	-0.9	-2.5	-4.8	-2.2	-3.0	4.8	0.3	-0.8	2.5	1.6	4.2	14.4	4.1	2.4	8.9				
AEO 1997				-0.9	2.3	7.7	3.8	-0.6	1.9	0.1	-2.4	0.1	-0.7	7.1	2.4	1.0	4.2	3.2	5.6	15.9	5.3	3.6	10.0				
AEO 1998					0.1	8.1	4.8	1.2	4.5	2.7	0.2	2.8	1.9	10.1	5.2	3.9	7.3	6.3	8.8	19.5	8.5	6.7	13.2	20.1	20.7	8.8	10.2
AEO 1999						2.6	4.2	0.3	3.5	1.7	-1.1	1.3	0.2	8.0	3.2	1.9	5.2	4.1	6.8	17.3	6.6	5.0	11.4	18.3	18.9	7.2	8.7
AEO 2000							0.3	-2.5	0.5	-1.0	-3.3	-0.6	-1.3	6.6	2.0	0.9	4.3	3.3	5.6	15.6	4.9	3.1	9.4	16.0	16.6	5.1	6.5
AEO 2001								-3.9	1.8	1.5	-0.1	3.1	2.7	11.0	6.4	5.2	8.7	7.9	10.6	21.5	10.6	9.0	16.0	23.4	24.4	12.5	14.4
AEO 2002									2.6	2.7	1.8	4.8	3.9	12.0	7.0	5.5	8.8	7.6	10.1	20.7	9.6	7.8	14.6	21.6	22.4	10.5	12.3
AEO 2003										0.9	0.3	3.6	3.1	11.8	7.2	5.9	9.3	8.3	10.7	21.2	9.9	8.0	14.7	21.7	22.4	10.5	12.2
AEO 2004											-0.6	3.2	2.7	11.5	7.1	6.1	9.8	9.2	11.9	22.5	11.1	9.1	15.8	22.9	23.7	11.7	13.4
AEO 2005												0.5	0.9	9.5	5.9	5.8	10.3	10.0	13.2	24.3	13.0	11.0	17.8	25.0	25.9	13.5	14.9
AEO 2006													1.2	8.9	3.9	3.2	7.0	6.3	9.0	19.6	8.6	6.7	13.6	20.6	21.4	9.4	10.8
AEO 2007														4.7	3.7	3.0	6.7	6.0	8.7	19.3	8.4	6.5	13.0	19.7	20.2	8.2	9.6
AEO 2008															0.9	0.4	3.6	1.2	3.6	13.6	1.9	-0.1	5.9	12.3	12.8	1.5	2.7
AEO 2009																0.2	2.7	0.8	0.5	9.1	-2.1	-4.4	1.0	6.7	7.0	-3.8	-2.7
AEO 2010																	-0.9	-2.2	-2.2	6.2	-4.8	-7.1	-1.8	3.7	4.0	-6.4	-5.2
AEO 2011																		-0.7	-2.2	6.1	-4.8	-7.2	-2.3	3.0	3.1	-7.6	-6.7
AEO 2012																			2.2	11.0	-2.5	-5.2	-0.4	4.7	5.0	-5.7	-4.8
AEO 2013																				2.7	-3.0	-7.3	-2.6	2.1	2.1	-8.7	-7.9
AEO 2014																				-2.9	-7.2	-4.1	0.6	0.8	-9.9	-9.5	
AEO 2015																					-1.4	3.3	0.3	0.3	10.3	10.0	
AEO 2016																						-3.2	1.9	3.4	-7.7	-7.5	
AEO 2017																							1.9	3.4	-7.7	-7.5	
AEO 2018																							3.4	-7.7	-7.5		
AEO 2019																								-4.6	-5.1		
AEO 2020																									-2.9		

Average Absolute
Percent Difference

2.2 2.9 1.7 3.9 1.3 4.8 2.5 2.9 2.5 2.5 2.9 3.1 3.0 7.8 4.6 3.8 6.0 5.1 6.8 15.6 6.5 5.9 8.7 12.3 12.5 8.1 8.4

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.TERCBUS.A & TOTAL.LORCBUS.A. Shading indicates overestimation (blue) or underestimation (green).