

Table 24. Total delivered residential energy consumption, projected versus actual

Projected*	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	10.3	10.4	10.4	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	10.6	10.6														
AEO1995		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														
AEO1996		10.4	10.7	10.7	10.7	10.8	10.8	10.9	10.9	11.0	11.2	11.2	11.3	11.4	11.5	11.5	11.6	11.7	11.8	11.9	12.0	12.1	12.2	12.3	12.4							
AEO1997			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										
AEO1998				10.7	11.1	11.2	11.4	11.5	11.5	11.6	11.7	11.8	11.9	11.9	12.1	12.1	12.2	12.3	12.5	12.6	12.7	12.8	12.9	12.9	13.0	13.1	13.2					
AEO1999					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	12.8	12.9	13.1					
AEO2000					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	12.5	12.6	12.7	12.8						
AEO2001						10.8	11.2	11.4	11.6	11.8	11.9	12.0	12.1	12.2	12.3	12.3	12.4	12.5	12.7	12.8	13.0	13.1	13.2	13.3	13.5	13.6	13.8					
AEO2002							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	13.5	13.7	13.8				
AEO2003								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	13.5	13.6	13.8				
AEO2004									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	13.7	13.7					
AEO2005										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	13.8	13.8					
AEO2006											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	13.3	13.4					
AEO2007												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	13.1	13.2	13.2					
AEO2008													11.5	11.7	11.7	11.8	11.9	11.8	11.9	11.9	12.1	12.1	12.2	12.2	12.3	12.3						
AEO2009														11.6	11.6	11.6	11.6	11.4	11.4	11.3	11.4	11.4	11.5	11.5	11.5	11.6	11.7	11.7				
AEO2010																11.2	11.3	11.1	11.1	11.0	11.0	11.1	11.1	11.2	11.2	11.3	11.4	11.4				
AEO2011																	11.4	11.1	11.1	11.0	11.0	11.0	11.1	11.1	11.1	11.1	11.1	11.2	11.2			
AEO2012																		11.6	11.6	11.3	11.3	11.2	11.2	11.3	11.3	11.3	11.4	11.4				
AEO2013																			10.7	11.2	11.0	11.0	11.0	11.0	10.9	11.0	11.0	11.0				
AEO2014																				11.3	11.0	10.8	10.8	10.8	10.8	10.8	10.8	10.7	10.7			
AEO2015																					11.7	10.9	10.8	10.8	10.7	10.7	10.6	10.6				
AEO2016																						10.9	10.9	11.1	11.1	11.0	10.9	10.8				
AEO2017																							10.6	10.9	11.0	11.0	11.0	10.9	10.8			
AEO2018																								10.5	11.1	10.9	10.8	10.8				
AEO2019																										11.4	11.3	11.1	11.0			
AEO2020																											11.6	11.3	11.3			
AEO2021																												11.4	11.3			
AEO2022																																
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	11.6	11.7			
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	0.9	0.7			

Table 24. Total delivered residential energy consumption, projected versus actual (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	-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												
AEO1995		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												
AEO1996			-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							
AEO1997				-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							
AEO1998					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	14.1		
AEO1999						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	12.7		
AEO2000							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	10.4		
AEO2001								-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	18.9		
AEO2002									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	16.7		
AEO2003										-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	16.3	16.5	
AEO2004											-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	17.7	17.6	
AEO2005												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	18.9	18.7	
AEO2006													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	14.7	14.5	
AEO2007														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	13.5	13.3	
AEO2008															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	6.0	5.8	
AEO2009																0.2	2.7	0.8	0.5	9.1	-2.1	-4.4	1.0	6.7	7.0	-3.8	-2.7	0.4	0.1	
AEO2010																	-0.9	-2.2	-2.2	6.2	-4.8	-7.1	-1.8	3.7	4.0	-6.4	-5.2	-2.0	-2.1	
AEO2011																		-0.7	-2.2	6.1	-4.8	-7.2	-2.3	3.0	3.1	-7.6	-6.7	-3.9	-4.4	
AEO2012																			2.2	11.0	-2.5	-5.2	-0.4	4.7	5.0	-5.7	-4.8	-2.2	-2.4	
AEO2013																				2.7	-3.0	-7.3	-2.6	2.1	2.1	-8.7	-7.9	-5.7	-6.0	
AEO2014																					-2.9	-7.2	-4.1	0.6	0.8	-9.9	-9.5	-7.5	-8.0	
AEO2015																						-1.4	-3.3	0.3	0.3	-10.3	-10.0	-8.4	-9.4	
AEO2016																							-3.2	1.9	3.4	-7.7	-7.5	-6.1	-7.0	
AEO2017																									-1.1	1.7	-8.2	-7.9	-6.2	-7.1
AEO2018																										-1.8	-7.8	-8.3	-6.6	-7.5
AEO2019																											-4.6	-5.1	-4.7	-5.7
AEO2020																												-2.9	-2.5	-3.3
AEO2021																													-2.1	-3.0
AEO2022																														-1.8
Average absolute percentage 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	12.3	8.2	8.4	9.1	7.7	

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.TERCBUS.A & TOTAL.LORCBUS.A; projections: Annual Energy Outlook, Reference case projections from various editions

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

*Projections exclude electricity-related losses.