



2024 Residential Utility Disconnections Report

April 2026

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Executive Summary

The U.S. Energy Information Administration (EIA) prepared this report in response to the Explanatory Statement accompanying the Consolidated Appropriations Act, 2023 (P.L. 117-328), which included language expressing interest in issues related to residential utility disconnections.¹

In April 2023, EIA initiated a new collection of data on monthly final notices, disconnections, and reconnections due to bill nonpayment from natural gas and electricity delivery companies serving U.S. residential customers. This process included both a pilot survey and two cognitive studies, culminating in Form EIA-112, *Residential Utility Disconnections Survey*, approved by the Office of Management and Budget in October 2024. The collection was launched in February 2025 and completed in December 2025; data processing was completed in February 2026.

The data in this report represent the total number of final notices, disconnections, and reconnections issued in each month of calendar year 2024. An individual customer account may receive more than one final notice, disconnection, and/or reconnection per calendar year.

- **Final notices.** Approximately 27.1 million final notices were sent to residential natural gas utility customers in 2024. April had the highest amount, with 2.9 million final notices, and November had the lowest amount, with 1.6 million final notices. Approximately 94.9 million final notices were sent to residential electricity customers in 2024. October had the highest amount, with 9.0 million final notices, and June had the lowest amount, with 7.2 million.
- **Disconnections.** There were 1.7 million residential natural gas disconnections in 2024. April had the most disconnections (214,726), and December had the fewest (52,783). There were 13.4 million residential electricity disconnections in 2024. October had the most disconnections (1.5 million), and July had the fewest (967,012 thousand).
- **Reconnections.** Approximately 1.2 million residential natural gas customer accounts were reconnected in 2024. October had the most reconnections, with 131,472; January had the fewest, with 63,758. In 2024, 11.4 million residential electricity customer accounts were reconnected. October had the most with 1.3 million reconnections; July had the fewest reconnections, with 794,094.

All utilities that report delivering electricity or natural gas to residential customers on Form EIA-861, *Annual Electric Power Industry Report*, and Form EIA-176, *Annual Report of Natural and Supplemental Gas Supply and Disposition*, were required to complete Form EIA-112. There were 74.0 million residential natural gas customers and 143.0 million residential electricity customers in the United States in 2024. The response rate, weighted by number of residential customers, was 96.1% for natural gas and 93.5% for electricity.

¹ “The agreement provides up to \$3,000,000 to conduct a monthly survey of electric and heating service providers of final termination notices sent due to bill non-payment, service disconnections due to bill non-payment, and Service reconnections of customers disconnected for bill non-payment, in a form and manner determined by the agency.” See the Committee Print on H.R. 2617 (Public Law 117-328), p. 938.

Introduction

The U.S. Energy Information Administration (EIA) collected data on monthly final notices, disconnections, and reconnections due to bill nonpayment from natural gas and electricity delivery companies serving U.S. residential customers in calendar year 2024 on Form EIA-112, *Residential Utility Disconnections Survey*. We collected this information in response to the Explanatory Statement accompanying the Consolidated Appropriations Act, 2023 (P.L. 117-328), which included language expressing interest in issues related to residential utility disconnections.²

EIA determined, through a pre-testing effort, that an annual survey that collected data on a monthly basis was the best approach. The survey development process included a pilot study approved by the Office of Management and Budget in April 2023; cognitive interviews in the spring and summer; the pilot collection effort in November–December 2023; the first notice and public comment period for 60 days in June–July 2024 (89 FR 51882); the second notice and public comment period for 30 days in November–December 2024 (89 FR 82598); and OMB approval of Form EIA-112, *Residential Utility Disconnections Survey*, on October 15, 2024. The information collection was formally launched in February 2025 and completed in December 2025; data processing, including imputation model development and estimation, was completed in February 2026. The entire program, therefore, took some three years of effort to complete.

Form EIA-112 collected the following information from respondents for each month of 2024:

- **Total customers for each service (natural gas and electricity) in each state.** Grand total sum of residential, including multifamily, customers served regardless of payment status, including non-delinquent customers
- **Final notices sent during the month.** The last notice sent to residential customers via mail, email, phone, and/or text a day or more before account disconnections occurred (also called a disconnect notice, delinquent notice, late notice, shut-off or cut-off notice, or termination notice)
- **Disconnections due to bill non-payment.** The involuntary shut-off of a residential customer's electricity and/or natural gas service (also called a service disconnect, cut-off or turn-off, or termination) due to bill nonpayment reasons; excludes voluntary disconnections
- **Reconnections of customer accounts formerly disconnected due to bill non-payment.** The turning back on of electricity and/or natural gas service to a residential customer whose service was previously involuntarily disconnected (also called a service reconnect, reactivation, or turn-on) due to bill nonpayment reasons.

² “The agreement provides up to \$3,000,000 to conduct a monthly survey of electric and heating service providers of final termination notices sent due to bill non-payment, service disconnections due to bill non-payment, and Service reconnections of customers disconnected for bill non-payment, in a form and manner determined by the agency.” See the Committee Print on H.R. 2617 (Public Law 117-328), p. 938.

This report, the *2024 Residential Utility Disconnections Report (RUDR)*, provides monthly estimates for the final notices, disconnections, and reconnections data series by state and fuel type in tables and data visualizations. It also discusses the EIA-112 data collection, frame, sample, quality assurance, imputation, and estimation methodology.

Estimates

This section provides state-level monthly data for final notices, disconnections, and reconnections for residential natural gas and electricity in 2024. Relative standard errors (RSEs) for these estimates are provided in Appendix C. There were approximately 74.0 million residential natural gas customers and 143.0 million residential electricity customers in the United States in 2024. The numbers of residential natural gas and electricity customers by month are provided in Appendix B.

Final notices

A final notice, as defined by Form EIA-112, is the last notice sent to residential customers via mail, email, phone, and/or text a day or more before account disconnections occurred (also called a disconnect notice, delinquent notice, late notice, shut-off or cut-off notice, or termination notice). Note, an individual customer account may receive a final notice multiple times in the year. We did not collect data on how many individual customer accounts received a final notice or how many final notices each customer account received.

Approximately 27.1 million final notices were sent to residential natural gas utility customers in 2024. April had the highest amount, with 2.9 million final notices, and November had the lowest amount, with 1.6 million final notices. Table 1 shows monthly natural gas final notices by state.

Approximately 94.9 million final notices were sent to residential electricity customers in 2024. October had the highest number with 9.0 million final notices, and June had the lowest number with 7.2 million. Monthly electricity final notices by state are provided in Table 2.

Table 1. Monthly residential natural gas final notices by state, 2024

State	January	February	March	April	May	June	July	August	September	October	November	December	Annual total
Alabama	70,940	74,830	76,616	74,016	65,078	44,842	38,935	38,092	30,688	36,017	34,274	43,845	628,174
Alaska	2,137	3,378	3,131	2,149	1,707	2,749	2,166	3,538	2,895	3,224	3,235	2,398	32,708
Arizona	7,600	5,510	5,847	6,387	5,319	4,484	5,212	3,784	4,917	4,230	4,201	4,398	61,891
Arkansas	32,250	36,093	38,004	25,108	20,220	11,738	10,077	8,231	6,927	7,010	6,063	9,088	210,810
California	180,197	170,433	191,905	158,250	128,258	111,037	139,409	177,479	154,932	168,468	138,420	120,786	1,839,574
Colorado	8,800	14,356	13,811	14,685	10,975	11,770	11,300	13,758	11,438	13,286	13,994	14,426	152,600
Connecticut	26,155	20,885	21,415	20,197	25,695	26,534	33,185	23,413	22,129	14,674	11,469	13,745	259,496
Delaware	4,572	4,826	5,237	5,110	4,843	3,881	3,876	1,740	42	42	40	17	34,226
District of Columbia	13,045	12,918	13,239	13,489	13,714	13,347	13,644	12,509	12,120	11,306	10,686	11,521	151,538
Florida	49,717	49,078	42,279	44,526	43,339	38,932	45,253	46,835	39,750	47,345	39,988	52,613	539,655
Georgia	90,780	99,339	101,553	93,925	83,475	65,244	52,515	64,731	53,205	58,961	53,455	66,945	884,126
Hawaii	13	16	93	105	89	67	113	83	60	68	47	40	794
Idaho	5,908	5,423 ^R	5,451 ^R	4,870 ^R	4,505 ^R	4,152 ^R	4,572 ^R	3,892 ^R	3,547 ^R	3,383 ^R	2,805 ^R	4,054 ^R	52,562
Illinois	5,044	5,022	59,705	154,163	148,710	131,625	131,036	132,798	128,339	131,017	49,234	4,496	1,081,189
Indiana	94,574	104,531	116,073	104,427	90,496	69,689	49,012	55,615	70,767	71,419	65,789	61,399	953,791
Iowa	13,260	13,754	12,425	10,714	11,316	8,519	10,447	11,640	10,639	10,367	6,594	8,625	128,299
Kansas	18,306	23,596	23,624	22,961	16,934	13,478	9,585	11,508	8,249	7,973	7,741	9,073	173,027
Kentucky	26,002	28,369	28,675	27,103	21,524	19,369	16,031	20,277	14,874	16,491	16,846	22,145	257,705
Louisiana	49,259	49,601	51,473	50,213	41,970	37,204	40,936	54,865	41,976	51,285	40,321	59,028	568,132
Maine	539	608	2,468	1,040	2,046	1,966	866	1,273	421	240	231	233	11,932
Maryland	106,735	85,884	65,589	105,614	94,244	90,106	81,676	24,284	101,812	84,632	66,518	94,086	1,001,179
Massachusetts	9,934	9,696	9,571	49,333	33,578	70,884	54,910	57,362	55,062	49,942	41,140	38,792	480,206
Michigan	243,925	264,322	263,526	221,628	260,272	163,056	172,957	196,982	163,152	159,579	109,021	174,099	2,392,518
Minnesota	48,968	47,651	48,068	46,966	44,612	31,820	22,408	25,869	21,002	21,862	20,654	31,566	411,444
Mississippi	22,910	28,945	28,856	28,990	20,725	17,808	15,331	27,646	17,247	16,903	14,505	30,780	270,645
Missouri	72,731	80,419	87,054	63,474	57,470	61,052	62,830	49,665	48,540	52,338	34,621	45,517	715,711
Montana	4,330	4,182	3,302	4,957	2,897	2,842	2,954	2,388	2,594	2,720	1,818	3,288	38,273
Nebraska	14,282	15,508	16,144	17,131	19,258	13,441	14,451	16,472	12,049	9,311	10,350	11,116	169,515
Nevada	2,545	1,757	595	588	809	634	768	731	783	686	569	598	11,063

State	January	February	March	April	May	June	July	August	September	October	November	December	Annual total
New Hampshire	1,458	1,323	2,564	4,711	5,087	4,997	5,350	4,411	3,735	3,164	1,760	791	39,351
New Jersey	86,149	89,698	101,889	100,828	95,227	94,036	91,171	89,388	83,200	75,445	68,935	69,737	1,045,703
New Mexico	36,713	42,139	39,671	36,270	29,237	23,386	20,688	12,067	9,301	9,348	18,944	18,517	296,283
New York	301,483	225,735	357,439	422,600	390,838	409,190	259,518	262,177	270,456	265,466	235,875	241,835	3,642,612
North Carolina	25,889	35,006	43,517	47,077	44,186	31,408	2,226	2,287	2,125	1,769	17,065	20,688	273,241
North Dakota	2,800	2,048	1,859	2,457	1,979	1,718	1,999	1,981	2,258	1,891	1,642	2,612	25,242
Ohio	275,280	301,352	282,505	259,755	267,511	227,781	205,739	210,174	221,144	230,522	195,005	218,496	2,895,265
Oklahoma	23,399	23,224	23,784	21,601	23,586	20,629	19,619	18,680	16,443	17,297	15,053	16,487	239,802
Oregon	19,026	17,786	19,479	17,826	14,680	11,219	9,119	4,311	4,716	3,948	4,755	7,890	134,755
Pennsylvania	18,903	75,558	61,273	80,032	68,175	53,713	63,877	49,181	46,386	52,124	33,654	10,214	613,088
Rhode Island	24,377	19,994	21,891	35,342	34,272	26,457	23,398	5	0	0	0	0	185,736
South Carolina	18,096	17,880	21,917	24,718	24,300	15,612	12,076	10,308	11,110	11,965	8,472	14,896	191,350
South Dakota	3,369	3,157	3,668	3,467	2,929	2,259	2,182	2,207	2,294	2,076	1,870	2,210	31,686
Tennessee	50,700	53,611	59,426	55,307	48,822	38,210	39,284	41,811	36,317	42,537	34,573	43,417	544,015
Texas	192,993	259,382	242,272	240,020	194,291	172,699	142,739	222,563	161,325	181,272	170,004	216,363	2,395,922
Utah	12,210	11,978	10,922	10,296	10,202	10,221	8,860	7,856	6,467	6,747	4,077	6,469	106,305
Vermont	3,636	4,006	4,217	4,199	3,896	2,962	2,388	2,126	2,025	1,212	1,875	2,768	35,310
Virginia	49,943	61,515	61,850	57,507	46,581	38,149	24,515	21,790	15,806	16,840	15,960	16,272	426,728
Washington	14,090	11,570	12,964	14,142	11,463	9,081	9,206	7,143	6,122	5,438	6,213	9,431	116,866
West Virginia	19,132	19,313	15,466	23,909	20,793	13,011	8,352	7,072	5,674	6,478	3,476	11,091	153,766
Wisconsin	1,317	1,627	1,702	18,299	19,835	21,299	25,109	23,947	21,030	13,111	745	940	148,961
Wyoming	1,734	1,675	2,048	2,638	2,672	2,216	2,251	2,160	1,926	1,573	1,363	1,888	24,144
U.S. total	2,408,157	2,540,505	2,728,054	2,855,120	2,634,642	2,302,520	2,026,122	2,091,103	1,970,018	2,005,002	1,645,942	1,871,731	27,078,913

Data source: U.S. Energy Information Administration, Form EIA-112, *Residential Utility Disconnections Survey*

Note: Customer accounts may receive more than one final notice in a year. Measures of model error are not calculated for derived statistics calculated from monthly statistics. These derived statistics are presented for convenience but should be treated with caution. R=Large relative standard error (RSE) greater than 50; Q=State response rate less than 50%

Table 2. Monthly residential electricity final notices by state, 2024

State	January	February	March	April	May	June	July	August	September	October	November	December	Annual total
Alabama	145,028	140,893	140,673	157,332	156,534	143,390	159,488	156,649	159,756	164,302	148,986	157,036	1,830,067
Alaska	7,038	6,650	6,302	7,187	7,666	7,001	8,818	7,269	6,656	6,281	6,510	6,883	84,262
Arizona	57,590	48,097	41,616	35,254	31,594	28,813 ^R	56,878	81,984	48,011	76,501	66,099	76,401	648,837
Arkansas	187,688	180,263	171,414	169,118	172,924	151,638	183,005	186,993	163,288	192,640	154,741	171,335	2,085,046
California	259,087	249,170	269,206	263,152	238,977	196,835	268,542	310,840	355,019	429,445	366,841	385,260	3,592,374
Colorado	81,394	78,537	82,762	91,994	76,349	79,729	80,649	78,207	83,289	90,582	79,627	91,180	994,298
Connecticut	38,636	40,537	31,005	26,245	30,523	35,949	51,822	40,610	50,967	38,563	28,977	19,649	433,483
Delaware	10,451	11,136	10,359	11,115	10,297	8,254	9,963	10,886	11,037	10,280	7,772	5,028	116,579
District of Columbia	20,452	17,222	18,870	19,054	18,531	14,343	13,694	0	40,898	25,919	18,688	9,299	216,970
Florida	978,645	926,675	868,693	963,129	961,961	920,552	1,096,821	1,079,497	1,014,421	1,164,584	968,170	1,102,344	12,045,492
Georgia	664,854	666,788	623,920	632,118	624,749	606,603	629,654	661,418	644,495	660,171	675,027	648,332	7,738,128
Hawaii	16,086	13,134	10,594	14,203	12,087	10,225	14,006	12,272	13,258	15,008	12,949	16,708	160,530
Idaho	18,191	18,577	20,376	19,972	19,147	16,465	18,694	18,365	18,756	23,077	16,940	16,567	225,129
Illinois	127,876	44,828	65,346	96,585	79,454	74,951	131,704	217,411	188,487	218,831	177,971	159,235	1,582,679
Indiana	158,219	165,821	162,835	163,614	163,182	159,633	165,054	147,630	167,983	185,922	158,434	152,346	1,950,673
Iowa	56,857	51,776	46,765	53,947	48,268	43,602	55,115	62,068	59,029	60,578	42,200	44,943	625,148
Kansas	35,986	37,731	34,797	43,286	38,279	36,608	40,091	50,243	50,976	48,234	41,506	37,733	495,469
Kentucky	222,553	216,360	221,009	220,769	202,365	187,660	215,596	218,238	199,796	220,964	176,203	203,962	2,505,476
Louisiana	276,654	267,818	254,304	250,531	262,050	232,506	302,421	324,357	291,989	347,945	272,866	276,603	3,360,043
Maine	2	2	2	36,576	62,198	50,877	59,618	57,154	53,630	46,220	5,855	2	372,136
Maryland	185,317	136,281	103,287	183,564	146,972	139,198	129,866	18,775	207,581	183,441	136,014	170,377	1,740,671
Massachusetts	112,396	98,631	95,882	138,996	88,675	72,080	76,805	70,618	82,555	94,758	62,944	76,067	1,070,408
Michigan	326,376	348,751	364,168	316,033	381,285	276,863	380,902	501,182	393,493	399,080	266,014	323,847	4,277,996
Minnesota	112,456	98,877	114,567	120,106	113,690	98,301	104,209	106,344	92,683	108,817	97,414	100,972	1,268,436
Mississippi	135,474	126,848	128,104	124,031	127,552	116,971	147,615	156,319	143,190	162,385	135,141	138,542	1,642,171
Missouri	186,215	194,371	190,293	147,321	132,236	141,603	178,252	239,534	240,034	247,638	190,686	161,623	2,249,806
Montana	3,649 ^R	3,289 ^R	4,806 ^R	8,863	6,233	6,219	6,640	5,557	5,915	6,351	2,255 ^R	3,321 ^R	63,099
Nebraska	44,563	44,807	46,080	43,966	43,203	40,588	43,822	55,292	52,841	54,301	46,609	44,484	560,554
Nevada	69,608	71,131	77,225	69,737	70,131	67,126	75,986	94,876	85,136	104,632	79,700	68,791	934,080
New Hampshire	9,675	9,494	7,941	27,977	16,094	18,098	17,259	24,354	29,008	25,837	11,330	6,788	203,853

State	January	February	March	April	May	June	July	August	September	October	November	December	Annual total
New Jersey	209,799	221,526	221,970	212,209	190,821	176,754	197,374	218,964	232,851	213,245	191,082	173,922	2,460,516
New Mexico	59,124	65,658	60,506	52,816	53,399	49,600	58,478	67,147	68,010	72,671	59,403	58,055	724,868
New York	200,426	160,901	468,315	622,612	542,989	480,154	425,732	447,491	464,091	430,368	378,516	373,530	4,995,125
North Carolina	240,778	298,532	237,690	260,613	287,641	283,299	244,656	308,366	245,232	291,249	260,466	249,401	3,207,923
North Dakota	11,080	10,533	11,531	11,227	11,104	9,697	9,653	10,011	9,670	11,355	10,247	9,972	126,081
Ohio	435,840	454,435	414,664	373,675	385,301	330,986	398,864	392,880	346,956	417,306	432,695	345,368	4,728,971
Oklahoma	257,770	259,785	250,942	255,974	250,014	241,306	270,106	283,506	259,995	315,308	273,109	254,534	3,172,349
Oregon	66,064	61,865	68,581	72,658	64,271	62,843	68,365	64,743	65,956	74,590	59,528	63,084	792,549
Pennsylvania	32,528	33,731	39,505	128,735	98,276	96,226	153,891	143,170	130,377	173,339	116,019	30,272	1,176,068
Rhode Island	38,250	29,205	31,312	48,559	47,517	37,653	35,770	740	779	493	94	178	270,550
South Carolina	175,406	185,602	186,047	200,698	190,619	173,409	178,943	205,025	169,446	148,141	169,441	194,193	2,176,971
South Dakota	9,878	9,660	10,279	11,650	11,157	9,635	10,712	10,712	10,152	11,597	8,395	9,515	123,343
Tennessee	317,224	315,217	296,278	302,590	302,106	274,236	323,665	343,913	308,108	349,392	282,717	293,453	3,708,896
Texas	510,174 ^Q	530,638 ^Q	472,822 ^Q	473,159 ^Q	460,061 ^Q	463,934 ^Q	580,235 ^Q	607,360 ^Q	549,321 ^Q	603,800 ^Q	503,977 ^Q	511,477 ^Q	6,266,958
Utah	20,704	18,322	18,048	23,919	20,852	20,836	21,878	21,838	23,752	24,099	19,375	23,112	256,736
Vermont	48,921	44,572	43,253	44,546	44,730	38,952	44,804	41,511	45,311	44,332	40,480	47,764	529,176
Virginia	219,716	250,356	221,380	278,701	236,572	199,635	177,421	192,187	176,052	199,417	162,823	170,313	2,484,571
Washington	86,841	76,988	82,320	80,291	80,031	81,535	80,386	72,926	69,414	68,414	70,901	77,089	927,136
West Virginia	68,853	75,319	67,662	72,009	70,648	64,428	71,819	80,287	62,948	78,867	64,431	58,316	835,587
Wisconsin	34,179	38,644	38,992	85,576	79,660	82,280	90,622	98,346	96,063	72,201	23,330	26,299	766,192
Wyoming	4,000	3,446	7,390	6,471	6,239	6,017	6,105	5,736	5,086	5,817	4,400	5,541	66,250
U.S. total	7,596,571	7,459,429	7,462,689	8,074,461	7,777,218	7,166,093	8,172,468	8,611,801	8,293,747	9,019,288	7,585,897	7,651,047	94,870,709

Data source: U.S. Energy Information Administration, Form EIA-112, *Residential Utility Disconnections Survey*

Note: Customer accounts may receive more than one final notice in a year. Measures of model error are not calculated for derived statistics calculated from monthly statistics. These derived statistics are presented for convenience but should be treated with caution. R=Large relative standard error (RSE) greater than 50; Q=State response rate less than 50%

Disconnections

A disconnection, as defined by Form EIA-112, is the involuntary shut-off of a residential customer's electricity and/or natural gas service (also called a service disconnect, cut-off or turn-off, or termination) due to bill nonpayment reasons, excluding voluntary disconnections. We note that an account may have multiple disconnections per year. We did not collect information on the duration of the disconnection, which could range from a brief interruption in service to a permanent disconnection.

Table 3 provides monthly disconnections by state and the total disconnections for U.S. natural gas customers, and Table 4 provides monthly disconnection rates, calculated as the number of disconnections divided by the number of customers. There were 1.7 million residential natural gas disconnections in 2024 in the United States. April had the most (214,726, or 0.3% of the active customer accounts as of April) and December had the least (52,783, or 0.1% of the customer accounts as of December).

There were 13.4 million residential electricity disconnections in 2024. October had the most (1.5 million, or 1.0% of the customer accounts as of October), and July had the fewest (967,012, or 0.7% of the customer accounts as of July). Table 5 shows monthly disconnections by state and the total disconnections for U.S. electricity customers, and Table 6 shows monthly disconnection rates, calculated as the number of disconnections divided by the number of customers.

A common practice in many states is to restrict utilities from disconnecting electric or gas services to customers in certain months. Local municipalities or individual utilities may also enforce their own policies to limit severe weather disconnections. Such practices are intended to protect the health of customers who would be vulnerable to the loss of utility service. These practices appear in the data as lower rates of disconnections during winter months in many states.

Table 3. Monthly natural gas residential customer disconnections by state, 2024

State	January	February	March	April	May	June	July	August	September	October	November	December	Annual total
Alabama	6,775	7,301	7,059	10,401	7,594	8,441	4,897	7,286	6,296	5,865	4,472	4,267	80,654
Alaska	0	0	0	97	246	131	239	99	146	71	3 ^R	0	1,032
Arizona	1,746	1,785	1,801	1,874	1,508	1,990	1,052	600	1,001	2,710	402	619	17,088
Arkansas	1,241	4,742	6,195	5,917	5,312	3,810	3,097	2,420	1,958	1,829	1,176	679	38,377
California	499	614	676	469	472	870	389	659	1,063	1,554	1,138	548	8,952
Colorado	98	72	193	766	806	771	748	568	661	470	58	56	5,267
Connecticut	3,045	2,575	2,663	3,148	2,698	2,956	2,665	3,114	3,602	2,442	872	1,157	30,937
Delaware	72	139	366	437	521	449	260	68	60	97	22	36	2,527
District of Columbia	820	644	1,038	443	279	66	341	688	558	864	326	74	6,141
Florida	3,070	2,732	2,487	2,861	2,665	3,279	2,929	2,683	2,068	1,485	2,669	1,923	30,852
Georgia	8,673 ^Q	13,192 ^Q	13,709 ^Q	17,530 ^Q	14,601 ^Q	12,776 ^Q	10,608 ^Q	10,859 ^Q	9,362 ^Q	10,002 ^Q	7,336 ^Q	5,772 ^Q	134,421 ^Q
Hawaii	15	18	102	103	90	71	109	89	49	66	42	43	797
Idaho	427	585	608	895	520	261	397	505	469	996	432	263	6,357
Illinois	86	136	162	17,445	13,703	13,570	12,806	14,512	14,621	10,861	4,610	57	102,570
Indiana	2,516	4,232	4,695	5,167	5,109	2,611	2,512	2,115	2,386	3,687	2,179	1,322	38,534
Iowa	108	316	344	1,225	1,183	999	802	873	672	649	106	53	7,328
Kansas	75	429	764	7,416	4,798	3,395	2,462	2,314	1,781	1,577	240	184	25,436
Kentucky	1,656	2,330	3,291	3,366	3,344	2,545	2,277	2,102	1,467	1,065	875	603	24,921
Louisiana	4,736	5,388	5,110	6,676	4,589	4,002	2,669	3,212	3,126	2,887	2,059	2,237	46,692
Maine	0	0	0	195	169	83	209	156	155	116	17	0	1,101
Maryland	60	247	234	3,181	2,370	2,461	2,571	2,173	1,797	2,055	193 ^R	77	17,419
Massachusetts	203	270	208	1,448	2,401	3,196	2,514	3,550	3,592	3,169	1,482	8 ^R	22,041
Michigan	2,872	4,845	4,999	7,382	6,480	4,313	5,661	4,251	3,904	3,918	1,841	1,185	51,653
Minnesota	2,374	1,805	1,102	1,498	8,570	5,453	3,657	4,209	2,267	757	433	533	32,659
Mississippi	2,159	2,994	3,258	5,220	3,447	2,970	2,270	2,461	2,267	1,470	1,098	695	30,310
Missouri	918	3,040	4,274	3,806	1,018	2,109	6,072	5,151	5,443	7,952	4,384	1,060	45,227
Montana	109	125	135	698	711	508	538	408	346	431	1 ^R	26	4,036
Nebraska	258	643	760	1,678	2,177	1,330	1,907	1,029	1,331	1,237	799	124	13,273
Nevada	146	241	677	345	711	366	440	576	887	763	88	228	5,468
New Hampshire	0	1	2	559	616	1,662	841	850	1,271	207	38	1	6,048

State	January	February	March	April	May	June	July	August	September	October	November	December	Annual total
New Jersey	496	1,065	3,610	6,736	7,789	3,704	3,131	5,855	8,129	8,353	3,071	1,462	53,401
New Mexico	926	1,282	1,210	1,413	1,514	1,014	1,576	1,404	856	569	435	435	12,634
New York	432	774	812	7,555	10,022	11,601	15,935	15,906	14,866	9,898	3,910	2,157	93,869
North Carolina	2,615	3,412	4,451	5,770	6,285	1,808	1,318	1,391	961	1,744	1,193	865	31,813
North Dakota	78	25	31	109	290	250	185	206	210	157	59	33	1,634
Ohio	3,601	6,182	6,075	6,841	7,051	5,770	5,216	5,251	6,274	5,073	2,812	1,234	61,380
Oklahoma	2,788	5,325	4,793	6,413	5,911	5,086	5,494	4,379	4,095	4,146	2,436	1,818	52,683
Oregon	765	1,111	792	1,182	1,438	1,066	1,318	1,219	227	998	721	494	11,331
Pennsylvania	602	682	755	14,047	12,314	10,085	12,264	12,146	9,136	8,835	7,317	518	88,703
Rhode Island	14	95	67	625	1,137	1,780	1,165	0	0	0	0	0	4,883
South Carolina	3,885	4,132	5,305	5,907	4,789	2,943	2,634	3,025	3,064	1,388	3,413	3,141	43,625
South Dakota	103	135	151	613	531	551	546	449	377	349	4 ^R	69	3,878
Tennessee	5,069	6,911	7,008	8,063	7,869	6,062	5,657	5,131	4,993	5,887	4,672	4,111	71,430
Texas	14,442	19,989	20,902	27,460	18,011	18,720	9,938	17,846	18,320	17,361	12,206	11,177	206,372
Utah	1,224	1,686	2,051	2,373	2,028	2,029	2,609	1,975	1,517	1,385	893	617	20,387
Vermont	0	0	0	27	70	52	81	88	52	101	0	0	471
Virginia	709	1,170	2,537	3,863	3,989	2,855	1,346	1,850	1,753	1,673	1,073	315	23,133
Washington	758	793	636	1,110	1,111	934	1,039	818	412	579	376	445	9,011
West Virginia	11 ^R	15 ^R	2,108	1,826	2,560	1,677	2,185	1,578	1,652	875	350	60	14,896
Wisconsin	0	0	0	404	690	523	670	679	742	1,337	0	0	5,044
Wyoming	6	10	6	140	309	378	369	275	218	97	6	3	1,817
U.S. total	83,284	116,235	130,212	214,726	194,418	166,334	152,613	161,054	152,458	142,058	84,336	52,783	1,650,511

Data source: U.S. Energy Information Administration, Form EIA-112, *Residential Utility Disconnections Survey*

Note: Customer accounts may receive more than one disconnection in a year. Measures of model error are not calculated for derived statistics calculated from monthly statistics. These derived statistics are presented for convenience but should be treated with caution. R=Large relative standard error (RSE) greater than 50; Q=State response rate less than 50%

Table 4. Monthly natural gas residential customer disconnection rates (percentage) by state, 2024

State	January	February	March	April	May	June	July	August	September	October	November	December
Alabama	0.84	0.90	0.87	1.29	0.95	1.06	0.61	0.91	0.79	0.73	0.56	0.53
Alaska	0.00	0.00	0.00	0.07	0.17	0.09	0.17	0.07	0.10	0.05	0.00	0.00
Arizona	0.12	0.12	0.12	0.13	0.10	0.14	0.07	0.04	0.07	0.19	0.03	0.04
Arkansas	0.22	0.82	1.08	1.03	0.93	0.67	0.55	0.43	0.35	0.32	0.21	0.12
California	0.00	0.01	0.01	0.00	0.00	0.01	0.00	0.01	0.01	0.01	0.01	0.00
Colorado	0.01	0.00	0.01	0.04	0.04	0.04	0.04	0.03	0.03	0.02	0.00	0.00
Connecticut	0.51	0.43	0.45	0.53	0.45	0.50	0.45	0.52	0.61	0.41	0.15	0.19
Delaware	0.04	0.07	0.18	0.22	0.26	0.22	0.13	0.03	0.03	0.05	0.01	0.02
District of Columbia	0.53	0.42	0.67	0.29	0.18	0.04	0.22	0.45	0.36	0.56	0.21	0.05
Florida	0.34	0.30	0.27	0.31	0.29	0.35	0.32	0.29	0.22	0.16	0.29	0.21
Georgia	0.45	0.69	0.71	0.91	0.76	0.66	0.55	0.56	0.49	0.52	0.38	0.30
Hawaii	0.05	0.06	0.31	0.32	0.28	0.22	0.34	0.28	0.15	0.20	0.13	0.13
Idaho	0.09	0.12	0.13	0.19	0.11	0.06	0.08	0.11	0.10	0.21	0.09	0.05
Illinois	0.00	0.00	0.00	0.44	0.34	0.34	0.32	0.36	0.37	0.27	0.12	0.00
Indiana	0.13	0.22	0.24	0.26	0.26	0.13	0.13	0.11	0.12	0.19	0.11	0.07
Iowa	0.01	0.03	0.03	0.12	0.12	0.10	0.08	0.09	0.07	0.07	0.01	0.01
Kansas	0.01	0.05	0.08	0.82	0.54	0.38	0.28	0.26	0.20	0.18	0.03	0.02
Kentucky	0.21	0.29	0.41	0.42	0.42	0.32	0.29	0.26	0.18	0.13	0.11	0.08
Louisiana	0.52	0.59	0.56	0.73	0.50	0.44	0.29	0.35	0.34	0.32	0.23	0.24
Maine	0.00	0.00	0.00	0.53	0.47	0.23	0.58	0.43	0.43	0.32	0.05	0.00
Maryland	0.00	0.02	0.02	0.26	0.19	0.20	0.21	0.18	0.15	0.17	0.02	0.01
Massachusetts	0.01	0.02	0.01	0.09	0.15	0.20	0.16	0.22	0.23	0.20	0.09	0.00
Michigan	0.08	0.14	0.15	0.21	0.19	0.13	0.16	0.12	0.11	0.11	0.05	0.03
Minnesota	0.14	0.11	0.07	0.09	0.52	0.33	0.22	0.25	0.14	0.05	0.03	0.03
Mississippi	0.47	0.66	0.71	1.14	0.76	0.67	0.51	0.56	0.52	0.33	0.24	0.15
Missouri	0.06	0.21	0.29	0.26	0.07	0.15	0.42	0.36	0.38	0.55	0.30	0.07
Montana	0.04	0.05	0.05	0.26	0.27	0.19	0.20	0.15	0.13	0.16	0.00	0.01
Nebraska	0.05	0.13	0.15	0.34	0.44	0.27	0.39	0.21	0.27	0.25	0.16	0.03
Nevada	0.01	0.02	0.07	0.03	0.07	0.04	0.04	0.06	0.09	0.08	0.01	0.02
New Hampshire	0.00	0.00	0.00	0.48	0.53	1.43	0.73	0.73	1.10	0.18	0.03	0.00

State	January	February	March	April	May	June	July	August	September	October	November	December
New Jersey	0.02	0.04	0.12	0.22	0.26	0.12	0.10	0.19	0.27	0.28	0.10	0.05
New Mexico	0.15	0.21	0.20	0.23	0.25	0.16	0.26	0.23	0.14	0.09	0.07	0.07
New York	0.01	0.02	0.02	0.16	0.22	0.25	0.34	0.35	0.32	0.21	0.08	0.05
North Carolina	0.18	0.24	0.31	0.40	0.44	0.13	0.09	0.10	0.07	0.12	0.08	0.06
North Dakota	0.05	0.02	0.02	0.07	0.19	0.16	0.12	0.13	0.13	0.10	0.04	0.02
Ohio	0.10	0.18	0.17	0.20	0.20	0.17	0.15	0.15	0.18	0.15	0.08	0.04
Oklahoma	0.28	0.54	0.48	0.65	0.60	0.51	0.56	0.44	0.42	0.42	0.25	0.18
Oregon	0.09	0.13	0.09	0.14	0.16	0.12	0.15	0.14	0.03	0.11	0.08	0.06
Pennsylvania	0.02	0.02	0.03	0.48	0.42	0.35	0.42	0.42	0.32	0.30	0.25	0.02
Rhode Island	0.01	0.04	0.03	0.25	0.45	0.71	0.46	0.00	0.00	0.00	0.00	0.00
South Carolina	0.47	0.49	0.64	0.71	0.58	0.34	0.31	0.36	0.36	0.16	0.40	0.37
South Dakota	0.05	0.07	0.07	0.30	0.26	0.27	0.26	0.22	0.18	0.17	0.00	0.03
Tennessee	0.40	0.54	0.55	0.63	0.61	0.47	0.44	0.40	0.39	0.46	0.36	0.32
Texas	0.27	0.38	0.39	0.51	0.34	0.35	0.19	0.33	0.34	0.32	0.23	0.21
Utah	0.11	0.15	0.18	0.21	0.18	0.18	0.23	0.18	0.14	0.12	0.08	0.05
Vermont	0.00	0.00	0.00	0.05	0.14	0.10	0.16	0.18	0.11	0.20	0.00	0.00
Virginia	0.05	0.09	0.19	0.29	0.30	0.22	0.10	0.14	0.13	0.13	0.08	0.02
Washington	0.06	0.06	0.05	0.09	0.09	0.07	0.08	0.06	0.03	0.04	0.03	0.03
West Virginia	0.00	0.00	0.61	0.52	0.73	0.48	0.63	0.45	0.47	0.25	0.10	0.02
Wisconsin	0.00	0.00	0.00	0.02	0.04	0.03	0.04	0.04	0.04	0.07	0.00	0.00
Wyoming	0.01	0.01	0.01	0.12	0.27	0.33	0.32	0.24	0.19	0.08	0.01	0.00
U.S. total	0.11	0.16	0.18	0.29	0.26	0.23	0.21	0.22	0.21	0.19	0.11	0.07

Data source: U.S. Energy Information Administration, Form EIA-112, *Residential Utility Disconnections Survey*

Note: Customer accounts may receive more than one disconnection in a year. R=Large relative standard error (RSE) greater than 50; Q=State response rate less than 50%

Table 5. Monthly electricity residential customer disconnections by state, 2024

State	January	February	March	April	May	June	July	August	September	October	November	December	Annual total
Alabama	26,000	23,871	40,599	48,477	40,219	35,181	41,256	44,561	46,260	46,305	33,692	28,393	454,815
Alaska	706	610	587	657	720	615	729	655	635	566	432	442	7,355
Arizona	17,994	13,730	10,636	9,646	7,663	2,336	853	310 ^R	1,613	8,665	9,304	29,023	111,773
Arkansas	18,520	23,927	21,687	18,958	22,454	17,203	14,463	11,128	19,946	18,649	12,999	10,966	210,901
California	24,281	28,803	34,811	46,541	38,464	33,603	28,948	48,257	51,334	67,405	41,021	30,076	473,544
Colorado	6,768	6,998	7,539	10,526	10,784	10,081	14,113	16,291	18,784	18,773	7,006	6,036	133,698
Connecticut	6,621	5,528	5,526	3,531	4,479	5,448	6,242	8,617	6,351	9,818	2,189	4,309	68,659
Delaware	1,628	1,844	2,360	2,878	3,009	3,420	2,413	2,844	3,491	3,407	2,047	1,197	30,536
District of Columbia	664	1,757	1,152	2,341	2,558	2,170	357	1	1,021	2,227	814	561	15,623
Florida	206,722	185,010	170,098	180,841	168,457	174,815	186,202	163,890	163,676	176,499	200,582	200,547	2,177,337
Georgia	33,835	46,859	46,018	50,882	47,737	39,770	39,560	44,672	43,624	27,524	20,646	17,308	458,435
Hawaii	1,629	957	1,171	1,204	1,315	1,105	1,013	1,257	1,159	1,295	776	705	13,586
Idaho	3,309	3,505	5,510	5,621	5,358	4,458	3,747	4,730	4,739	6,013	4,540	3,117	54,645
Illinois	843	1,766	1,348	20,424	9,808	7,527	9,737	37,041	33,104	53,709	15,976	255	191,537
Indiana	11,336	14,032	15,017	16,606	17,930	13,138	17,754	15,810	16,880	20,678	16,317	13,077	188,575
Iowa	1,333	3,230	2,500	5,809	5,287	4,368	4,381	5,138	5,176	6,835	1,404	852	46,315
Kansas	2,386	5,313	4,821	19,234	15,820	12,148	9,942	14,722	18,985	21,755	3,709	1,752	130,588
Kentucky	9,609	13,091	13,494	12,289	11,142	9,698	10,000	9,517	10,127	21,138	17,946	14,750	152,798
Louisiana	40,671	39,193	36,604	30,781	34,198	29,170	25,419	18,900	33,603	44,044	26,662	38,355	397,599
Maine	5	5	3	1,559	4,939	6,870	2,917	6,298	5,841	6,961	2,423	3	37,824
Maryland	4,779	3,513	1,064	10,960	12,313	8,674	4,231	2,803	5,454	16,309	8,229	4,716	83,044
Massachusetts	1,032	1,205	3,170	7,460	5,921	4,659	3,950	5,101	6,263	6,720	3,765	870	50,116
Michigan	27,174	30,841	28,385	33,490	41,614	29,361	36,149	30,514	34,831	43,742	25,910	13,500	375,511
Minnesota	4,361	3,633	3,425	5,101	14,964	11,574	12,952	12,031	6,394	6,110	4,585	3,646	88,777
Mississippi	19,730	20,725	19,497	18,224	21,049	16,436	15,104	11,029	19,974	20,672	14,358	19,647	216,447
Missouri	12,754	21,051	21,381	27,384	24,895	20,156	18,886	28,601	33,229	36,750	18,101	9,723	272,912
Montana	452	486	446	1,155	1,210	1,000	1,099	915	897	1,170	207	284	9,323
Nebraska	2,460	3,536	4,275	5,094	3,958	3,525	3,599	4,149	4,407	5,589	3,617	2,412	46,619
Nevada	14,796	11,625	15,082	17,225	15,281	10,205	4,279	14,306	23,870	23,923	18,458	16,253	185,302
New Hampshire	136	147	209	2,453	2,941	2,150	1,505	2,426	2,808	3,404	1,123	126 ^R	19,427

State	January	February	March	April	May	June	July	August	September	October	November	December	Annual total
New Jersey	1,304	2,965	9,864	15,938	17,815	6,878	6,654	12,619	19,307	21,188	8,472	5,825	128,828
New Mexico	4,523	5,133	5,125	5,712	5,619	4,043	5,131	5,604	5,480	6,665	3,761	3,524	60,321
New York	1,862	2,330	3,247	11,946	16,019	20,404	25,630	27,111	27,565	22,757	8,515	6,225	173,612
North Carolina	30,282	35,726	32,995	34,041	36,188	32,733	34,567	37,630	34,156	37,856	28,379	27,403	401,957
North Dakota	787	638	687	1,152	1,982	1,712	1,673	1,578	1,778	1,148	806	716	14,658
Ohio	18,021	24,798	27,528	32,133	37,316	23,545	34,383	23,023	33,196	39,340	20,089	20,279	333,650
Oklahoma	44,568	43,698	47,181	49,531	51,987	41,000	47,175	43,285	55,376	63,045	45,827	39,806	572,480
Oregon	5,387	6,517	6,859	10,077	8,403	7,500	7,006	7,117	7,453	9,696	5,941	3,334	85,289
Pennsylvania	1,421	1,953	2,870	29,772	28,777	19,287	29,401	36,894	35,461	42,734	28,335	1,567	258,471
Rhode Island	6	0	16	1,337	1,579	1,927	2,007	20	32	30	0	0	6,954
South Carolina	21,133	22,030	23,654	24,401	22,198	18,099	20,053	22,763	22,689	18,331	19,975	20,196	255,522
South Dakota	1,499	1,807	2,160	2,494	2,644	2,270	2,407	2,442	2,502	2,473	1,636	1,555	25,890
Tennessee	39,267	48,200	46,781	48,310	52,973	41,098	41,326	43,679	51,286	61,137	43,017	40,573	557,648
Texas	268,431	279,514	273,691	276,218	198,146	212,962	121,881	178,678	295,761	344,318	285,942	292,608	3,028,150
Utah	2,270	2,294	2,344	3,835	3,448	2,886	3,221	2,841	3,602	3,165	2,104	2,073	34,083
Vermont	141	194	193	1,611	1,561	1,143	1,176 ^R	1,332	1,236	1,730	113 ^R	128 ^R	10,558
Virginia	19,992	36,079	54,677	59,170	59,563	41,906	22,397	28,333	44,491	46,287	26,063	22,629	461,586
Washington	11,421	10,512	10,508	12,384	11,787	10,689	9,707	8,635	9,748	11,107	6,235	10,018	122,752
West Virginia	2,394	5,179	8,132	10,664	10,425	7,460	8,192	8,229	9,621	9,421	4,704	3,468	87,890
Wisconsin	77	59	59	5,678	20,721	15,669	20,673	19,060	17,353	20,748	326	62	120,484
Wyoming	167	163	93	201	542	494	552	484	397	369	32 ^R	36	3,531
U.S. total	977,490	1,046,582	1,077,079	1,253,951	1,186,179	1,034,570	967,012	1,077,869	1,302,963	1,490,201	1,059,108	974,929	13,447,935

Data source: U.S. Energy Information Administration, Form EIA-112, *Residential Utility Disconnections Survey*

Note: Customer accounts may receive more than one disconnection in a year. Measures of model error are not calculated for derived statistics calculated from monthly statistics. These derived statistics are presented for convenience but should be treated with caution. R=Large relative standard error (RSE) greater than 50; Q=State response rate less than 50%

Table 6. Monthly electricity residential customer disconnection rates (percentage) by state, 2024

State	January	February	March	April	May	June	July	August	September	October	November	December
Alabama	1.09	1.00	1.70	2.03	1.68	1.47	1.72	1.85	1.92	1.93	1.40	1.18
Alaska	0.24	0.20	0.20	0.22	0.24	0.21	0.24	0.22	0.21	0.19	0.14	0.15
Arizona	0.58	0.44	0.34	0.31	0.25	0.07	0.03	0.01	0.05	0.27	0.29	0.91
Arkansas	1.25	1.61	1.46	1.28	1.51	1.16	0.97	0.75	1.33	1.25	0.87	0.73
California	0.17	0.21	0.25	0.33	0.28	0.24	0.21	0.34	0.37	0.48	0.29	0.21
Colorado	0.26	0.27	0.29	0.41	0.42	0.39	0.54	0.63	0.72	0.72	0.27	0.23
Connecticut	0.42	0.35	0.35	0.22	0.28	0.34	0.39	0.54	0.40	0.61	0.14	0.27
Delaware	0.33	0.38	0.48	0.59	0.61	0.70	0.49	0.58	0.71	0.69	0.41	0.24
District of Columbia	0.21	0.55	0.36	0.74	0.80	0.68	0.11	0.00	0.32	0.69	0.25	0.17
Florida	1.98	1.77	1.62	1.72	1.60	1.65	1.76	1.54	1.54	1.66	1.88	1.88
Georgia	0.72	0.99	0.97	1.07	1.01	0.84	0.83	0.94	0.91	0.58	0.43	0.36
Hawaii	0.36	0.21	0.26	0.27	0.29	0.25	0.23	0.28	0.26	0.29	0.17	0.16
Idaho	0.39	0.41	0.64	0.65	0.62	0.52	0.43	0.55	0.55	0.69	0.52	0.36
Illinois	0.02	0.03	0.03	0.38	0.18	0.14	0.18	0.69	0.62	1.01	0.30	0.00
Indiana	0.36	0.45	0.48	0.53	0.57	0.41	0.56	0.50	0.53	0.65	0.51	0.41
Iowa	0.09	0.22	0.17	0.40	0.36	0.30	0.30	0.35	0.36	0.47	0.10	0.06
Kansas	0.18	0.41	0.37	1.47	1.21	0.93	0.76	1.12	1.44	1.66	0.28	0.13
Kentucky	0.44	0.59	0.61	0.56	0.51	0.44	0.45	0.43	0.46	0.96	0.81	0.67
Louisiana	1.90	1.84	1.71	1.44	1.60	1.36	1.19	0.88	1.57	2.05	1.24	1.79
Maine	0.00	0.00	0.00	0.21	0.68	0.94	0.40	0.86	0.80	0.95	0.33	0.00
Maryland	0.20	0.14	0.04	0.45	0.50	0.35	0.17	0.11	0.22	0.67	0.34	0.19
Massachusetts	0.04	0.04	0.12	0.28	0.22	0.17	0.15	0.19	0.23	0.25	0.14	0.03
Michigan	0.60	0.68	0.63	0.74	0.92	0.65	0.80	0.67	0.77	0.96	0.57	0.30
Minnesota	0.17	0.14	0.13	0.20	0.58	0.45	0.50	0.46	0.25	0.23	0.18	0.14
Mississippi	1.46	1.54	1.44	1.35	1.56	1.21	1.11	0.81	1.47	1.53	1.06	1.45
Missouri	0.44	0.72	0.73	0.93	0.85	0.69	0.64	0.97	1.13	1.25	0.61	0.33
Montana	0.09	0.09	0.09	0.22	0.23	0.19	0.21	0.17	0.17	0.22	0.04	0.05
Nebraska	0.27	0.40	0.48	0.57	0.44	0.39	0.40	0.46	0.49	0.62	0.40	0.27
Nevada	1.14	0.89	1.16	1.32	1.17	0.78	0.33	1.09	1.81	1.82	1.40	1.23
New Hampshire	0.02	0.02	0.03	0.37	0.45	0.33	0.23	0.37	0.43	0.52	0.17	0.02

State	January	February	March	April	May	June	July	August	September	October	November	December
New Jersey	0.03	0.08	0.27	0.43	0.48	0.18	0.18	0.34	0.52	0.57	0.23	0.16
New Mexico	0.47	0.53	0.53	0.59	0.58	0.42	0.54	0.58	0.57	0.69	0.39	0.37
New York	0.03	0.03	0.05	0.17	0.23	0.29	0.36	0.38	0.38	0.32	0.12	0.09
North Carolina	0.60	0.71	0.65	0.67	0.71	0.64	0.68	0.74	0.67	0.74	0.55	0.53
North Dakota	0.20	0.16	0.17	0.29	0.50	0.43	0.42	0.40	0.45	0.29	0.20	0.18
Ohio	0.35	0.48	0.53	0.62	0.72	0.45	0.66	0.44	0.64	0.76	0.39	0.39
Oklahoma	2.38	2.33	2.51	2.63	2.75	2.18	2.50	2.29	2.93	3.34	2.42	2.10
Oregon	0.29	0.35	0.37	0.54	0.45	0.40	0.37	0.38	0.40	0.52	0.32	0.18
Pennsylvania	0.03	0.04	0.05	0.54	0.52	0.35	0.53	0.67	0.64	0.77	0.51	0.03
Rhode Island	0.00	0.00	0.00	0.29	0.34	0.42	0.44	0.00	0.01	0.01	0.00	0.00
South Carolina	0.83	0.86	0.93	0.95	0.88	0.69	0.78	0.88	0.87	0.70	0.77	0.78
South Dakota	0.35	0.42	0.50	0.58	0.62	0.53	0.56	0.57	0.58	0.57	0.38	0.36
Tennessee	1.25	1.53	1.48	1.53	1.67	1.30	1.30	1.38	1.61	1.92	1.35	1.28
Texas	2.12	2.20	2.15	2.17	1.55	1.66	0.95	1.39	2.30	2.67	2.21	2.27
Utah	0.18	0.18	0.18	0.30	0.27	0.23	0.25	0.22	0.28	0.25	0.16	0.16
Vermont	0.04	0.06	0.06	0.50	0.48	0.35	0.36	0.41	0.38	0.53	0.03	0.04
Virginia	0.55	0.99	1.50	1.63	1.64	1.15	0.61	0.78	1.22	1.26	0.71	0.62
Washington	0.35	0.32	0.32	0.37	0.36	0.32	0.29	0.26	0.29	0.33	0.19	0.30
West Virginia	0.28	0.60	0.94	1.23	1.20	0.86	0.95	0.95	1.11	1.09	0.54	0.40
Wisconsin	0.00	0.00	0.00	0.20	0.73	0.55	0.73	0.67	0.61	0.73	0.01	0.00
Wyoming	0.06	0.06	0.03	0.07	0.19	0.17	0.19	0.17	0.14	0.13	0.01	0.01
U.S. total	0.69	0.73	0.76	0.88	0.83	0.72	0.68	0.75	0.91	1.04	0.74	0.68

Data source: U.S. Energy Information Administration, Form EIA-112, *Residential Utility Disconnections Survey*

Note: Measures of model error are not calculated for derived statistics calculated from monthly statistics. These derived statistics are presented for convenience but should be treated with caution. Disconnection rate is calculated as the number of disconnections divided by the number of customers.

Reconnections

A reconnection, as defined by Form EIA-112, is the turning back on of electricity and/or natural gas service to a residential customer whose service was previously involuntarily disconnected (also called a service reconnect, reactivation, or turn-on). A customer may have more than one reconnection in a year.

Approximately 1.2 million total residential natural gas customer accounts were reconnected in 2024. October had the most reconnections, 131,472; January had the fewest, 63,758.

In 2024, 11.4 million total residential electricity customer accounts were reconnected. October had the most, with 1.3 million reconnections; July had the fewest, with 794,094 reconnections.

Total reconnections by state and month for 2024 are provided in Table 7 for natural gas and Table 8 for electricity.

Typically, respondents reported fewer reconnections than disconnections. At the U.S. level, the only time reconnections surpassed disconnections was for natural gas customers during the months of November and December.

Table 7. Monthly residential natural gas reconnections by state, 2024

State	January	February	March	April	May	June	July	August	September	October	November	December	Annual total
Alabama	4,043	4,605	4,447	5,471	5,517	4,823	3,852	4,910	4,632	6,002	5,240	5,205	58,745
Alaska	0	0	0	16 ^R	73	63	97	90	82	48	3 ^R	0	473
Arizona	976	1,158	1,239	1,126	800	742	476	345	423	1,125	323	387	9,121
Arkansas	1,036	2,461	3,562	3,160	3,028	2,157	1,965	1,985	1,736	2,747	2,531	2,125	28,494
California	283	392	451	303	289	385	210	406	623	879	638	421	5,281
Colorado	18	25	112	344	340	334	332	262	248	235	27	18	2,296
Connecticut	2,732	2,387	2,552	2,352	2,415	2,285	1,806	2,823	3,107	3,366	1,777	1,792	29,394
Delaware	138	202	291	387	317	406	137	48	35	65	16	22	2,064
District of Columbia	79	245	320	244	148	48	82	256	144	322	129	49	2,066
Florida	3,657	1,748	1,571	1,658	1,796	1,891	1,694	1,772	1,810	807	1,766	1,295	21,465
Georgia	6,046 ^Q	8,864 ^Q	9,185 ^Q	10,000 ^Q	10,450 ^Q	7,850 ^Q	7,385 ^Q	8,083 ^Q	7,027 ^Q	9,867 ^Q	8,645 ^Q	6,780 ^Q	100,183 ^Q
Hawaii	3	3	12	36	40	14	36	40	32	34	28	13	291
Idaho	176 ^R	273	272	318	247	94 ^R	136 ^R	173 ^R	156 ^R	421	206	135	2,605
Illinois	1,316	682	394	9,303	8,156	8,101	8,424	11,176	10,825	13,352	8,267	2,935	82,931
Indiana	1,796	2,810	2,695	2,131	1,950	1,247	1,074	1,075	1,351	2,355	2,345	1,414	22,243
Iowa	77	135	158	424	487	395	327	331	297	422	188	63 ^R	3,303
Kansas	946	515	525	2,710	2,754	2,098	1,775	1,906	1,684	2,821	2,657	1,595	21,985
Kentucky	1,088	1,441	1,989	1,508	1,336	876	887	967	908	1,417	1,203	768	14,389
Louisiana	3,040	3,375	3,518	4,105	3,379	2,540	1,508	2,438	2,066	2,374	1,906	1,857	32,106
Maine	0	0	0	92	80	32	73	67	61	72	13	0	491
Maryland	129	92	91	1,585	1,343	1,259	1,518	1,332	980	1,241	308	70	9,948
Massachusetts	161	74	96	472	1,436	839	1,026	1,824	2,212	2,704	1,088	181	12,113
Michigan	1,675	3,038	3,255	3,814	2,989	1,948	2,066	1,812	1,625	2,034	1,233	789	26,276
Minnesota	1,905	1,794	1,023	978	4,851	4,180	2,392	3,534	2,276	3,402	2,298	1,203	29,836
Mississippi	1,292	1,950	2,153	2,590	2,179	1,445	1,246	1,432	1,481	1,360	1,254	1,029	19,411
Missouri	2,190	2,241	2,517	2,149	870	1,110	2,244	3,184	2,868	5,823	7,370	3,982	36,550
Montana	85	106	91	349	370	376	336	300	303	370	69	49	2,806
Nebraska	237	690	914	1,474	1,462	1,140	1,245	893	1,243	1,368	1,005	108	11,779
Nevada	67	74	288	120	234	99	128	194	301	241	42	78	1,866
New Hampshire	0	0	1	79	63	483	243	247	265	124	36	0	1,541

State	January	February	March	April	May	June	July	August	September	October	November	December	Annual total
New Jersey	755	878	1,270	5,191	6,477	3,088	2,318	4,410	6,249	6,748	3,464	1,861	42,709
New Mexico	603	831	849	910	998	652	920	1,002	778	519	414	312	8,789
New York	191	338	475	4,476	6,693	7,257	8,605	9,424	9,388	6,819	1,848	1,681	57,195
North Carolina	1,705	2,386	2,958	2,766	2,538	956	648	663	549	1,234	849	621	17,873
North Dakota	5	2	0 ^R	12	48	39	32	39	39	57	25	5 ^R	303
Ohio	2,845	3,803	3,829	3,022	3,085	2,496	2,181	2,628	3,287	7,240	5,437	3,501	43,354
Oklahoma	2,955	4,441	3,786	3,892	4,049	3,264	3,882	3,939	3,453	5,028	5,046	3,730	47,464
Oregon	538	745	566	667	832	638	653	689	199	937	763	446	7,673
Pennsylvania	720	347	287	6,001	6,966	5,350	6,454	8,860	7,412	9,746	9,448	2,078	63,667
Rhode Island	8	75	45	460	815	1,316	815	0	0	0	0	0	3,534
South Carolina	3,006	3,392	4,208	4,355	3,343	2,209	1,936	2,451	2,429	1,065	2,804	2,580	33,778
South Dakota	65	89	97	354	290	266	252	259	210	263	26	51	2,223
Tennessee	3,597	4,620	4,520	4,649	4,684	3,572	3,560	3,412	3,430	4,866	4,039	3,412	48,359
Texas	9,702	14,539	17,750	19,290	14,612	13,310	7,068	11,910	13,457	14,238	13,283	10,952	160,111
Utah	564	872	1,072	1,091	1,275	1,032	1,228	1,120	711	778	471	319	10,533
Vermont	0	0	0	8	26	20	21	26	21	31	0	0	153
Virginia	395	672	1,370	1,918	1,921	1,443	632	898	956	1,262	898	515 ^R	12,880
Washington	433	483	378	565	577	463	486	444	199	407	316	278	5,031
West Virginia	303	84	539	814	809	643	660	645	892	1,600	662	1,508	9,160
Wisconsin	175	49	14	166	260	198	203	260	315	1,165	817	396	4,017
Wyoming	4 ^R	2 ^R	1 ^R	39	85	96	94	104	70	70	8 ^R	1 ^R	574
U.S. total	63,758	80,028	87,738	119,946	119,784	97,565	87,368	107,086	104,846	131,472	103,231	68,614	1,171,435

Data source: U.S. Energy Information Administration, Form EIA-112, Residential Utility Disconnections Survey

Note: Customer accounts may receive more than one reconnection in the year. Measures of model error are not calculated for derived statistics calculated from monthly statistics. These derived statistics are presented for convenience but should be treated with caution. R=Large relative standard error (RSE) greater than 50; Q=State response rate less than 50%

Table 8. Monthly residential electricity reconnections by state, 2024

State	January	February	March	April	May	June	July	August	September	October	November	December	Annual total
Alabama	23,410	15,498	18,470	29,887	33,412	24,787	24,445	30,072	29,771	36,026	27,278	22,362	315,417
Alaska	646	506	434	497	579	532	522	516	599	523	389	410	6,155
Arizona	21,581	18,018	13,547	12,761	9,888	1,536 ^R	848	474 ^R	1,687	7,820	8,182	23,113	119,455
Arkansas	14,705	21,049	19,087	16,884	19,310	15,350	12,636	9,890	15,915	15,671	11,302	9,940	181,740
California	20,440	23,211	28,357	39,462	32,869	27,844	24,045	37,990	41,351	57,009	35,467	26,322	394,367
Colorado	5,855	6,264	6,727	8,300	8,802	8,516	10,133	13,024	14,414	14,898	6,358	5,609	108,899
Connecticut	5,930	4,538	5,177	3,150	4,200	7,866	4,799	8,025	5,387	9,341	2,317	4,197	64,925
Delaware	1,334	1,498	1,889	2,253	2,582	2,829	1,962	2,477	2,944	2,795	1,986	1,191	25,740
District of Columbia	515	1,365	987	1,952	2,158	1,750	308	1	787	1,994	610	426	12,853
Florida	192,044	175,283	161,518	169,778	158,542	164,618	171,957	152,100	153,507	160,790	186,805	185,232	2,032,174
Georgia	26,703	36,490	36,121	40,372	38,787	32,803	31,011	34,327	33,195	23,169	17,960	15,443	366,384
Hawaii	1,562	918	1,116	1,152	1,263	1,064	961	1,186	1,091	1,189	701	616	12,819
Idaho	3,162	3,148	4,832	4,999	4,982	4,113	3,493	4,304	4,420	5,500	4,224	2,932	50,109
Illinois	729	1,521	1,120	12,892	7,871	5,498	7,148	28,220	22,508	38,983	16,899	493	143,882
Indiana	9,565	11,591	12,617	13,535	15,074	11,195	14,802	13,508	13,964	17,495	14,603	11,358	159,306
Iowa	1,001	2,260	1,817	4,441	4,233	3,480	3,391	4,096	4,122	5,609	1,177	621	36,249
Kansas	2,494	5,266	4,566	17,331	13,978	11,474	9,887	13,586	17,288	20,098	4,133	1,544	121,644
Kentucky	8,288	11,318	11,438	10,313	9,493	8,381	8,482	8,082	8,511	19,435	16,735	13,698	134,174
Louisiana	33,886	34,946	33,270	27,177	31,002	26,908	22,497	16,417	27,457	37,127	25,038	32,956	348,680
Maine	1	1	1	1,127	4,262	5,857	2,927	5,909	5,529	6,819	322	5	32,760
Maryland	3,178	3,041	803	7,299	9,094	6,563	3,294	1,867	3,340	11,170	6,515	3,411	59,575
Massachusetts	883	1,117	2,660	5,857	5,118	3,904	3,220	4,128	5,112	5,773	3,533	822	42,127
Michigan	22,402	26,708	24,775	27,493	33,245	24,964	29,904	26,598	29,299	34,683	23,026	11,815	314,914
Minnesota	3,697	3,341	3,117	4,400	12,299	10,086	11,279	11,069	5,997	5,784	4,383	3,363	78,816
Mississippi	16,071	18,179	17,018	16,058	18,592	14,643	12,764	9,653	15,988	17,359	12,626	17,016	185,967
Missouri	12,410	17,592	18,478	23,168	22,106	17,846	16,859	26,091	29,970	33,747	16,802	8,110	243,178
Montana	358	418	387	863	976	913	880	685	794	998	248	282	7,800
Nebraska	2,395	3,087	3,770	4,262	3,449	2,986	2,995	3,469	3,709	4,880	3,273	1,874	40,148
Nevada	12,383	10,061	14,133	15,166	13,363	8,963	3,835	12,263	19,492	21,262	16,861	14,441	162,222
New Hampshire	106	120	155	1,802	2,199	1,542	1,120	2,074	2,228	2,866	1,019	157	15,388

State	January	February	March	April	May	June	July	August	September	October	November	December	Annual total
New Jersey	1,855	2,250	3,479	14,152	16,738	6,865	6,084	10,091	15,606	17,358	7,731	5,852	108,061
New Mexico	1,990	2,259	2,529	2,447	2,833	2,084	2,700	3,029	2,914	3,408	2,057	1,698	29,948
New York	1,538	1,760	2,375	8,182	12,288	13,906	12,953	18,036	20,394	16,922	6,203	6,631	121,187
North Carolina	25,635	28,756	27,393	27,699	30,173	26,337	27,704	30,359	27,825	30,648	24,366	22,119	329,015
North Dakota	533	527	520	735	1,371	1,263	1,224	1,199	1,358	923	628	584	10,866
Ohio	14,396	20,187	21,943	24,765	30,225	19,463	27,549	19,863	26,548	32,973	18,823	16,815	273,550
Oklahoma	27,451	27,758	31,125	30,978	29,534	22,357	26,863	26,664	31,745	41,657	30,537	22,616	349,284
Oregon	4,601	5,852	6,036	8,968	7,847	6,988	6,485	6,551	6,764	9,078	5,717	3,254	78,142
Pennsylvania	881	1,066	1,658	21,342	23,548	15,883	22,198	32,091	29,824	31,836	31,026	1,531	212,884
Rhode Island	6	0	16	1,133	1,380	1,698	1,779	18	31	27	0	0	6,088
South Carolina	16,712	17,497	19,374	19,284	17,566	14,070	14,900	17,657	17,849	14,054	15,930	15,847	200,739
South Dakota	1,402	1,661	1,914	2,182	2,325	2,043	2,206	2,216	2,274	2,279	1,568	1,453	23,525
Tennessee	33,640	42,588	41,304	42,231	47,204	36,080	36,328	37,944	45,372	53,902	39,059	36,453	492,106
Texas	228,175	235,977	232,956	236,780	175,998	180,384	103,400	141,048	237,528	293,311	248,933	256,214	2,570,702
Utah	2,059	2,066	2,143	3,549	3,325	2,767	3,014	2,625	3,153	2,922	1,946	1,855	31,424
Vermont	108	161	169	1,386	1,353	1,016	986	1,173	1,076	1,566	77 ^R	105 ^R	9,175
Virginia	16,098	30,320	46,300	52,046	53,994	37,177	20,322	24,617	38,230	42,077	24,704	20,413	406,298
Washington	10,676	9,515	9,693	11,158	10,752	9,691	9,062	7,898	8,886	10,120	5,849	9,478	112,778
West Virginia	1,819	3,980	5,384	8,243	8,432	6,159	6,525	7,109	7,805	7,815	4,420	2,864	70,556
Wisconsin	183	126	99	4,181	17,133	14,144	18,956	18,579	16,805	20,448	2,144	819	113,616
Wyoming	100	109	66	116	372	379	453	417	337	345	20 ^R	24	2,738
U.S. total	837,591	892,771	904,862	1,046,188	1,018,117	879,564	794,094	891,284	1,062,698	1,254,483	942,512	846,386	11,370,551

Data source: U.S. Energy Information Administration, Form EIA-112, Residential Utility Disconnections Survey

Note: Customer accounts may receive more than one reconnection in the year. Measures of model error are not calculated for derived statistics calculated from monthly statistics. These derived statistics are presented for convenience but should be treated with caution. R=Large relative standard error (RSE) greater than 50; Q=State response rate less than 50%

Methodology

Data sources, frame, and sample

EIA collected data for this report on Form EIA-112, *Residential Utility Disconnections Survey*, a mandatory annual survey that collects monthly final notices, disconnections, and reconnections due to bill nonpayment from natural gas and electricity delivery companies serving residential customers.³ For data collection year 2024, a census of all utilities was surveyed. Mandatory respondents included all utilities that report on Form EIA-861, *Annual Electric Power Industry Report*, and Form EIA-176, *Annual Report of Natural and Supplemental Gas Supply and Disposition*, that also report delivering electricity or natural gas to residential customers. These utilities represent all natural gas delivery companies and all but some of the smallest electric utilities, accounting for 100% of natural gas residential customers and 98% of electricity residential customers. Respondents to those surveys who do not deliver energy to residential end-use customers were not required to report on Form EIA-112.

Small electric utilities that report on Form EIA-861S, *Annual Electric Power Industry Report (Short Form)*, were not surveyed unless they also reported on Form EIA-176. Respondents to the EIA-861S comprise less than 2% of electric residential customers, and final state-level statistics include imputations for these industry participants.

The frame count for 2024 was 2,307 distinct entities: 1,199 for natural gas and 1,208 for electricity (some entities supply both natural gas and electricity).

EIA-112 data collection and quality assurance checks

Data for the 2024 EIA-112 were collected between February and December in 2025. Respondents entered data directly into a web form in EIA's respondent portal or submitted the data in Excel spreadsheet format in the respondent portal. EIA performed extensive nonresponse follow-up using multiple contact methods to maximize response rates. The overall U.S. response rate⁴ for natural gas, weighted by number of customer accounts from EIA-176 data, was 96.1%. The overall U.S. response rate for electricity, weighted by number of customer accounts from EIA-861 data, was 93.5%. Response rates varied by state (Appendix A). The unweighted response rates were 82.0% for natural gas and 87.6% for electricity.

Data entered into the web form were subject to certain interactive range or value checks. All data were subject to a subsequent round of automated quality assurance checks that included checks for item non-response rendering the submission insufficient, range checks based on pre-specified plausible ranges, submissions in which survey items are logically inconsistent with each other, and submissions with residential customer counts that are inconsistent with EIA-861 and EIA-176. When a submission failed these quality checks, EIA subject matter experts reviewed the data and attempted to recontact the respondent to obtain either corrected data or an explanation for why the value is correct. If the respondent could not be contacted, EIA determined whether to accept or impute the

³ The [EIA-112 survey form and instructions](#) are available on EIA's website.

⁴ Sufficient responses for the purpose of calculating response rates are considered those in which respondents provided customer counts and 12 months of data for at least one data series (disconnections, reconnections, or final notices). Sufficient responses may still have quality assurance check failures.

data. Form EIA-112 included a prompt for respondents to leave comments describing unusual reporting patterns. These comments were instrumental in evaluating the EIA-112 data quality, including validating outliers and identifying reporting challenges experienced by respondents.

Potential sources of error

Survey data are subject to both sampling error and non-sampling error. For estimates produced from the 2024 EIA-112, there is no sampling error because EIA conducted a census of all natural gas and electric utilities represented on the frame. Non-sampling errors can be attributed to many sources: (1) inability to obtain complete data from all sources (i.e., non-response); (2) response errors; (3) definitional difficulties; (4) differences in interpretation of questions; (5) mistakes in recording or coding the data; (6) frame coverage error; and (7) other errors of collection, response, coverage, and estimation of missing data.

Except for the estimation of missing data using a model, no direct measure of the effect of nonsampling errors can be obtained, and precautionary steps were taken during all phases of frame development, collection, and data processing to minimize their influence.

Pay-in-advance utility customers

Some U.S. natural gas and electric customers offer their customers the opportunity to pay for their gas or electricity in advance rather than be billed after the gas or electricity has been consumed. If residential *pay-in-advance* customers deplete their advanced payment balance, then the utility may stop providing gas or electricity to these customers. Such lapses in service are not considered *disconnections* for purposes of reporting on Form EIA-112, based on the following definitions from the instructions of Form EIA-112:

Disconnections: the involuntary shut-off of a residential customer's electricity and/or natural gas service (also called a service disconnect, cut-off or turn-off, or termination) due to bill nonpayment reasons, excluding voluntary disconnections.

Bill nonpayment reasons: situations when residential customers are unable to or fail to pay their account balance, are in arrears or debt, and their electricity and/or natural gas service will be, is, or has been disconnected as a result.

In instances where gas or electric utilities have incorrectly reported lapses in service for *pay-in-advance* customers as disconnections, EIA imputed the number of disconnections for the utility.

Combined natural gas and electric customers

Many industry participants deliver both natural gas and electricity to their customers. In these cases, EIA asked respondents to report natural gas customers versus electricity customers separately and natural gas disconnections, reconnections, and final notices versus electricity disconnections, reconnections, and final notices separately. So, if a customer had both natural gas and electricity shut off in a month, the customer would be reported once as an electricity disconnection and once as a natural gas disconnection. Natural gas and electricity disconnections should not be summed because there is likely significant overlap between the two populations.

In a handful of cases, the respondent was unable to differentiate between notices, disconnections, and reconnections for natural gas customers versus electricity customers. In those cases, the respondent reported a total figure only. EIA determined that it is a combined figure if (a) the same values have been submitted for both electricity and gas, or (b) the respondent provides a comment indicating that only totals have been provided. Because electricity shutoffs have been observed at a much higher rate than gas shutoffs, EIA used the total figures as the electricity figures and then imputed for the gas figures separately.

Imputation and estimation

In cases of non-response, or if reported values failed quality assurance checks and corrected data could not be obtained from the respondent, a regression model was used to impute the missing data for final notices, reconnections, and disconnections. If the customer count failed data quality checks and was deemed to be in error, the entire submission's data items were imputed. Otherwise, only the particular data items that failed quality checks were imputed.

To impute customer counts, the annual residential customer count for 2023 reported on either Form EIA-861 (for electricity) or Form EIA-176 (for natural gas) was substituted directly from the frame. For all other quantities of interest, a regression model was used for imputation. All 50 states were assigned to estimation groups, defined separately for electricity and natural gas. These groups were designed to combine states by geography and by similarities in observed disconnection rates and trends among responding utilities. For each estimation group, and for each month, separate regression models were fit for disconnections, reconnections, and final notices.

Assuming a linear relationship between the total number of disconnections, reconnections, or final notices and the monthly residential customers within an estimation group, we used the following regression model without intercept for imputation:

$$y_{ism} = \beta_{em}x_{ism} + \varepsilon_{ism}, \quad i = 1, \dots, N$$

where N is the number of utilities in the estimation group; $\varepsilon_{ism} \sim (0, x_{ism}^{-1}\sigma^2_{em})$ are the random errors; β_{em} is the regression parameter; y_{ism} is the reported disconnections, reconnections, or final notices; and x_{ism} is the number of residential customers for utility i in month m for state s in estimation group e . For each estimation group, we fit 12 independent monthly models for estimating each of disconnections, reconnections, and final notices.

To impute the quantity of interest y_{ism} , we used

$$\hat{y}_{ism} = \hat{\beta}_{em}x_{ism}$$

To fit the regression model, we used weighted least squares with weight $w_{ism} = \frac{1}{x_{ism}}$. The parameter estimate for estimation group e in month m containing states s is:

$$\hat{\beta}_{em} = \frac{\sum_{s \in e} \sum_{i=1}^n y_{ism}}{\sum_{s \in e} \sum_{i=1}^n x_{ism}}$$

where $i = 1, \dots, n$ is the observed utilities that passed quality assurance checks.

The total \hat{T}_{sm} for state s and month m is estimated as the sum of the reported values that passed quality checks (taken to be units $i = 1$ through n) plus the sum of the imputed values (taken to be units $i = n + 1$ through N , where N is the number of utilities in the frame):

$$\hat{T}_{sm} = \sum_{i=1}^n y_{ism} + \sum_{i=n+1}^N \hat{y}_{ism}$$

Regression diagnostics were reviewed for influential observations, serial correlation, heteroskedasticity, and other patterns which could invalidate the model assumptions. No major departures from the model assumptions were observed. Most of the imputed data were from smaller utilities. When a large respondent is observed to exert an undue influence on the regression parameter, it was classified as an *outlier* or *addon* and was excluded from the parameter estimation process; it was still included in the published aggregates. Certain states in certain months exhibited unique patterns that were not shared by the rest of the estimation group and were classified as their own estimation group for those months. This was due to states that had strict disconnection moratoria during particular months that were not observed in the rest of the estimation group.

Table A.2 in Appendix A has imputation rates by fuel type and variable. The imputation rates are similar to those found in the data files for the monthly Form EIA-923, *Power Plant Operations Report* data file, Form EIA-861M, *Monthly Electric Industry Report*, and the *Residential Energy Consumption Survey*.

Total estimates for customer counts, disconnections, reconnections, and final notices were created by summing EIA-112 reported values that passed quality assurance checks and imputed values.

Relative standard errors (RSEs)

The relative standard error (RSE) for \hat{T}_{sm} , which is an estimate of relative prediction error, is:

$$RSE(\hat{T}_{sm}) = \frac{V(\hat{T}_{sm} - T_{sm})}{\hat{T}_{sm}} = \frac{\sigma_{em}^2 \left(\sum_{i=n+1}^N x_{ism} + \frac{(\sum_{i=n+1}^N x_{ism})^2}{\sum_{s \in e} \sum_{i=1}^n x_{ism}} \right)}{\hat{T}_{sm}}$$

and the residual variance, σ_{em}^2 , is estimated by

$$\hat{\sigma}_{em}^2 = \frac{1}{n-1} \sum_{s \in e} \sum_{i=1}^n \frac{(\hat{\beta}_{em} x_{ism} - y_{ism})^2}{x_{ism}}$$

We include RSE tables for estimates in Appendix C. These RSE values are similar to those found in the *Electric Power Monthly* and the *Residential Energy Consumption Survey*.

Appendix A. Response rates and imputation rates

Table A.1. EIA-112 weighted and unweighted response rates for electricity and gas by state, 2024
Percentage

State	Electricity		Natural gas	
	Weighted response rate	Unweighted response rate	Weighted response rate	Unweighted response rate
Alabama	88.7	60.4	97.0	82.4
Alaska	92.0	100.0	99.0	50.0
Arizona	95.4	71.4	99.7	75.0
Arkansas	96.9	96.4	99.8	66.7
California	98.6	87.5	100.0	91.7
Colorado	97.2	94.1	100.0	81.8
Connecticut	99.3	100.0	100.0	100.0
Delaware	94.9	83.3	100.0	100.0
District of Columbia	100.0	100.0	100.0	100.0
Florida	94.8	82.9	94.9	77.1
Georgia	86.3	81.0	13.4	55.7
Hawaii	100.0	100.0	100.0	100.0
Idaho	96.0	100.0	100.0	100.0
Illinois	95.2	96.6	99.2	77.8
Indiana	77.6	89.6	99.7	84.9
Iowa	87.5	98.0	99.2	87.5
Kansas	83.1	88.9	99.3	66.7
Kentucky	94.2	78.0	60.9	85.3
Louisiana	95.6	89.3	96.3	66.1
Maine	98.4	80.0	81.7	50.0
Maryland	99.8	90.9	97.6	87.5
Massachusetts	95.1	90.5	100.0	91.7
Michigan	97.5	90.3	100.0	100.0
Minnesota	91.0	100.0	99.9	88.9
Mississippi	77.3	48.8	82.1	33.3
Missouri	92.7	94.6	96.1	75.6
Montana	81.4	80.0	99.4	71.4
Nebraska	84.2	100.0	100.0	100.0
Nevada	99.4	100.0	100.0	100.0
New Hampshire	98.4	100.0	100.0	100.0
New Jersey	97.0	83.3	100.0	100.0
New Mexico	81.5	80.0	99.4	80.0
New York	98.6	88.2	99.9	87.5
North Carolina	95.7	85.7	99.2	83.3
North Dakota	94.0	100.0	100.0	80.0
Ohio	96.6	100.0	97.8	87.5

Oklahoma	90.5	87.2	99.4	65.5
Oregon	96.5	100.0	100.0	100.0
Pennsylvania	98.2	100.0	100.0	72.2
Rhode Island	100.0	100.0	100.0	50.0
South Carolina	94.2	94.1	91.3	93.8
South Dakota	59.5	100.0	100.0	100.0
Tennessee	84.9	60.2	83.5	79.4
Texas	85.4	84.4	99.3	65.4
Utah	89.1	79.0	99.9	75.0
Vermont	90.1	100.0	100.0	100.0
Virginia	95.9	85.7	91.5	90.0
Washington	96.8	89.5	100.0	100.0
West Virginia	98.9	100.0	94.2	57.1
Wisconsin	93.0	93.9	99.7	84.6
Wyoming	76.6	75.0	100.0	100.0

Data source: U.S. Energy Information Administration, Form EIA-112, *Residential Utility Disconnections Survey*

Note: Sufficient responses for the purpose of calculating response rates are considered those in which respondents provided customer counts and 12 months of data for at least one data series (disconnections, reconnections, or final notices). Sufficient responses may still have quality assurance check failures. Unweighted response rates are a measure of respondent cooperation, calculated as the number of sufficient responses divided by the number of entities surveyed.

Table A.2. Imputation rates

Utility type	Variable	Imputation rate
Electricity	Disconnections	8.47%
Electricity	Reconnections	8.91%
Electricity	Final Notices	9.97%
Natural gas	Disconnections	11.36%
Natural gas	Reconnections	11.58%
Natural gas	Final Notices	6.12%

Data source: U.S. Energy Information Administration, Form EIA-112, *Residential Utility Disconnections Survey*

Appendix B. Number of residential customers tables

Table B.1. Residential natural gas customers by state, 2024

State	January	February	March	April	May	June	July	August	September	October	November	December	Annual
Alabama	807,384	807,707	806,857	804,067	802,469	798,759	798,593	797,285	796,711	800,108	802,329	806,759	802,419
Alaska	142,640	142,707	142,800	142,887	142,941	143,015	143,138	143,307	143,482	143,686	143,850	143,974	143,202
Arizona	1,438,074	1,440,036	1,441,265	1,440,190	1,440,376	1,439,766	1,441,161	1,443,406	1,445,572	1,448,421	1,453,583	1,458,498	1,444,196
Arkansas	575,519	575,411	574,146	572,011	569,757	567,501	565,987	564,974	564,490	565,502	567,555	571,123	569,498
California	11,324,267	11,329,101	11,332,576	11,336,226	11,339,814	11,337,273	11,339,694	11,340,992	11,343,227	11,346,971	11,348,823	11,366,489	11,340,454
Colorado	1,941,868	1,943,080	1,945,253	1,947,315	1,948,308	1,948,944	1,950,657	1,952,174	1,953,807	1,955,896	1,958,146	1,960,761	1,950,517
Connecticut	595,451	595,031	596,276	595,862	595,181	594,168	595,177	593,736	593,966	595,075	594,028	598,570	595,210
Delaware	201,515	201,956	202,316	202,493	202,946	203,024	203,358	203,640	204,509	204,826	205,487	206,241	203,526
District of Columbia	154,357	154,174	153,849	153,821	153,701	153,559	153,434	153,258	153,059	153,052	153,026	153,461	153,563
Florida	912,508	918,283	917,464	918,339	920,060	924,095	925,928	926,774	929,123	931,457	933,301	935,977	924,442
Georgia	1,923,460	1,923,832	1,924,135	1,924,155	1,924,007	1,924,254	1,924,518	1,924,432	1,924,668	1,923,003	1,922,763	1,923,684	1,923,909
Hawaii	32,530	32,530	32,418	32,438	32,307	32,269	32,263	32,238	32,248	32,215	32,208	32,140	32,317
Idaho	471,457	472,230	472,881	473,154	473,552	473,880	474,354	475,130	476,035	478,001	479,552	480,667	475,074
Illinois	4,001,365	4,004,765	4,004,768	3,998,725	3,991,551	3,985,514	3,980,405	3,977,126	3,975,388	3,982,271	3,995,639	4,007,699	3,992,101
Indiana	1,959,564	1,960,309	1,960,810	1,960,083	1,957,545	1,955,145	1,954,123	1,954,317	1,957,128	1,963,745	1,968,853	1,974,716	1,960,528
Iowa	981,664	982,313	983,042	982,907	982,647	981,244	980,084	981,074	980,676	983,083	985,599	987,608	982,662
Kansas	899,455	899,499	900,481	899,017	895,287	892,849	892,087	889,018	890,375	889,001	892,170	897,193	894,703
Kentucky	802,220	802,630	802,090	801,444	799,395	797,294	796,610	794,940	794,652	796,424	799,027	802,462	799,099
Louisiana	919,515	918,835	919,726	916,506	915,231	911,388	915,750	916,233	914,276	916,184	913,790	918,414	916,321
Maine	36,563	36,643	36,659	36,564	36,194	36,100	35,959	35,885	35,923	36,685	36,832	36,969	36,415
Maryland	1,233,090	1,233,303	1,227,984	1,233,588	1,222,810	1,229,071	1,230,312	1,227,174	1,232,681	1,232,799	1,235,072	1,236,867	1,231,229
Massachusetts	1,609,542	1,606,854	1,607,975	1,608,699	1,607,959	1,580,554	1,574,762	1,597,501	1,588,496	1,586,542	1,578,797	1,572,311	1,593,333
Michigan	3,442,243	3,442,929	3,446,000	3,446,653	3,446,634	3,444,613	3,444,881	3,448,589	3,444,649	3,450,023	3,454,459	3,459,743	3,447,618
Minnesota	1,655,826	1,659,867	1,658,686	1,660,058	1,658,853	1,656,206	1,658,569	1,658,423	1,659,776	1,664,209	1,668,050	1,671,229	1,660,813
Mississippi	456,059	456,735	456,269	456,656	455,350	440,667	441,758	439,797	439,222	451,015	450,294	455,540	449,947
Missouri	1,460,813	1,460,668	1,458,395	1,457,154	1,456,085	1,453,214	1,450,620	1,447,332	1,447,001	1,449,656	1,457,123	1,465,641	1,455,309
Montana	267,241	267,600	267,768	267,925	268,108	268,248	268,248	268,607	268,877	269,487	270,278	270,551	268,578
Nebraska	493,838	493,772	494,216	493,822	493,792	492,662	493,434	493,291	493,050	493,959	494,928	496,157	493,910
Nevada	1,000,201	1,001,388	1,001,792	1,002,545	1,003,282	1,004,161	1,005,432	1,006,843	1,007,623	1,009,185	1,011,591	1,013,742	1,005,649

State	January	February	March	April	May	June	July	August	September	October	November	December	Annual
New Hampshire	116,030	116,051	116,297	116,327	116,289	115,842	115,758	115,654	115,673	116,320	116,703	117,061	116,167
New Jersey	3,008,341	3,002,029	3,000,216	3,010,184	3,003,022	3,012,866	3,006,926	3,019,098	3,013,733	3,018,413	3,016,890	3,027,671	3,011,616
New Mexico	615,236	615,959	616,662	617,018	617,220	615,526	615,674	617,118	617,043	619,107	621,119	621,937	617,468
New York	4,615,607	4,588,336	4,587,562	4,585,779	4,642,924	4,581,583	4,620,747	4,558,922	4,599,191	4,629,785	4,607,805	4,595,414	4,601,138
North Carolina	1,429,610	1,432,489	1,433,967	1,433,706	1,431,726	1,428,953	1,436,049	1,438,572	1,439,136	1,445,926	1,450,823	1,457,963	1,438,243
North Dakota	156,076	156,211	156,252	156,281	156,104	156,007	155,968	156,034	156,147	156,555	156,835	159,135	156,467
Ohio	3,500,329	3,501,582	3,499,809	3,496,237	3,489,826	3,479,661	3,473,804	3,471,667	3,470,901	3,481,266	3,494,294	3,507,084	3,488,872
Oklahoma	993,930	994,916	994,841	994,060	991,994	989,593	987,668	986,368	986,040	987,936	991,969	996,822	991,345
Oregon	869,987	870,558	870,902	871,480	871,528	871,442	870,558	870,466	870,190	872,453	873,972	875,733	871,606
Pennsylvania	2,919,729	2,921,238	2,921,736	2,916,682	2,909,287	2,903,304	2,898,958	2,896,888	2,898,532	2,907,820	2,917,379	2,926,082	2,911,470
Rhode Island	252,772	253,148	253,595	253,598	253,286	252,240	252,145	252,014	251,964	252,307	252,841	253,169	252,757
South Carolina	827,987	835,761	827,484	834,555	820,962	854,171	838,566	841,546	840,297	846,238	846,824	854,238	839,052
South Dakota	206,709	207,003	207,171	207,041	206,724	206,661	206,513	206,679	206,839	207,859	208,843	209,308	207,279
Tennessee	1,270,736	1,268,566	1,280,429	1,280,060	1,280,751	1,278,909	1,277,615	1,275,089	1,276,170	1,279,283	1,284,585	1,289,202	1,278,450
Texas	5,314,095	5,316,476	5,325,902	5,340,855	5,343,094	5,336,397	5,354,117	5,348,863	5,342,166	5,353,229	5,350,689	5,390,520	5,343,034
Utah	1,109,686	1,111,439	1,112,724	1,114,859	1,116,901	1,119,371	1,119,731	1,121,490	1,123,538	1,122,512	1,126,538	1,128,634	1,118,952
Vermont	49,935	49,827	49,978	49,918	50,076	50,159	49,434	49,451	49,370	49,457	49,746	49,931	49,774
Virginia	1,313,117	1,314,085	1,314,068	1,313,102	1,311,388	1,308,494	1,309,772	1,309,883	1,310,186	1,312,875	1,316,040	1,319,707	1,312,726
Washington	1,291,959	1,292,489	1,292,895	1,292,900	1,292,881	1,292,956	1,292,668	1,292,914	1,292,833	1,294,721	1,296,014	1,296,780	1,293,501
West Virginia	346,026	347,330	348,298	348,349	348,279	347,912	348,593	348,914	349,826	352,731	355,121	358,725	350,009
Wisconsin	1,881,335	1,883,227	1,884,400	1,884,956	1,886,820	1,886,114	1,886,613	1,888,232	1,889,717	1,892,021	1,893,367	1,896,514	1,887,776
Wyoming	116,084	116,269	116,379	116,481	116,592	115,120	115,265	115,174	115,231	115,584	115,880	116,248	115,859
U.S. Total	73,945,545	73,959,177	73,980,464	73,999,732	73,993,816	73,872,718	73,904,438	73,868,532	73,905,413	74,066,879	74,151,430	74,353,064	74,000,101

Data source: U.S. Energy Information Administration, Form EIA-112, Residential Utility Disconnections Survey

Note: R=Large relative standard error (RSE) greater than 50; Q=State response rate less than 50%

Table B.2. Residential electricity customers by state, 2024

State	January	February	March	April	May	June	July	August	September	October	November	December	Annual
Alabama	2,384,730	2,388,998	2,391,982	2,393,030	2,395,678	2,398,666	2,402,195	2,404,337	2,404,239	2,405,061	2,406,311	2,410,942	2,398,847
Alaska	298,371	297,933	298,472	299,012	299,655	299,493	300,397	300,897	300,765	301,253	300,675	300,375	299,775
Arizona	3,111,564	3,115,067	3,118,740	3,115,655	3,118,025	3,121,423	3,125,997	3,136,619	3,145,163	3,156,442	3,158,261	3,176,867	3,133,319
Arkansas	1,481,033	1,483,917	1,483,803	1,486,301	1,485,886	1,488,197	1,490,835	1,493,356	1,494,523	1,495,866	1,496,346	1,498,445	1,489,876
California	13,940,225	13,940,964	13,955,606	13,967,903	13,980,032	13,975,401	14,001,909	14,007,269	14,009,621	14,012,590	14,009,974	14,020,116	13,985,134
Colorado	2,571,639	2,576,252	2,579,815	2,583,415	2,586,998	2,589,939	2,593,968	2,597,145	2,599,298	2,602,585	2,605,260	2,608,418	2,591,228
Connecticut	1,592,996	1,594,108	1,598,301	1,600,626	1,602,803	1,603,954	1,604,496	1,602,710	1,603,980	1,604,738	1,605,841	1,606,636	1,601,766
Delaware	488,935	489,400	489,998	490,743	491,473	491,768	492,604	492,985	493,656	494,086	494,119	494,993	492,063
District of Columbia	316,383	316,812	317,391	317,645	317,990	317,950	318,839	319,131	320,427	320,759	320,359	321,677	318,780
Florida	10,452,072	10,481,879	10,508,437	10,532,284	10,546,703	10,568,555	10,597,530	10,613,825	10,623,059	10,633,336	10,648,972	10,663,924	10,572,548
Georgia	4,731,616	4,723,608	4,727,675	4,735,904	4,743,136	4,752,117	4,758,924	4,767,252	4,773,424	4,782,135	4,787,466	4,794,839	4,756,508
Hawaii	446,404	446,477	446,528	446,573	446,768	445,511	446,544	446,426	446,937	446,957	447,111	447,400	446,636
Idaho	853,861	854,936	856,700	858,626	860,446	861,707	863,851	865,870	867,301	868,572	870,006	871,658	862,795
Illinois	5,430,250	5,392,131	5,373,559	5,364,587	5,349,838	5,344,095	5,341,374	5,332,953	5,342,311	5,338,785	5,350,899	5,361,560	5,360,195
Indiana	3,152,117	3,146,344	3,147,822	3,150,681	3,150,962	3,179,061	3,156,283	3,185,582	3,189,233	3,191,628	3,192,660	3,191,047	3,169,452
Iowa	1,447,099	1,447,727	1,449,339	1,450,709	1,453,070	1,453,698	1,455,245	1,456,980	1,457,156	1,458,004	1,458,568	1,459,578	1,453,931
Kansas	1,304,228	1,308,004	1,308,218	1,312,008	1,311,463	1,312,497	1,315,604	1,315,511	1,314,359	1,313,453	1,313,768	1,314,620	1,311,978
Kentucky	2,200,007	2,201,985	2,201,945	2,203,832	2,205,308	2,206,618	2,207,026	2,208,905	2,210,154	2,212,277	2,213,706	2,215,447	2,207,268
Louisiana	2,139,212	2,135,372	2,136,848	2,137,879	2,140,008	2,140,680	2,142,199	2,143,944	2,145,189	2,146,305	2,142,811	2,141,630	2,141,006
Maine	725,337	725,982	726,538	727,058	727,489	727,986	728,487	729,140	729,292	729,623	730,055	730,809	728,150
Maryland	2,440,711	2,440,920	2,431,519	2,443,407	2,442,233	2,455,775	2,444,746	2,441,019	2,451,392	2,451,638	2,454,005	2,457,710	2,446,256
Massachusetts	2,700,906	2,698,867	2,712,360	2,701,108	2,696,565	2,686,439	2,705,407	2,704,786	2,704,954	2,709,021	2,724,082	2,709,665	2,704,513
Michigan	4,528,168	4,526,891	4,530,019	4,532,476	4,536,358	4,537,752	4,541,153	4,547,217	4,542,880	4,545,129	4,546,769	4,549,455	4,538,689
Minnesota	2,581,145	2,583,468	2,585,148	2,588,148	2,592,362	2,593,203	2,595,402	2,598,133	2,600,141	2,603,118	2,604,743	2,606,470	2,594,290
Mississippi	1,348,972	1,349,684	1,350,736	1,351,202	1,351,860	1,354,179	1,355,939	1,355,885	1,355,706	1,355,511	1,355,382	1,354,835	1,353,324
Missouri	2,929,355	2,932,331	2,933,106	2,935,248	2,934,563	2,935,729	2,940,165	2,941,441	2,943,787	2,943,476	2,945,999	2,949,242	2,938,704
Montana	520,250	520,799	521,081	521,466	522,075	522,702	522,895	523,609	524,195	524,882	525,961	526,619	523,045
Nebraska	897,007	892,170	893,411	893,712	894,738	893,982	895,584	894,691	896,107	896,732	896,968	898,447	895,296
Nevada	1,301,474	1,302,017	1,304,453	1,306,735	1,309,122	1,314,051	1,316,129	1,317,884	1,318,718	1,317,861	1,320,273	1,324,890	1,312,801
New Hampshire	654,121	654,976	655,360	655,568	657,779	659,328	659,563	660,525	660,311	659,802	658,953	658,666	657,913

State	January	February	March	April	May	June	July	August	September	October	November	December	Annual
New Jersey	3,727,030	3,713,985	3,706,659	3,724,990	3,724,299	3,735,205	3,725,217	3,749,190	3,742,747	3,745,634	3,741,103	3,752,305	3,732,364
New Mexico	954,442	964,311	963,699	964,671	965,776	955,813	956,644	959,442	959,404	959,284	961,652	961,191	960,527
New York	7,055,136	7,079,367	7,111,593	7,052,412	7,054,292	7,121,850	7,078,382	7,093,965	7,164,686	7,069,215	7,163,256	7,098,820	7,095,248
North Carolina	5,035,754	5,045,326	5,051,207	5,063,376	5,071,390	5,081,143	5,088,070	5,095,440	5,103,695	5,111,447	5,118,486	5,126,210	5,082,629
North Dakota	396,481	396,793	397,115	397,421	397,610	397,627	397,909	398,573	398,345	398,767	399,018	399,130	397,899
Ohio	5,174,648	5,175,480	5,174,580	5,178,490	5,177,113	5,178,442	5,179,577	5,180,905	5,184,375	5,184,627	5,191,945	5,196,095	5,181,356
Oklahoma	1,875,701	1,877,581	1,877,160	1,886,055	1,888,192	1,883,538	1,886,292	1,886,712	1,886,869	1,888,999	1,890,643	1,892,892	1,885,053
Oregon	1,862,582	1,865,423	1,867,991	1,870,001	1,872,589	1,874,944	1,876,911	1,877,335	1,879,829	1,881,999	1,882,963	1,883,788	1,874,696
Pennsylvania	5,526,513	5,527,346	5,527,568	5,528,095	5,526,770	5,520,028	5,520,549	5,517,202	5,520,354	5,525,140	5,524,406	5,533,435	5,524,784
Rhode Island	457,839	458,088	458,693	458,839	458,672	458,231	458,581	458,224	458,307	458,217	458,471	458,460	458,385
South Carolina	2,546,975	2,559,301	2,542,000	2,563,334	2,528,593	2,623,390	2,579,432	2,588,553	2,594,812	2,602,297	2,582,632	2,589,885	2,575,100
South Dakota	428,036	428,153	428,380	428,615	429,094	428,802	429,735	430,324	430,372	430,878	431,368	431,714	429,623
Tennessee	3,147,698	3,147,095	3,156,280	3,158,842	3,166,631	3,170,126	3,172,881	3,173,203	3,176,561	3,178,096	3,180,565	3,181,698	3,167,473
Texas	12,688,177	12,710,298	12,734,058	12,756,887	12,783,311	12,812,466	12,832,940	12,861,232	12,867,386	12,902,998	12,912,897	12,912,778	12,814,619
Utah	1,263,062	1,266,287	1,270,228	1,274,116	1,276,820	1,278,386	1,280,646	1,282,597	1,282,487	1,284,547	1,286,749	1,287,478	1,277,784
Vermont	324,729	324,532	324,414	325,095	326,278	326,845	326,673	327,060	326,962	327,015	326,445	326,294	326,029
Virginia	3,630,572	3,632,983	3,633,374	3,636,557	3,642,349	3,644,403	3,649,523	3,653,595	3,655,295	3,659,422	3,662,647	3,667,719	3,647,370
Washington	3,306,972	3,309,451	3,316,599	3,312,095	3,315,416	3,320,259	3,324,585	3,329,541	3,330,750	3,334,651	3,337,945	3,340,944	3,323,267
West Virginia	868,543	868,296	867,236	866,541	865,881	865,746	865,991	865,920	866,091	866,721	866,771	868,429	866,847
Wisconsin	2,833,358	2,834,785	2,836,739	2,838,810	2,840,140	2,839,508	2,841,220	2,842,861	2,845,238	2,848,850	2,851,106	2,855,049	2,842,305
Wyoming	283,415	283,410	283,833	284,050	284,543	284,672	284,984	285,284	284,880	285,293	285,082	285,093	284,545
U.S. Total	142,357,851	142,438,310	142,564,316	142,672,833	142,747,145	143,033,880	143,078,032	143,263,185	143,427,723	143,465,722	143,642,453	143,716,387	143,033,986

Data source: U.S. Energy Information Administration, Form EIA-112, Residential Utility Disconnections Survey

Note: R=Large relative standard error (RSE) greater than 50; Q=State response rate less than 50%

Appendix C. Relative standard error tables

Table C.1. Relative standard errors for residential natural gas final notices, 2024

State	January	February	March	April	May	June	July	August	September	October	November	December
Alabama	2.62	2.41	2.43	2.49	2.53	3.20	3.67	3.86	4.68	4.51	4.03	3.73
Alaska	17.62	11.36	12.92	20.12	24.30	9.92	8.76	3.32	4.93	2.93	4.56	10.61
Arizona	8.46	12.89	11.51	10.08	11.15	11.55	10.04	13.37	10.53	11.86	11.88	12.26
Arkansas	1.20	1.05	1.03	1.45	1.71	2.42	2.98	3.77	4.10	4.97	4.78	3.54
California	0.02	0.01	0.02	0.08	0.09	0.10	0.10	0.18	0.07	0.05	0.14	0.18
Colorado	1.80	1.25	1.15	0.83	0.86	0.74	0.63	0.86	0.91	0.95	1.16	1.30
Connecticut	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Delaware	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
District of Columbia	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Florida	7.18	6.47	8.63	7.68	7.01	6.11	5.42	5.88	5.97	5.41	6.08	5.66
Georgia	13.30	11.96	12.01	12.15	12.98	13.60	17.90	14.96	16.70	18.53	17.00	15.09
Hawaii	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Idaho	49.35	59.38	55.95	59.91	59.69	56.53	51.91	58.91	66.16	67.23	80.66	60.31
Illinois	11.61	11.93	1.00	0.37	0.34	0.36	0.36	0.34	0.37	0.37	0.91	12.66
Indiana	1.46	1.43	1.17	1.19	1.44	1.59	2.61	2.18	1.58	1.71	1.54	1.83
Iowa	2.59	2.56	2.83	3.14	2.65	3.28	2.66	2.24	2.54	2.76	4.01	3.88
Kansas	1.68	1.66	1.38	1.25	1.63	2.34	2.81	2.64	4.39	3.63	4.93	2.98
Kentucky	15.77	14.95	15.19	14.77	17.31	19.27	21.05	17.54	24.48	22.82	21.34	17.90
Louisiana	1.90	1.58	1.80	1.48	1.70	2.45	2.13	1.71	2.11	1.94	2.40	1.47
Maine	111.30	100.60	26.13	66.32	32.32	22.12	34.90	14.72	53.99	62.85	101.70	174.20
Maryland	3.24	3.18	4.08	3.04	3.18	2.59	2.42	6.73	2.90	2.78	2.62	2.92
Massachusetts	25.88	20.98	20.79	4.85	6.63	2.45	2.68	2.12	3.99	3.50	3.15	5.28
Michigan	0.00	0.00	0.00	0.00	0.00	0.18	0.17	0.14	0.18	0.19	0.26	0.20
Minnesota	3.51	3.91	3.57	3.34	3.64	4.35	7.32	6.01	6.64	6.99	6.11	4.58
Mississippi	9.80	7.64	7.87	7.32	9.69	9.23	11.65	6.66	9.79	12.24	11.86	6.21
Missouri	3.65	3.59	3.05	3.80	4.37	3.49	3.93	4.71	4.44	4.54	5.67	4.84
Montana	3.79	4.01	4.52	2.29	3.07	2.86	2.27	4.67	3.77	4.37	8.39	5.36
Nebraska	10.70	10.72	9.49	8.17	7.53	9.20	9.77	8.13	10.23	14.51	10.77	11.36
Nevada	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

State	January	February	March	April	May	June	July	August	September	October	November	December
New Hampshire	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New Jersey	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New Mexico	1.58	1.52	1.53	1.60	1.83	2.00	2.28	5.51	7.31	7.05	2.37	2.62
New York	6.78	8.05	5.06	4.36	4.60	4.25	4.25	6.34	6.51	6.28	6.43	7.09
North Carolina	5.50	4.22	3.49	2.96	2.94	4.10	52.88	54.20	59.73	74.13	7.34	6.66
North Dakota	0.71	0.99	1.10	0.79	0.88	0.94	0.80	0.78	0.70	0.88	4.20	3.35
Ohio	1.26	1.25	1.23	1.22	1.23	1.23	1.57	1.46	1.27	1.34	1.31	1.31
Oklahoma	3.61	3.60	3.51	3.62	3.29	3.08	3.38	3.55	3.81	4.43	4.32	4.46
Oregon	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pennsylvania	3.74	0.81	1.00	0.80	0.91	1.12	0.60	1.14	1.31	1.11	1.56	5.81
Rhode Island	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
South Carolina	13.69	10.66	8.92	8.29	10.83	13.03	20.09	21.25	20.26	20.41	20.80	16.98
South Dakota	7.98	8.71	7.50	7.60	8.01	9.67	9.96	9.42	9.37	10.78	11.05	11.85
Tennessee	7.33	6.93	6.44	6.39	6.84	7.17	7.39	7.15	7.55	7.90	8.07	7.14
Texas	0.78	0.62	0.62	0.63	0.71	0.80	0.96	0.58	1.06	0.98	1.05	0.84
Utah	2.76	3.11	3.23	3.28	3.05	2.66	3.10	3.38	4.20	3.90	6.42	4.37
Vermont	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Virginia	9.87	8.14	6.17	7.98	7.21	9.05	13.03	14.46	10.08	9.96	20.87	14.76
Washington	9.54	8.33	7.89	8.70	8.03	9.34	13.39	17.33	17.11	18.02	8.35	16.36
West Virginia	10.03	11.21	12.09	8.42	6.67	11.64	16.77	19.53	11.60	10.69	42.01	8.94
Wisconsin	11.95	10.73	11.39	2.64	2.17	1.87	2.03	4.68	1.94	2.50	18.43	18.12
Wyoming	3.22	3.40	2.48	1.47	1.13	3.64	2.96	5.13	5.04	7.51	11.12	9.27
U.S. total	1.13	1.00	0.92	0.88	0.91	0.95	0.88	1.04	1.12	1.12	1.22	1.21

Data source: U.S. Energy Information Administration, Form EIA-112, Residential Utility Disconnections Survey

Table C.2. Relative standard errors for residential electricity final notices, 2024

State	January	February	March	April	May	June	July	August	September	October	November	December
Alabama	5.56	5.72	5.64	5.32	5.54	5.33	5.49	5.20	5.25	5.58	5.54	5.66
Alaska	19.82	25.46	23.92	18.07	18.26	19.27	15.48	18.63	20.32	23.05	26.20	22.50
Arizona	3.76	3.90	4.92	6.16	7.01	9.35	7.09	5.11	8.25	5.25	5.71	4.05
Arkansas	2.86	3.02	3.26	2.95	2.95	3.01	2.94	3.55	3.18	3.74	3.54	3.02
California	3.32	3.22	2.85	3.01	3.32	3.60	3.36	2.96	2.75	2.27	2.47	2.36
Colorado	4.25	4.19	3.93	3.52	4.10	3.90	4.08	4.69	4.26	4.04	3.90	3.59
Connecticut	1.92	1.32	2.11	2.50	2.47	1.50	1.16	1.82	3.07	2.47	2.45	2.79
Delaware	10.54	7.16	9.39	8.80	10.90	9.74	8.97	10.10	21.12	13.80	13.56	16.22
District of Columbia	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Florida	1.23	1.29	1.28	1.36	1.24	1.18	1.23	1.19	1.23	1.30	1.22	1.29
Georgia	2.43	2.01	2.32	2.36	2.19	2.09	2.23	2.14	2.15	2.16	1.97	2.29
Hawaii	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Idaho	5.99	5.54	5.22	4.96	4.79	5.63	5.35	5.10	4.72	4.62	5.49	6.70
Illinois	2.64	7.02	3.89	2.63	2.91	2.78	2.24	1.22	1.38	1.23	1.36	1.59
Indiana	5.06	4.78	4.46	4.13	3.96	4.24	4.50	5.78	4.41	4.39	5.14	4.49
Iowa	7.12	7.28	6.51	5.65	5.74	5.74	6.42	5.47	5.64	5.35	6.88	6.75
Kansas	18.25	20.66	18.45	15.53	17.00	17.37	16.83	13.22	13.58	12.61	15.34	18.53
Kentucky	3.12	3.09	3.15	3.08	3.11	3.06	3.29	3.13	3.20	3.26	3.13	3.31
Louisiana	2.94	2.54	2.25	2.39	2.34	2.55	2.77	2.27	2.14	2.04	2.02	2.83
Maine	0.00	0.00	0.00	6.65	3.90	4.19	3.52	3.96	4.64	5.12	37.33	0.00
Maryland	0.59	0.63	0.84	0.67	0.67	0.69	0.70	3.85	0.49	0.56	0.56	0.61
Massachusetts	4.82	4.37	4.53	4.39	5.53	7.50	6.67	5.12	6.86	5.39	6.05	6.83
Michigan	1.34	1.32	1.13	0.94	0.76	0.99	0.88	0.81	1.02	1.10	1.37	1.46
Minnesota	2.69	2.86	2.40	2.39	2.54	2.73	2.71	2.63	3.14	2.73	2.81	2.73
Mississippi	8.57	9.28	8.05	8.69	8.63	8.43	7.87	7.83	7.83	7.87	7.33	7.84
Missouri	3.44	3.48	3.18	2.94	3.22	2.83	2.77	2.48	2.45	2.59	2.80	4.28
Montana	51.10	51.65	58.38	25.80	36.27	34.56	30.54	36.54	30.10	31.13	75.95	58.90
Nebraska	7.83	5.89	7.62	4.94	5.16	5.90	5.67	4.03	5.24	4.28	5.47	6.31
Nevada	2.39	2.37	1.91	2.22	2.25	2.11	2.19	1.85	1.89	1.75	1.78	2.26
New Hampshire	26.00	23.94	28.16	8.06	13.98	10.92	11.27	8.62	7.95	8.49	17.87	36.08

State	January	February	March	April	May	June	July	August	September	October	November	December
New Jersey	2.28	1.72	1.73	2.55	2.28	2.41	2.05	1.46	1.92	2.12	1.76	2.64
New Mexico	7.13	6.11	6.56	7.48	7.14	7.63	6.86	6.80	6.49	6.26	6.49	7.00
New York	8.68	9.77	3.30	2.50	2.86	2.84	3.16	3.24	3.43	3.52	3.70	4.53
North Carolina	3.88	2.63	3.63	3.47	2.88	2.79	3.66	2.88	3.55	3.06	3.18	4.08
North Dakota	11.28	11.09	9.87	10.62	10.80	11.49	12.13	11.59	12.49	10.84	11.06	11.47
Ohio	1.64	1.56	1.56	1.61	1.58	1.83	1.66	1.94	1.90	1.75	1.68	1.77
Oklahoma	2.46	2.37	2.41	2.80	2.96	2.49	2.57	2.26	2.57	2.31	2.36	2.77
Oregon	11.41	10.78	9.66	9.41	10.27	9.39	10.99	11.50	11.97	11.69	12.65	11.98
Pennsylvania	3.50	5.08	2.30	0.99	1.06	0.97	0.62	0.58	0.67	0.51	0.71	3.64
Rhode Island	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
South Carolina	4.45	3.61	3.96	3.76	3.59	3.75	4.02	3.43	5.05	5.75	3.95	4.05
South Dakota	21.24	20.49	19.91	16.03	15.49	18.13	17.61	16.47	16.43	17.33	20.90	21.99
Tennessee	4.57	4.70	4.51	4.61	4.59	4.53	4.52	4.48	4.58	4.61	4.41	4.66
Texas	7.87	7.64	7.81	8.68	8.27	7.96	8.59	7.66	7.56	7.75	7.77	8.18
Utah	17.54	18.86	18.94	14.24	15.77	15.66	15.82	17.66	15.70	15.95	16.82	14.86
Vermont	9.10	9.03	9.15	8.96	8.91	8.98	7.68	8.95	9.00	8.76	8.86	9.08
Virginia	2.82	2.39	2.81	2.18	2.38	2.57	3.57	3.18	3.24	3.23	3.03	3.55
Washington	4.99	5.49	4.96	4.65	4.33	4.22	4.53	5.57	5.66	5.92	4.84	4.69
West Virginia	2.44	1.92	2.34	2.26	2.11	2.21	2.16	1.91	2.39	1.95	2.27	2.78
Wisconsin	10.05	10.04	9.69	2.93	2.61	2.74	2.40	2.50	2.56	3.53	12.55	11.83
Wyoming	34.57	36.55	28.16	25.32	26.87	26.49	24.63	26.26	25.97	25.21	28.87	26.18
U.S. Total	0.81	0.80	0.76	0.75	0.73	0.75	0.82	0.75	0.74	0.74	0.75	0.82

Data source: U.S. Energy Information Administration, Form EIA-112, *Residential Utility Disconnections Survey*

Table C.3. Relative standard errors for residential natural gas disconnections, 2024

State	January	February	March	April	May	June	July	August	September	October	November	December
Alabama	9.08	8.36	4.68	4.53	4.79	5.12	4.78	4.36	4.45	4.53	5.56	7.42
Alaska	21.48	19.74	16.30	16.56	15.17	13.15	12.66	12.92	14.70	16.85	22.56	22.36
Arizona	3.85	3.52	4.27	5.74	8.41	11.11	40.34	78.13	17.78	6.71	7.20	2.50
Arkansas	4.20	3.87	3.89	4.15	4.30	4.53	5.88	8.67	5.17	7.33	7.97	7.65
California	4.37	3.01	2.28	2.51	2.15	1.98	2.23	1.33	1.48	1.58	1.91	2.87
Colorado	9.78	8.73	7.51	6.12	5.72	5.06	4.22	3.48	3.09	3.74	5.67	8.80
Connecticut	2.96	1.78	3.12	3.31	3.81	2.53	1.89	2.68	2.92	2.43	2.79	2.90
Delaware	17.89	7.92	10.85	6.03	8.43	6.00	7.29	12.08	7.89	10.40	4.44	15.55
District of Columbia	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Florida	1.45	2.01	1.91	2.21	1.71	1.28	1.18	1.50	1.38	2.45	1.39	1.19
Georgia	7.89	4.59	5.24	4.91	4.90	4.69	5.30	4.91	5.58	10.60	10.88	12.42
Hawaii	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Idaho	5.10	4.84	3.78	4.63	4.54	4.91	8.08	4.52	4.48	3.52	5.36	5.06
Illinois	10.16	7.97	7.51	1.70	2.25	1.77	1.62	0.46	0.49	0.37	0.64	22.61
Indiana	5.93	5.25	4.99	4.69	4.33	4.81	4.98	4.57	4.89	4.80	5.31	6.19
Iowa	7.71	5.23	4.86	3.67	5.01	3.66	4.33	4.23	4.01	3.49	8.80	8.10
Kansas	30.04	23.10	19.30	4.54	6.77	9.21	9.81	8.13	5.98	6.12	26.57	34.00
Kentucky	3.60	3.15	3.75	4.53	4.82	6.17	4.11	5.10	4.40	4.52	4.62	4.57
Louisiana	2.58	3.19	3.02	3.34	3.69	3.73	4.67	7.13	4.01	3.40	4.25	3.06
Maine	5.06	5.06	4.26	6.11	1.52	1.98	13.43	5.05	5.06	4.97	7.32	4.26
Maryland	0.56	1.05	2.38	0.82	0.57	0.69	1.05	2.26	1.02	0.62	0.41	0.41
Massachusetts	13.34	15.80	4.12	6.20	6.12	7.34	6.45	6.42	5.09	7.78	4.58	11.43
Michigan	2.39	2.36	2.38	2.08	1.72	2.31	2.19	2.58	2.21	1.99	2.91	5.61
Minnesota	3.99	4.87	4.70	3.57	1.99	1.81	1.74	1.67	3.48	3.10	3.64	4.34
Mississippi	8.53	9.65	9.36	9.34	9.92	10.26	12.16	18.91	11.16	11.98	13.05	9.24
Missouri	7.84	5.07	4.63	3.73	4.20	4.93	6.13	4.04	3.40	3.47	6.10	11.40
Montana	6.14	5.41	3.77	3.40	8.09	8.57	7.15	7.29	6.74	6.31	17.33	7.21
Nebraska	10.72	5.40	7.76	5.81	5.71	7.69	6.24	8.25	5.12	6.97	7.70	10.47
Nevada	1.63	2.47	1.74	1.42	1.96	2.37	6.16	2.09	1.34	1.48	1.46	1.60
New Hampshire	20.64	17.39	14.35	3.60	2.37	5.86	24.12	12.15	9.74	9.43	14.63	65.13

State	January	February	March	April	May	June	July	August	September	October	November	December
New Jersey	9.04	5.50	1.13	2.49	1.74	3.82	2.94	2.22	1.27	2.11	1.74	1.46
New Mexico	17.83	14.50	13.46	13.75	13.38	15.36	14.15	12.59	13.17	13.11	13.14	18.74
New York	10.41	7.57	6.37	5.10	3.00	4.27	9.79	7.51	6.86	9.74	13.32	9.08
North Carolina	4.78	3.42	4.16	4.17	3.68	3.28	3.63	3.51	4.29	4.64	4.71	4.73
North Dakota	9.12	11.43	9.70	6.55	6.21	5.08	5.56	5.28	5.19	6.83	8.56	9.14
Ohio	3.51	2.79	2.56	2.28	1.96	2.52	2.42	2.95	2.34	2.37	4.06	3.76
Oklahoma	4.21	3.62	3.20	3.82	3.19	3.49	3.32	3.56	2.95	2.64	3.25	4.20
Oregon	15.12	10.19	9.23	9.25	7.53	6.79	7.08	6.71	7.59	8.93	9.62	18.85
Pennsylvania	9.54	6.93	4.72	0.60	0.52	0.69	0.47	0.41	0.42	0.39	0.60	9.40
Rhode Island	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
South Carolina	6.20	5.02	5.27	5.27	5.43	5.37	5.41	5.02	6.72	9.97	5.79	5.64
South Dakota	21.86	18.25	18.74	19.85	17.52	18.34	23.95	16.67	16.15	16.30	28.30	19.29
Tennessee	5.35	5.23	5.05	4.56	4.96	5.17	5.60	6.01	5.47	5.10	5.49	5.63
Texas	1.49	1.53	1.26	1.33	1.46	1.46	2.69	2.29	1.39	1.13	1.23	1.19
Utah	30.61	27.97	25.37	17.66	18.80	18.55	19.43	20.98	16.92	23.32	19.85	26.91
Vermont	35.22	23.31	27.40	9.70	7.90	19.51	54.65	39.17	39.19	32.83	258.20	112.70
Virginia	1.55	1.02	0.83	0.84	0.81	1.28	1.64	1.53	0.90	1.84	2.84	2.66
Washington	7.27	7.47	6.76	5.76	5.80	5.28	6.79	7.28	6.59	7.00	7.06	5.87
West Virginia	12.00	4.69	3.35	2.64	2.53	2.86	2.90	3.05	2.89	3.54	5.39	7.08
Wisconsin	40.24	36.01	33.48	3.86	1.60	1.29	1.19	1.15	1.80	1.17	35.57	40.15
Wyoming	12.33	11.96	13.37	14.01	13.43	12.88	10.58	10.25	11.33	14.88	82.44	42.36
U.S. total	0.83	0.80	0.71	0.67	0.64	0.65	0.79	0.76	0.65	0.67	0.72	0.75

Data source: U.S. Energy Information Administration, Form EIA-112, *Residential Utility Disconnections Survey*

Table C.4. Relative standard errors for residential electricity disconnections, 2024

State	January	February	March	April	May	June	July	August	September	October	November	December
Alabama	9.08	8.36	4.68	4.53	4.79	5.12	4.78	4.36	4.45	4.53	5.56	7.42
Alaska	21.48	19.74	16.30	16.56	15.17	13.15	12.66	12.92	14.70	16.85	22.56	22.36
Arizona	3.85	3.52	4.27	5.74	8.41	11.11	40.34	78.13	17.78	6.71	7.20	2.50
Arkansas	4.20	3.87	3.89	4.15	4.30	4.53	5.88	8.67	5.17	7.33	7.97	7.65
California	4.37	3.01	2.28	2.51	2.15	1.98	2.23	1.33	1.48	1.58	1.91	2.87
Colorado	9.78	8.73	7.51	6.12	5.72	5.06	4.22	3.48	3.09	3.74	5.67	8.80
Connecticut	2.96	1.78	3.12	3.31	3.81	2.53	1.89	2.68	2.92	2.43	2.79	2.90
Delaware	17.89	7.92	10.85	6.03	8.43	6.00	7.29	12.08	7.89	10.40	4.44	15.55
District of Columbia	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Florida	1.45	2.01	1.91	2.21	1.71	1.28	1.18	1.50	1.38	2.45	1.39	1.19
Georgia	7.89	4.59	5.24	4.91	4.90	4.69	5.30	4.91	5.58	10.60	10.88	12.42
Hawaii	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Idaho	5.10	4.84	3.78	4.63	4.54	4.91	8.08	4.52	4.48	3.52	5.36	5.06
Illinois	10.16	7.97	7.51	0.87	2.25	1.77	1.62	0.46	0.49	0.37	0.64	22.61
Indiana	5.93	5.25	4.99	4.69	4.33	4.81	4.98	4.57	4.89	4.80	5.31	6.19
Iowa	7.71	5.23	4.86	3.67	5.01	3.66	4.33	4.23	4.01	3.49	8.80	8.10
Kansas	30.04	23.10	19.30	4.54	6.77	9.21	9.81	8.13	5.98	6.12	26.57	34.00
Kentucky	3.60	3.15	3.75	4.53	4.82	6.17	4.11	5.10	4.40	4.52	4.62	4.57
Louisiana	2.58	3.19	3.02	3.34	3.69	3.73	4.67	7.13	4.01	3.40	4.25	3.06
Maine	5.06	5.06	4.26	6.11	1.52	1.98	13.43	5.05	5.06	4.97	7.32	4.26
Maryland	0.56	1.05	2.38	0.82	0.57	0.69	1.05	2.26	1.02	0.62	0.41	0.41
Massachusetts	13.34	15.80	4.12	6.20	6.12	7.34	6.45	6.42	5.09	7.78	4.58	11.43
Michigan	2.39	2.36	2.38	2.08	1.72	2.31	2.19	2.58	2.21	1.99	2.91	5.61
Minnesota	3.99	4.87	4.70	3.57	1.99	1.81	1.74	1.67	3.48	3.10	3.64	4.34
Mississippi	8.53	9.65	9.36	9.34	9.92	10.26	12.16	18.91	11.16	11.98	13.05	9.24
Missouri	7.84	5.07	4.63	3.73	4.20	4.93	6.13	4.04	3.40	3.47	6.10	11.40
Montana	6.14	5.41	3.77	3.40	8.09	8.57	7.15	7.29	6.74	6.31	17.33	7.21
Nebraska	10.72	5.40	7.76	5.81	5.71	7.69	6.24	8.25	5.12	6.97	7.70	10.47
Nevada	1.63	2.47	1.74	1.42	1.96	2.37	6.16	2.09	1.34	1.48	1.46	1.60
New Hampshire	20.64	17.39	14.35	3.60	2.37	5.86	24.12	12.15	9.74	9.43	14.63	65.13

State	January	February	March	April	May	June	July	August	September	October	November	December
New Jersey	9.04	5.50	1.13	2.49	1.74	3.82	2.94	2.22	1.27	2.11	1.74	1.46
New Mexico	17.83	14.50	13.46	13.75	13.38	15.36	14.15	12.59	13.17	13.11	13.14	18.74
New York	10.41	7.57	6.37	5.10	3.00	4.27	9.79	7.51	6.86	9.74	13.32	9.08
North Carolina	4.78	3.42	4.16	4.17	3.68	3.28	3.63	3.51	4.29	4.64	4.71	4.73
North Dakota	9.12	11.43	9.70	6.55	6.21	5.08	5.56	5.28	5.19	6.83	8.56	9.14
Ohio	3.51	2.79	2.56	2.28	1.96	2.52	2.42	2.95	2.34	2.37	4.06	3.76
Oklahoma	4.21	3.62	3.20	3.82	3.19	3.49	3.32	3.56	2.95	2.64	3.25	4.20
Oregon	15.12	10.19	9.23	9.25	7.53	6.79	7.08	6.71	7.59	8.93	9.62	18.85
Pennsylvania	9.54	6.93	4.72	0.60	0.52	0.69	0.47	0.41	0.42	0.39	0.60	9.40
Rhode Island	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
South Carolina	6.20	5.02	5.27	5.27	5.43	5.37	5.41	5.02	6.72	9.97	5.79	5.64
South Dakota	21.86	18.25	18.74	19.85	17.52	18.34	23.95	16.67	16.15	16.30	28.30	19.29
Tennessee	5.35	5.23	5.05	4.56	4.96	5.17	5.60	6.01	5.47	5.10	5.49	5.63
Texas	1.49	1.53	1.26	1.33	1.46	1.46	2.69	2.29	1.39	1.13	1.23	1.19
Utah	30.61	27.97	25.37	17.66	18.80	18.55	19.43	20.98	16.92	23.32	19.85	26.91
Vermont	35.22	23.31	27.40	9.70	7.90	19.51	54.65	39.17	39.19	32.83	258.20	112.70
Virginia	1.55	1.02	0.83	0.84	0.81	1.28	1.64	1.53	0.90	1.84	2.84	2.66
Washington	7.27	7.47	6.76	5.76	5.80	5.28	6.79	7.28	6.59	7.00	7.06	5.87
West Virginia	12.00	4.69	3.35	2.64	2.53	2.86	2.90	3.05	2.89	3.54	5.39	7.08
Wisconsin	40.24	36.01	33.48	3.86	1.60	1.29	1.19	1.15	1.80	1.17	35.57	40.15
Wyoming	12.33	11.96	13.37	14.01	13.43	12.88	10.58	10.25	11.33	14.88	82.44	42.36
U.S. Total	0.83	0.80	0.71	0.67	0.64	0.65	0.79	0.76	0.65	0.67	0.72	0.75

Data source: U.S. Energy Information Administration, Form EIA-112, *Residential Utility Disconnections Survey*

Table C.5. Relative standard errors for residential natural gas reconnections, 2024

State	January	February	March	April	May	June	July	August	September	October	November	December
Alabama	3.79	3.64	3.82	3.36	3.74	3.46	4.33	3.38	3.49	3.38	3.21	3.37
Alaska	0.00	0.00	0.00	84.72	15.14	9.25	8.35	8.30	8.64	21.94	70.26	0.00
Arizona	2.03	1.93	2.03	2.71	3.10	3.03	5.60	8.18	5.20	2.28	5.39	5.45
Arkansas	3.07	1.44	1.00	1.15	1.44	1.53	1.79	1.76	1.84	1.58	1.39	1.63
California	1.38	1.28	1.27	0.97	0.93	0.84	0.78	0.81	0.86	0.89	7.87	7.82
Colorado	23.90	10.43	2.16	2.50	2.44	2.77	2.52	3.24	3.33	3.80	12.03	12.92
Connecticut	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Delaware	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
District of Columbia	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Florida	10.77	5.41	6.33	5.98	8.18	5.57	3.78	3.78	8.65	10.01	3.85	3.95
Georgia	16.48	12.47	12.14	11.38	13.02	13.17	14.91	13.55	14.25	13.85	12.82	16.02
Hawaii	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Idaho	51.01	37.17	41.92	43.54	45.44	108.50	89.20	74.15	64.06	27.60	38.28	70.98
Illinois	1.36	3.58	5.59	0.35	0.34	0.32	0.27	0.22	0.19	0.22	0.30	0.79
Indiana	1.62	1.27	1.34	1.92	2.68	4.08	3.57	4.10	2.87	1.97	1.62	1.64
Iowa	15.46	11.96	9.27	5.09	3.78	4.42	4.56	4.82	4.70	4.70	8.76	24.36
Kansas	1.99	10.08	5.66	0.46	1.78	1.92	2.06	1.09	2.99	1.96	1.53	2.81
Kentucky	17.30	12.66	14.50	11.61	10.50	14.23	27.11	17.07	17.96	15.12	14.33	25.94
Louisiana	7.34	3.86	3.70	5.15	5.09	4.78	7.57	8.98	6.68	9.33	10.22	7.37
Maine	0.00	0.00	0.00	23.92	21.99	28.88	17.85	17.73	18.58	23.08	26.53	0.00
Maryland	28.36	35.93	47.42	7.80	10.90	11.65	7.40	7.58	10.98	11.02	18.06	28.33
Massachusetts	21.66	42.71	42.51	24.95	9.70	16.63	10.41	5.27	4.63	4.81	4.86	10.48
Michigan	0.35	0.26	0.22	0.28	0.30	0.92	0.74	0.91	0.88	1.01	1.37	2.01
Minnesota	2.03	2.64	4.70	5.56	1.43	1.60	2.16	1.68	2.26	1.80	2.19	2.61
Mississippi	14.34	10.54	9.63	8.17	11.57	13.26	16.79	14.54	12.85	19.02	16.74	19.98
Missouri	4.02	4.83	4.36	5.78	18.23	13.77	5.14	4.17	4.10	2.41	1.57	1.77
Montana	5.28	2.33	2.49	2.32	2.10	2.30	2.34	2.66	2.56	2.27	4.44	4.47
Nebraska	14.63	6.20	4.76	3.34	4.30	5.32	3.67	5.89	3.75	4.04	4.54	25.78
Nevada	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New Hampshire	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

State	January	February	March	April	May	June	July	August	September	October	November	December
New Jersey	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New Mexico	2.99	2.45	2.69	3.06	2.26	3.14	2.64	3.72	3.74	6.51	3.82	6.16
New York	28.34	21.86	13.78	10.12	8.81	6.90	7.70	6.90	7.17	10.24	30.09	11.29
North Carolina	2.80	1.94	2.47	1.60	1.40	3.24	9.40	6.31	7.53	4.40	5.14	8.12
North Dakota	11.66	39.39	2,527.00	8.83	1.89	2.20	2.29	2.01	1.76	1.72	14.87	63.85
Ohio	2.64	2.42	2.44	3.50	4.38	5.23	4.50	4.30	3.05	1.64	1.80	1.71
Oklahoma	2.40	1.77	2.10	2.08	2.39	2.25	2.02	1.98	2.06	1.93	1.59	2.10
Oregon	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pennsylvania	0.26	0.72	0.77	0.26	0.29	0.32	0.36	0.25	0.31	0.25	0.20	0.32
Rhode Island	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
South Carolina	6.18	5.31	4.73	4.69	5.69	7.80	6.26	7.70	9.18	21.00	5.71	5.66
South Dakota	12.16	12.17	10.01	4.06	4.23	4.37	3.93	4.10	4.42	5.03	41.76	20.01
Tennessee	8.53	7.48	7.74	7.58	8.95	8.94	9.55	9.91	9.01	8.64	8.42	9.77
Texas	0.68	0.61	0.48	0.52	0.75	0.72	1.27	0.73	0.85	0.74	0.76	1.04
Utah	1.84	1.34	1.23	1.47	1.02	1.14	1.14	1.32	1.63	1.73	1.94	3.47
Vermont	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Virginia	22.88	11.28	10.20	10.96	9.63	9.82	14.13	10.27	13.49	19.39	12.94	55.34
Washington	18.70	16.68	15.86	12.69	12.71	10.29	9.39	12.53	16.96	19.44	23.46	12.43
West Virginia	8.68	9.39	11.52	11.47	10.16	9.80	6.02	6.36	6.43	6.80	7.80	8.40
Wisconsin	2.37	1.20	2.61	6.43	3.75	5.87	2.91	4.56	6.17	2.42	1.73	1.33
Wyoming	151.60	149.10	602.00	31.18	13.61	15.86	14.73	13.47	19.50	21.06	71.77	291.90
U.S. total	2.00	1.66	1.56	1.23	1.45	1.40	1.70	1.39	1.35	1.37	1.40	1.96

Data source: U.S. Energy Information Administration, Form EIA-112, Residential Utility Disconnections Survey

Table C.6. Relative standard errors for residential electricity reconnections, 2024

State	January	February	March	April	May	June	July	August	September	October	November	December
Alabama	6.22	10.24	8.33	5.08	4.63	5.68	6.03	4.93	5.20	4.64	5.63	6.47
Alaska	21.68	21.65	21.61	20.37	17.06	13.85	15.52	15.94	14.85	17.10	23.00	23.18
Arizona	14.81	12.13	15.29	20.12	30.02	80.97	44.01	63.41	19.92	7.99	8.15	3.37
Arkansas	4.50	4.01	3.85	4.11	4.55	4.35	5.97	7.97	5.47	7.96	8.41	7.76
California	5.01	3.55	2.78	2.89	2.47	2.32	2.60	1.59	1.76	1.80	2.25	3.16
Colorado	9.23	6.44	6.22	5.31	4.93	4.72	4.35	2.94	3.08	2.86	4.43	7.55
Connecticut	3.24	2.14	3.30	2.99	4.13	3.34	2.24	3.02	3.50	2.71	2.59	3.16
Delaware	21.42	9.63	13.45	6.22	10.00	13.83	8.15	14.54	9.52	13.49	4.49	16.56
District of Columbia	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Florida	1.54	2.15	2.21	2.35	1.83	1.36	1.33	1.66	1.50	2.50	1.45	1.25
Georgia	8.67	5.46	6.10	5.47	5.56	5.31	6.19	5.81	6.58	11.02	11.25	12.59
Hawaii	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Idaho	5.31	5.07	3.98	4.98	4.58	5.01	8.12	4.67	4.48	3.62	5.33	5.15
Illinois	10.72	8.93	8.78	1.08	2.37	2.02	1.74	0.48	0.59	0.45	0.55	10.64
Indiana	6.71	5.99	5.61	5.50	5.02	5.49	5.69	5.10	5.49	5.32	5.70	6.85
Iowa	9.38	7.22	6.50	3.78	5.30	3.83	4.41	4.25	4.16	3.74	9.44	10.15
Kansas	30.13	24.57	22.16	7.86	7.35	10.22	12.20	9.01	7.04	6.95	23.78	32.67
Kentucky	4.02	3.52	3.73	4.72	5.18	6.52	4.51	5.35	4.84	4.97	5.02	4.95
Louisiana	2.64	3.26	2.88	3.34	3.71	3.47	4.68	6.70	4.14	3.68	4.16	3.27
Maine	0.00	0.00	0.00	6.11	1.66	1.35	5.21	2.23	2.77	2.47	10.10	5.06
Maryland	0.66	1.01	2.73	1.04	0.68	0.80	1.17	2.73	1.33	0.77	0.45	0.49
Massachusetts	12.21	14.14	4.25	6.71	6.28	7.74	6.87	6.37	5.00	7.74	4.25	10.56
Michigan	3.70	2.62	2.64	2.50	2.07	2.64	2.55	2.89	2.48	2.39	3.21	6.14
Minnesota	4.51	5.45	5.11	4.02	2.05	1.85	1.81	1.73	3.50	3.25	3.85	4.54
Mississippi	8.90	10.04	9.33	9.35	10.22	9.86	12.77	17.65	11.77	13.01	13.63	9.80
Missouri	11.50	6.85	6.09	5.10	5.36	6.36	7.79	5.08	4.18	4.24	7.57	15.41
Montana	6.04	5.77	4.06	3.76	8.41	8.00	8.64	9.49	6.87	4.93	8.52	3.77
Nebraska	14.40	6.42	7.93	7.13	6.62	8.13	7.31	9.12	6.90	7.88	8.66	10.03
Nevada	1.66	2.60	1.61	1.42	2.04	2.31	6.09	1.99	1.38	1.52	1.46	1.66
New Hampshire	21.86	16.84	14.97	3.54	2.98	4.76	12.61	5.88	6.37	5.45	2.96	23.55

State	January	February	March	April	May	June	July	August	September	October	November	December
New Jersey	4.98	6.01	2.78	2.38	1.64	3.38	2.79	2.23	1.26	2.20	1.66	1.27
New Mexico	33.11	21.76	20.16	21.96	18.67	23.49	19.90	15.71	18.96	15.53	17.01	31.00
New York	10.43	7.91	6.75	5.38	3.68	3.65	7.53	4.67	4.80	6.38	3.36	3.86
North Carolina	4.90	3.94	4.57	4.54	4.06	3.81	4.14	3.96	4.73	5.02	4.94	5.29
North Dakota	12.89	14.25	12.69	9.96	7.62	6.10	6.91	6.59	6.40	8.44	11.12	10.82
Ohio	4.11	3.17	2.98	2.77	2.31	2.92	2.82	3.20	2.67	2.60	4.08	4.27
Oklahoma	4.21	4.54	3.93	4.23	4.51	5.00	4.36	4.42	3.88	3.18	4.00	5.08
Oregon	17.88	11.32	10.88	10.59	8.32	7.43	7.74	7.22	8.43	9.66	10.67	19.58
Pennsylvania	10.19	8.38	5.41	0.76	0.50	0.59	0.44	0.34	0.38	0.41	0.41	6.32
Rhode Island	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
South Carolina	6.80	5.86	5.86	5.90	6.32	6.46	6.66	5.89	7.67	11.38	6.53	6.39
South Dakota	23.07	18.49	19.33	21.49	18.51	19.00	24.22	17.10	16.41	16.47	27.08	19.59
Tennessee	5.31	5.40	4.98	4.60	5.07	5.04	5.65	5.65	5.22	5.28	5.55	5.76
Texas	1.73	1.75	1.48	1.50	1.68	1.43	2.76	2.29	1.65	1.30	1.32	1.33
Utah	27.57	20.51	20.51	13.05	13.71	15.25	15.37	15.31	14.80	15.30	15.20	23.97
Vermont	38.13	22.10	24.28	8.14	8.57	12.80	25.37	18.41	23.34	17.67	69.38	62.26
Virginia	1.85	1.17	0.82	0.84	0.81	1.31	1.68	1.57	0.96	2.05	3.04	2.97
Washington	6.35	5.45	5.42	4.37	4.47	4.59	5.39	5.36	5.53	4.66	5.33	4.94
West Virginia	13.70	5.65	4.62	3.03	2.89	3.23	3.34	3.21	3.20	3.73	5.16	7.76
Wisconsin	14.59	15.87	17.82	4.76	1.44	1.29	1.21	1.14	1.72	1.05	2.68	3.08
Wyoming	16.00	16.43	17.56	20.13	16.39	14.31	12.47	11.58	12.06	10.61	77.84	33.57
U.S. total	0.95	0.91	0.84	0.78	0.75	0.69	0.82	0.76	0.70	0.72	0.74	0.79

Data source: U.S. Energy Information Administration, Form EIA-112, Residential Utility Disconnections Survey