

Crisis in Energy Affordability
Summer Shutoff Protections and Bill Support Fail to Adapt to a Warming World
July 2024

Key Findings

State shut-off rules to help families stay connected to cooling during periods of extreme temperatures have not kept pace with the realities of climate change. Many were written decades ago when in many parts of the country dangerous temperatures were limited to short-term heat waves and the demand for electricity to run cooling systems was much lower because fewer families had access to air-conditioning. This issue brief provides background on why energy is becoming less affordable to low income families, and the limitations of current federal funding programs and state shut-off rules to protect families during periods of high summer temperatures.

- **Low income families struggle to pay their home energy bills. The rapid increase in the cost of basic goods – food, shelter and energy – have placed millions of low income families in the precarious position of having to choose between paying their home energy bill and food, rent and medicine.** While the overall rate of inflation is finally starting to come down, the impact of rapidly rising prices in the last year have taken their toll.
- **Summer shut-off protections are only required by 19 states and DC. About 49% of the US population (164.2 million) of the US population (334.9 million) live in the 31 states with no summer shut-off protections.** Of the 92.3 million people with incomes of less than 200 percent of the federal poverty level, 45.2 million (49.0 percent) live in the states with no shut-off protections. (See page 8)
- **The lack of shut-off protections will put millions of low income families at risk of shut-off this summer** as the cost of home cooling continues to rise as families crank-up their air conditioning as temperatures continue to reach record levels. NEADA and CEPC recently [estimated](#) that the financial burden to families of keeping cool this summer will increase by 8.7 percent across the United States to an average of \$719 from June through September, up from \$661 during the same period last year.
- **Federal Funding for the Low Income Home Energy Assistance Program Reduced by \$2 billion:** The dangers of extreme heat leave low-income families at heightened risk, due to lack of access to affordable summer cooling, increasing electric costs and cutbacks in funding for the federal Low Income Home Energy Assistance Program (LIHEAP) from \$6.1 billion in FY 23 to \$4.1 billion for FY 24.

States have reported that due to the reduction in federal funds, they will have no choice this year but to reduce the number of households served by about one million, and reduce average heating and cooling benefits. It is estimated that only around 12% of LIHEAP funds will be used on summer cooling despite predictions of another summer of unprecedented high temperatures. NEADA has called on Congress to restore the additional [\\$2 billion plus \\$1 billion in emergency funds](#) to help families pay the additional costs associated with cooling this summer.

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Summer Shutoff Protections and Bill Support Fail to Adapt to a Warming World

July 2024

Rising temperatures are putting millions of low-income families at risk of losing access to home energy during the summer months as they struggle to pay higher cooling costs. The National Energy Assistance Directors Association (NEADA) and the Center for Energy Poverty and Climate (CEPC) [project](#) that the financial burden of residential cooling will increase this summer by 8.7% across the United States to an average of \$719 from June through September, up from \$661 during the same period last year. Increased cooling costs means that low-income families will be at risk for incurring debt to pay for cooling; face utility shut offs due to unpaid electricity bills; and suffer dangerous health effects of extreme heat exposure.

Almost 20% of very Low-Income Families have no Air Conditioning: For households who will be shut off from electricity this summer because they cannot afford their bills, **even being inside their homes is dangerous.** In less extreme situations, a family can ride out a hot day by opening their windows, taking a cool shower, and hoping it cools down at night. But when the heat persists for weeks, or the outside air is dangerous, opening a window will only make things worse.

Energy price increases fall hardest on low-income households. The average energy burden for low-income households is about [8.6% of income](#), almost three times the rate for non-low-income households (3.0%). Of even more concern, the most recent [Census Households Pulse Survey \(7/11/2024\)](#), which was designed to estimate the economic impact of the pandemic on families, found that:

- The percentage of households that could not pay their energy bill for at least one month in the last year increased, from 21.6% to 23.7%. The largest increase was in households with children, which increased from 29.3% to 32.4%.

Percent of Households Unable to Pay Energy Bill

Household was unable to pay an energy bill or unable to pay the full bill amount, at least one month in the last year

Time Period	National Average	Low- and Moderate-Income (<\$50k)	Households with Children	Households of Color
5/28/2024 - 6/24/2024	23.7%	37.4%	32.4%	32.3%
6/7/2023 - 6/19/2023	21.6%	36.3%	29.3%	31.1%

Table: NEADA • Source: Census Pulse Survey July 2024 • Created with Datawrapper

- The percentage of households reporting that they kept their home at unsafe temperatures also increased during the 12-month period, from 20.3% to 22.0%. The largest increase with this metric was in households with children, increasing from 19.8% to 22.4%.

Percent of Households Keeping Home at Unsafe Temperature to Save Money on Energy Bill, by Survey Period

Household kept home at a temperature that felt unsafe or unhealthy, at least one month in the last year

Time Period	National Average	Low- and Moderate-Income (<\$50k)	Households with Children	Households of Color
5/28/2024 - 6/24/2024	22.0%	30.9%	22.4%	25.7%
6/7/2023 - 6/19/2023	20.3%	30.5%	19.8%	25.8%

Table: NEADA • Source: Census Pulse Survey July 2024 • Created with Datawrapper

- More than one out of three households (34.2%) reduced or forewent basic household expenses at least once during the previous 12 months in order to pay their home energy bills. Of all households surveyed during the reporting period, the largest increase was in households with children, from 38.7% to 40.9%.

Percent of Households Foregoing Basic Necessities to Pay Energy Bills, by Survey Period

Household reduced or forewent expenses for basic household necessities, such as medicine or food, in order to pay an energy bill, at least one month in the last year

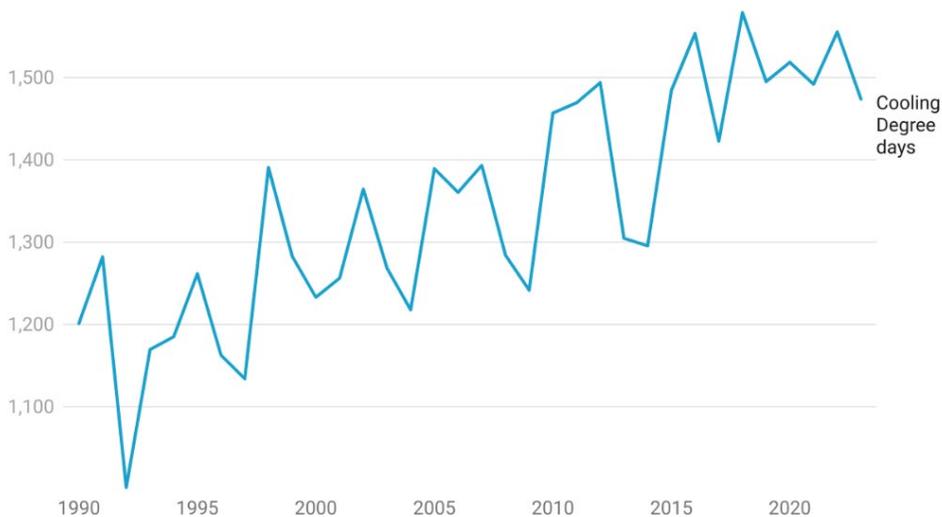
Time Period	National Average	Low- and Moderate-Income (<\$50k)	Households with Children	Households of Color
5/28/2024 - 6/24/2024	34.2%	50.8%	40.9%	43.4%
6/7/2023 - 6/19/2023	32.5%	49.2%	38.7%	41.9%

Table: NEADA • Source: Census Pulse Survey July 2024 • Created with Datawrapper

Increased Need for Cooling: The fact that temperatures are rising due to climate change is not news. The Energy Information Administration, which has been tracking a metric for calculating the number of days in a year that require cooling since 1990, has found a steady increase in cooling degree days over time. Families that may have not had cooling, or only needed to turn on their air conditioners during brief heat waves in prior decades are now using cooling more frequently, for longer periods of time, and are paying the additional cost.

Cooling Degree Days 1990 to 2023

Yearly cooling degree days for the entire United States



Source: EIA • Created with Datawrapper

Furthermore, the United States is woefully unprepared for the health and financial impacts of a hotter world. Rising temperatures are not just uncomfortable, they are also a major cause of heat stroke and death. A recent report from the Department of Health and Human Services tracking extreme heat and extreme heat risk factors reported that there were an estimated [2,302](#) heat related deaths in 2023 over triple the average from 2004 to 2018 as reported by the Center for Disease Control and prevention of [702](#). In part, these figures are increasing due to on average longer heat waves than in decade past, as an Environmental Protection Agency report [released last week](#) made clear.

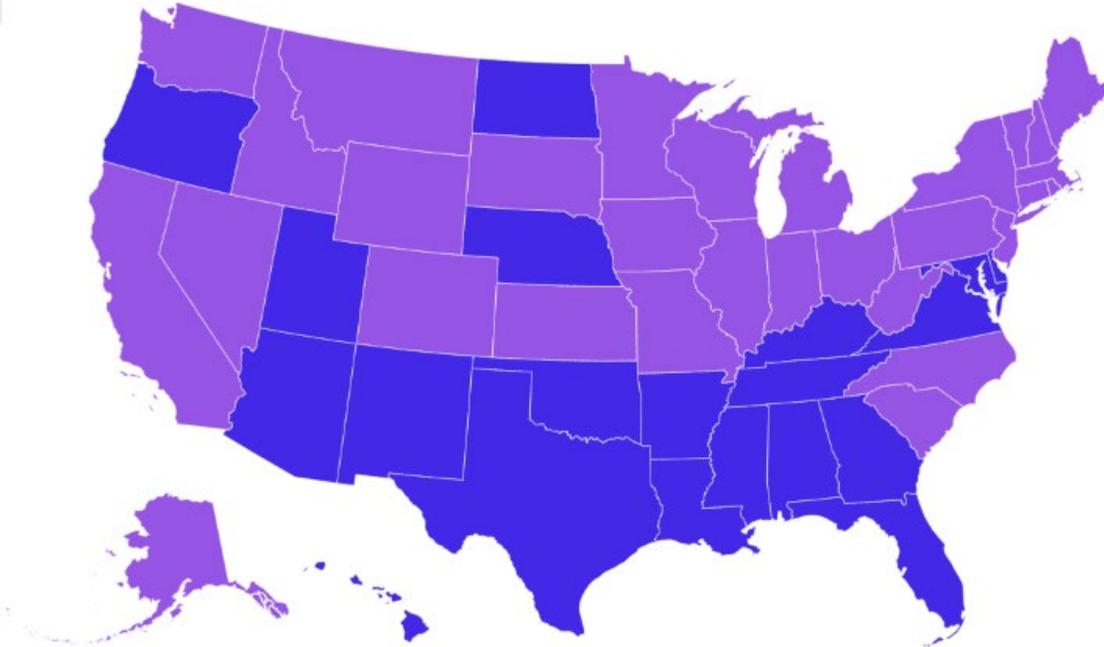
Federal Funding for the Low-Income Home Energy Assistance Program Reduced by \$2 billion:

The dangers of extreme heat leave low-income families at heightened risk, due to lack of access to affordable summer cooling, increasing electric costs and cutbacks in funding for the federal Low Income Home Energy Assistance Program (LIHEAP) from \$6.1 billion in FY 23 to \$4.1 billion for FY 24. States have reported that due to the reduction in federal funds, they will have no choice this year but to reduce the number of households served by about one million, and reduce average heating and cooling benefits. Its estimated that only around 12% of LIHEAP funds will be used on summer cooling despite predictions of another summer of unprecedented high temperatures.

States with Large Cooling Programs

Highlighted states use 15% or more of their LIHEAP funds on cooling

Greater than 15% Less than 15%



Source: U.S. Census Bureau 2021 boundaries , LIHEAP Clearinghouse

In practice, as shown in the chart above 20 states explicitly set aside at least 15% of their regular program funds for cooling, while this figure does not fully cover all LIHEAP summer assistance as some states do not categorize the use of funds the majority of LIHEAP funds goes towards heating. LIHEAP was originally designed to address heating needs, but in recent years more states are developing year-round programs recognizing that the winter heating and summer cooling seasons can overlap and that families are struggling to pay their bill in both summer and winter.

Offering a year round program comes at a cost. Federal funding is not sufficient to help all eligible families, so adding summer assistance takes funds away from the winter program. Last year for example, federal funding was only sufficient to help about six million households or one out of six eligible families.

Utility Debt: As a result of rising home energy bills and insufficient federal funding for LIHEAP, the amount of funds owed by families to their utilities has increased from \$17.5 billion at the end of January 2023 to \$20.3 billion by the end of December 2023. About 21.2 million households (approximately one out of six nationwide) were behind on their electric bills at the end of December 2023. Families owed an average of \$684 on their electric bills up from \$642 as of 12/31/22 and \$406 on their on their natural gas bills up from \$351 as of 12/31/22. When families cannot pay their energy bill even after receiving LIHEAP assistance, they can be subject to the loss of power.

Summer Cooling/Bill Payment/Shut-Off Protections: Shut-off protections are put in place by the state governing body that oversees regulated utilities to protect families from losing access to heating or cooling during extreme temperatures. When shutoff protections are not in place, utilities generally follow a structured process when a family falls behind on the bill. This includes issuing late fees, a disconnections notices and then issue a disconnect order. State Public Utility Commissions do not have jurisdiction over cooperative or municipal utilities, or delivered fuel providers, so they are not subject to shutoff protection requirements.

In general, winter shutoff protections are more robust than in the summer. The best winter protections provide blanket shut-off protections for low-income families for the months of December to March. The argument being that winter temperatures are unpredictable and families need to be protected against shut-offs even in periods of warmer temperatures during the winter months. Other states use temperature-based rules that only protect families during periods of very low-temperatures, overall 46 states and DC have some winter shut-off protections.

On the other hand, summer shut-off protections have changed little since they were first established in the early 1970s. At that time, summer heat waves were limited in scope and air conditioning was needed was needed in only part of the summer cooling season. Of the states that have summer protections they are primarily temperature-based – they only go into effect if the outside temperature reaches a certain level – do not take humidity into consideration and only apply during the core summer months, usually May to August.

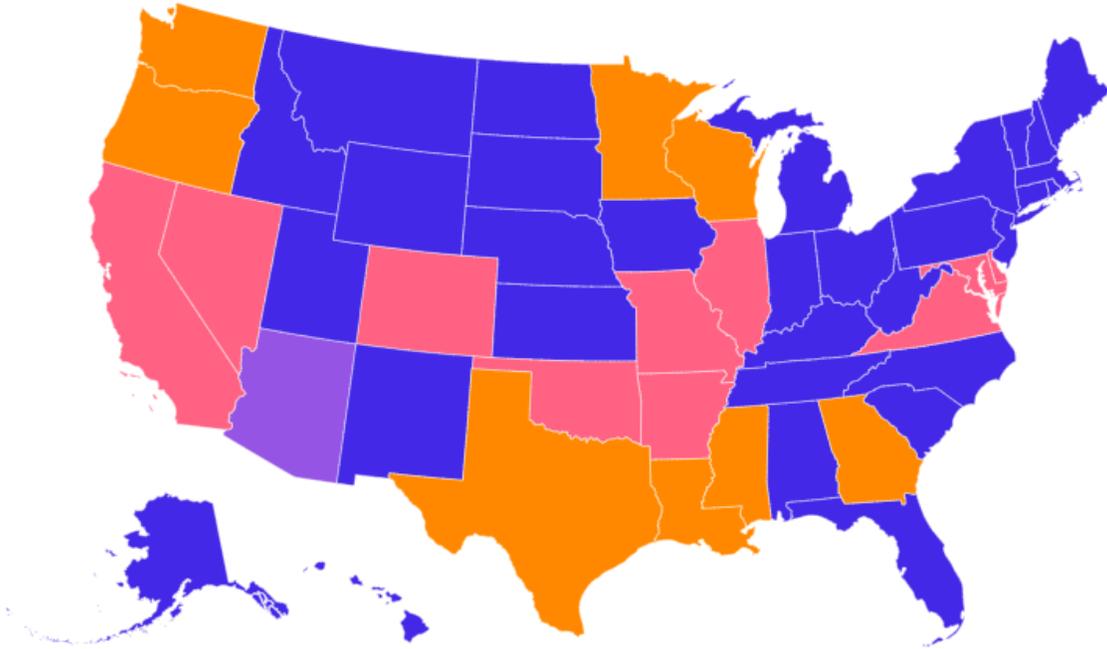
The following provides a summary of state-by-state summer protections. A detailed table follows at the end of this paper. Three types protections are offered by 19 states and DC:

1. Temperature-based shutoff protection. The temperature that triggers this protection varies widely between states from 90 degrees to 105 degrees.
2. Temperature and date based. Similar to temperature-based, except protection from shutoff is only available during a specific time period.
3. National Weather Service warning. Shutoff protections go into effect when the National Weather Service issues a heat advisory for that area.
4. Date based, where the state offers blanket shut-off protections during certain months.

The remaining 31 states offer no protection from shutoff during the summer.

Summer Shut-off Protections by State

■ None ■ Date Based Protections ■ Temperature Based Protections ■ National Weather Service Heat Warning



Next Steps: The data presented in this memorandum demonstrate that the current system to protect low-income families from high summer cooling bills and the threat of disconnection if they cannot pay those bills needs to be updated to reflect longer summer cooling periods. The data presented in this report will be used to develop model summer cooling protections that reflect the longer waves and the risk that they place on low-income families, especially those with vulnerable health conditions.

Source: Center for Energy Poverty and Climate

US Population Living in States With and Without Summer Protections

US population who live in states with summer shut off protection

	US Total	People Of Color	200% of Poverty	125% of Poverty	Children	Elderly
Population with Protections	170,683,612	75,144,216	47,115,526	27,054,136	37,404,279	26,867,744
Population without Protections	164,231,283	51,991,419	45,204,418	26,087,488	33,837,244	29,553,339
% with Protections	51.0%	59.1%	51.0%	50.9%	52.5%	47.6%
% without Protections	49.0%	40.9%	49.0%	49.1%	47.5%	52.4%

Created with Datawrapper

The [Center for Energy Poverty and Climate](#) (CEPC) is a nonprofit organization that is creating a platform for policymakers to engage directly with one another to share best practices and lessons learned, brainstorm solutions to difficult problems, and find innovative ways to braid funds and leverage programs to achieve net zero.

The [National Energy Assistance Directors Association](#) (NEADA) is the primary educational and policy organization for state directors of the Low Income Home Energy Assistance Program (LIHEAP), a federal program that helps low-income families pay their heating and cooling bills.

Appendices

Protections Listed by State			
Summer Protections	No Summer Protections	Winter Protections	No Winter Protections
Arizona	Alabama	Alabama	Alaska
Arkansas	Alaska	Arizona	Florida
California	Connecticut	Arkansas	Hawaii
Colorado	Florida	California	Kentucky
Delaware	Hawaii	Colorado	North Dakota
DC	Idaho	Connecticut	
Georgia	Indiana	Delaware	
Illinois	Iowa	DC	
Louisiana	Kansas	Georgia	
Maryland	Kentucky	Idaho	
Minnesota	Maine	Illinois	
Mississippi	Massachusetts	Indiana	
Missouri	Michigan	Iowa	
Nevada	Montana	Kansas	
Oklahoma	Nebraska	Louisiana	
Oregon	New Hampshire	Maine	
Texas	New Jersey	Maryland	
Virginia	New Mexico	Massachusetts	
Washington	New York	Michigan	
Wisconsin	North Carolina	Minnesota	
	North Dakota	Mississippi	
	Ohio	Missouri	
	Pennsylvania	Montana	
	Rhode Island	Nebraska	
	South Carolina	Nevada	
	South Dakota	New Hampshire	
	Tennessee	New Jersey	
	Utah	New Mexico	
	Vermont	New York	
	West Virginia	North Carolina	
	Wyoming	Ohio	
		Oklahoma	
		Oregon	
		Pennsylvania	
		Rhode Island	
		South Carolina	
		South Dakota	
		Tennessee	
		Texas	
		Utah	
		Vermont	
		Virginia	
		Washington	
		West Virginia	
		Wisconsin	
		Wyoming	

200% of Poverty with and Without Summer Protections			
Population with Summer Protections		Population without Summer Protections	
State	Population	State	Population
Arizona	2,117,299	Alabama	1,713,641
Arkansas	1,114,447	Alaska	174,988
California	10,572,958	Connecticut	768,507
Colorado	1,273,479	Florida	6,584,110
Delaware	222,908	Hawaii	324,113
DC	147,627	Idaho	549,313
Georgia	3,194,151	Indiana	1,947,879
Illinois	3,227,523	Iowa	814,867
Louisiana	1,710,593	Kansas	807,390
Maryland	1,321,686	Kentucky	1,545,838
Minnesota	1,238,999	Maine	350,396
Mississippi	1,136,002	Massachusetts	1,465,517
Missouri	1,798,198	Michigan	2,879,030
Nevada	947,160	Montana	323,063
Oklahoma	1,401,258	Nebraska	507,649
Oregon	1,147,379	New Hampshire	247,325
Texas	9,373,489	New Jersey	1,950,386
Virginia	2,003,411	New Mexico	769,227
Washington	1,709,507	New York	5,506,926
Wisconsin	1,457,452	North Carolina	3,132,734
Total	47,115,526	North Dakota	181,844
% of Total	51.0%	Ohio	3,355,981
		Pennsylvania	3,322,587
		Rhode Island	248,579
		South Carolina	1,627,959
		South Dakota	240,358
		Tennessee	2,161,809
		Utah	753,049
		Vermont	152,953
		West Virginia	641,593
		Wyoming	154,807
		Total	45,204,418
		% of Total	49.0%

Total US Population With and Without Summer Potections			
Population with Summer Protections		Population without Summer Protections	
State	Population	State	Population
Arizona	7,431,344	Alabama	5,108,468
Arkansas	3,067,732	Alaska	733,406
California	38,965,193	Connecticut	3,617,176
Colorado	5,877,610	Florida	22,610,726
Delaware	1,031,890	Hawaii	1,435,138
DC	678,972	Idaho	1,964,726
Georgia	11,029,227	Indiana	6,862,199
Illinois	12,549,689	Iowa	3,207,004
Louisiana	4,573,749	Kansas	2,940,546
Maryland	6,180,253	Kentucky	4,526,154
Minnesota	5,737,915	Maine	1,395,722
Mississippi	2,939,690	Massachusetts	7,001,399
Missouri	6,196,156	Michigan	10,037,261
Nevada	3,194,176	Montana	1,132,812
Oklahoma	4,053,824	Nebraska	1,978,379
Oregon	4,233,358	New Hampshire	1,402,054
Texas	30,503,301	New Jersey	9,290,841
Virginia	8,715,698	New Mexico	2,114,371
Washington	7,812,880	New York	19,571,216
Wisconsin	5,910,955	North Carolina	10,835,491
Total	170,683,612	North Dakota	783,926
% of Total	51.0%	Ohio	11,785,935
		Pennsylvania	12,961,683
		Rhode Island	1,095,962
		South Carolina	5,373,555
		South Dakota	919,318
		Tennessee	7,126,489
		Utah	3,417,734
		Vermont	647,464
		West Virginia	1,770,071
		Wyoming	584,057
		Total	164,231,283
		% of Total	49.0%

State Utility Shutoff Moratorium Overview

State	Protection Dates	Temperature	Seasonal Policy
Alabama		<32° F	
Alaska			No disconnect for seriously ill, disabled.
Arizona	6/1 - 10/15	32° F and below or 95° F and above	Utilities advised not to terminate residential service when the customer has an inability to pay and where weather will be especially dangerous to health (usually 32° F or below for winter and above 95° F for summer) as determined by the Commission.
Arkansas		<32° F or >95° F (elderly and disabled)	No disconnect for elderly or disabled or medical emergency.
California		<32° F or >95° F	
Colorado		>95° F	
Connecticut	11/1 - 5/1		No disconnect for hardship customers.
Delaware	11/15 - 4/15	20° F or below, 105° F or above	
District of Columbia		<32° F or 95° F and above	
Florida			
Georgia	11/15 - 3/15	<32° F or National Weather Service Heat Advisory or Excessive Heat Warning in effect	No disconnect if illness would be aggravated.
Hawaii	None	None	
Idaho	12/1 - 3/1		Disconnect ban for households with children under 18, elderly age 62 or older, or infirm.
Illinois	12/1 - 3/31	<32° F; >=95° F: NWS Heat Warning	
Indiana	12/1 - 3/15		Prohibits disconnect if customer qualifies and applies for state energy assistance.
Iowa	11/1 - 4/1	<20° F	
Kansas	11/1 - 3/31	<35° F	
Kentucky			
Louisiana		Winter termination procedures: The previous day's highest temperature did not exceed 32° F, and the temperature is predicted to remain at or below that level for the next 24 hours. Summer termination procedures: When NWS issues a heat warning for any parish in the utility's service territory, or when such a	

State Utility Shutoff Moratorium Overview

State	Protection Dates	Temperature	Seasonal Policy
		warning has been issued on any one of the preceding two calendar days.	
Maine	11/15 - 4/15		Must agree to special payment arrangement
Maryland	11/1 - 3/31	During the next 72 hours, if 32° F or below during winter dates or if temperature exceeds 95° F at any time of year	
Massachusetts	11/15 - 3/15		Disconnect not permitted if household includes child <12 months, seriously ill member or all residents are 65 or older.
Michigan	11/1 - 3/31		Winter Protection Plan for elderly 65 years or older, recipients of Medicaid, SNAP or state emergency relief, full- time active military personnel or persons needing critical care or having a certified medical emergency. Households with income less than 150% of federal poverty level must be in a payment plan.
Minnesota	10/1 - 4/30	Disconnect ban for residential electricity service when an excessive heat watch, heat advisory, or excessive heat warning has been issued by the National Weather Service	
Mississippi	12/1 - 3/31	Summer Rule: Residential customers shall have the right to avoid discontinuation of electric service for nonpayment of bills if, as of 8:00 am on the scheduled disconnection day, and Excessive Heat Warning has been issued by the National Weather Service for the county of the scheduled disconnection.	
Missouri	11/1-3/31, 6/1-9/30	<32° F and 95° or above	
Montana	11/1 - 4/1	No disconnect when the temperature at 8 a.m. is below 32° F or if freezing temperatures are forecast for the next 24 hours for customers receiving public assistance or if household member is age 62 or older or disabled.	
Nebraska			No disconnect for low-income natural gas customers with proof of eligibility for energy assistance.
Nevada		15° F or below and 105° F or above	
New Hampshire	11/15 - 3/31		

State Utility Shutoff Moratorium Overview

State	Protection Dates	Temperature	Seasonal Policy
New Jersey	11/15 - 3/15		Disconnect ban for customers receiving Lifeline, LIHEAP, TANF, SSI, or households unable to pay overdue amounts due to unemployment, medical expenses, or recent death of spouse
New Mexico	11/15 - 3/15		Must be current with payments or have entered into a payment agreement and are current with that agreement by Nov. 15
New York	Two week period between 12/25 and 12/31		
North Carolina	11/1 - 3/31		No disconnect for elderly, disabled, and customers who are eligible for the Energy Crisis Assistance Program.
North Dakota			
Ohio	10/20 - 4/15		Medical certification program.
Oklahoma		32° F or below (daytime), 20° F or below (night), or heat index 101° F or higher	
Oregon		Any day a forecasted high temperature of 32° F or below or on any day a local Heat Advisory is issued by the applicable weather reporting service.	
Pennsylvania	12/1 - 3/31		
Rhode Island	11/1 - 4/30		Disconnect ban for elderly, disabled, seriously ill, households with child under 2 years old, or recipients of unemployment compensation, federal heating assistance or have income 75% or less of state median income.
South Carolina		Disconnection is suspended when the average forecasted temperature is 32°F or below for a 45-hour period.	
South Dakota	11/1 - 3/31		
Tennessee		<32° F	
Texas		<32° F or during heat advisory	No disconnect for elderly 65 years + and critical care customers until Oct. 1
Utah	11/15 - 3/15		
Vermont	11/1 - 3/31	<10° F or <32° F for households with elderly age 62 or older.	
Virginia		<32°F or >92°F	Disconnect delay for persons with a 'Serious Medical Condition Certification Form.' This is a year-round policy.

State Utility Shutoff Moratorium Overview

State	Protection Dates	Temperature	Seasonal Policy
Washington	11/1 - 3/31	NWS heat advisory	
West Virginia	11/1 - 3/31	Service may not be disconnected on a day the National Weather Service predicts temperature to be 32 degrees Fahrenheit or colder near the customer's home.	Disconnection may be delayed when termination of service would be especially dangerous to the health or safety of a member of the customer's household.
Wisconsin	11/1 - 4/15	Prohibited when heat advisory from the National Weather Service is in effect.	Prohibited when heat advisory from the National Weather Service is in effect.
Wyoming	11/1 - 4/30	Disconnection only if above 32° F	