Dead Heat: The Danger Of Home Power Shutoffs

https://www.climateone.org/audio/dead-heat-danger-home-power-shutoffs
Recorded on June 20, 2025

Note: Transcripts are generated using a combination of automated software and human transcribers and may contain errors. Please check the actual audio before quoting it.

Ariana Brocious: I'm Ariana Brocious.

Kousha Navidar: I'm Kousha Navidar

Ariana Brocious: And this is Climate One.

[music change]

[Public Hearing Tape]

Roshan Harris: we're paying exorbitant amounts in rates and fees for a power grid that is not truly service servicing us. We have many outages and, and those outages have a huge economic impact and not just on families, but also on small businesses

Erin Liberty: Right now, I mean, me personally, I had an 81% increase in my auto insurance, a 45% increase in my home insurance, an increase in the water, gas, electric, phone, food, gasoline, everything, I mean, I'm like every other resident in Michigan, we're just struggling.

Monica Booker: I personally grew up in poverty and my parents struggled to keep the lights on. There were days when I would come home from school and there would be no electricity at home because my parents, despite working long hours, couldn't afford the electricity bill, and things have only gotten worse. Now as an adult, I'm constantly in fear of not being able to afford my bills, including my electric bills, to the point that I've considered getting a second job just to afford it all,

Ariana Brocious: Those were the voices of Roshan Harris, Erin Liberty, and Monica Booker, speaking at a public hearing in Detroit in April of last year. Kousha, what's your reaction when you

hear their testimony?

Kousha Navidar: Yeah, I feel two things. This is obviously urgent in so many individual homes and individual people's lives. And then that one voice that said, I live in constant fear, so much that I almost took a second job. I think that really brings it into perspective for me for how difficult rate hikes and potential shutoffs are in people's lives.

Ariana Brocious: Yeah. We've all seen higher bills for monthly expenses – not to mention groceries – and it's putting a ton of pressure on pretty much everyone's finances. And this is the context we're in as we're hearing about electricity rates getting higher for people all across the country.

Kousha Navidar: When people can't pay their utility bills, the power companies generally have the right to cut them off. Along with prices, this practice is on the rise:

In 2024, over six hundred thousand American households had their power shut off due to an inability to pay.

Ariana Brocious: That's a shockingly high number, and it's more than just inconvenient. It can be downright dangerous. In hot summer months like these, people rely on electricity for air conditioning that can literally keep them alive.

Kousha Navidar: Exactly. More people die from extreme heat than from hurricanes, floods, and tornadoes combined – often in their own homes when they can't afford AC. It's a horrible situation. Most states have shutoff protections during winter months. But only 23 states have laws that prevent utilities from shutting off power during extreme heat events.

Ariana Brocious: And extreme heat is becoming a growing trend, we've seen it several of the last couple summers, places that didn't used to have really high temperatures are suddenly seeing them. So this is a problem that really needs to be addressed now. Fortunately, there are people working hard to implement solutions that work for both the utilities and the ratepayers – customers like you and me. We'll hear about several of those solutions a bit later in the show. But first, Kousha, you spoke with Jean Su. She's the Energy Justice Director and Senior Attorney at the Center for Biological Diversity. She laid out some of the reasons behind these rising electricity rates, along with the rising rates of shutoffs.

Kousha Navidar: Yeah, The Center for Biological Diversity has been tracking electricity shutoffs along with the profits of six major utilities across the US. I asked Su what the top line takeaway was from that research.

Jean Su: Right now the United States is facing an epidemic of shutoffs with over 665,000 households who were shut off in 2024. And at the same time we have utilities, private utilities, making bank over that same year. So in comparison to the year before, we have around 20% more households who are being cut off because they cannot afford electricity. And interestingly enough, we have the same increase of 21% in profits of those same utilities over that period.

Kousha Navidar: Wow. So the companies that are delivering electricity are making record profits. The people, individuals, who can't necessarily afford to pay are experiencing more shutoffs than ever. Is that a fair summarization?

Jean Su: That is a total great summary of what is happening, and I think when you look at the scale of profits, It is absolutely incredible to see how accelerated the profits have been since 2018 until now. They just keep going higher. And then in 2024 it peaked. We only have data up to 2024, but that's, that's what's going on. Shutoffs are such a devastating event. It means that you cannot turn

on your lights, you do not have refrigeration, you cannot access the internet if you're using, you know, internet at home. All of those things are because you cannot afford it. And what we found is that these, profiting utilities if they had just taken 1.4% of their shareholder dividends, they could have totally wiped out the debt of all of those 665,000 households, which is such a drop in the bucket for them to actually save lives and keep people online for power.

Kousha Navidar: That statistic jumped out at me when I was reading through the report, and I wanna unpack that in a second. Before we do that, let's look at the factors that make this situation extra egregious. So it seems like the number of shutoffs have increased significantly in recent years. Why is that?

Jean Su: A number of reasons. One reason is because utilities have been hiking up rates for people. If you are part of a private utility, you probably will have experienced an increase in your rates. It's because they are building out more fossil fuel power plants. They are also passing on fossil fuel volatility from around the world. So because of the Ukraine war, we actually saw a huge spike in gas prices around the world and utilities are just passing that buck off to customers and not taking any responsibility for it.

Kousha Navidar: Let me pause you there. So you're saying electricity rates are going up. Part of that is macroeconomic global trade issues. where, something's going on halfway across the world that makes dollar per barrel of oil higher. gas companies and, and electricity companies and saying, okay, we're gonna take that extra money we have to pay, pass it on to consumers. Is that right?

Jean Su: Yes. Mm-hmm.

Kousha Navidar: And it sounds like climate change is also another big issue here. Is that right?

Jean Su: Absolutely. So climate change is a huge second factor right now. When you pay for your electricity, you're paying for something. And what's happened in the last few years is that we have had extreme heat sweep this country. So people are turning on their air conditioning at rates they've never turned them on before, trying to cool their house to stay, to stay alive in, in some places around the country. So that peaks people's demand of electricity, which is also why their bill is much higher.

Kousha Navidar: Okay. So that's on I guess the demand side. There was also one that stuck out to me that you've also already mentioned, utility companies are making buck, right? They're making, they're, yeah, they're going to bank. That's what you said. Tell me more about that.

Jean Su: Yes. Yeah. So they're jacking up your rates and one reason they're able to do that is they are applying for higher rates based on building out new infrastructure. So utilities make money by building out more infrastructure, and they have been saying, we need more fossil fuel plants online, more methane gas online. So they are building those out and actually charging you as the rate payer for that build out. One of the big threats that's coming up under this administration is the build out of data centers and artificial intelligence, which suck up tons and tons of energy. Guess who is paying for the power for those data centers

Kousha Navidar: Is it me?

Jean Su: You and me. Yeah, it's you. It's you in particular, Kousha. It's all you.

Kousha Navidar: Great.

Jean Su: Uh, absolutely.

Kousha Navidar: I have enough student loans, whatever, tack it on.

Jean Su: Yeah, absolutely. So we have very rich tech companies building out data centers. They need to power them. They're not soaking up the costs. They're actually working with the utilities. And the utilities are forecasting also these data centers and saying, Hey, we need to get these data centers here. We need to build out more gas and we need to wait to pay for that. So we're just gonna pass it on to consumers.

Kousha Navidar: Is there any other factor that you think is worth mentioning that is leading to more shutoffs than ever before for individuals?

Jean Su: I think the main issue for the last election and last few years has been kitchen table economics and people are suffering from inflation. So the inflationary context of the last few years have made it such that people are struggling to pay every single bill, whether it's your grocery bill with your eggs or your electricity bill. So that macroeconomic factor of inflation is also a big part of this story. One fine point I wanna put on this, all, though when we really unpack who the most vulnerable to shutoffs. We are looking at the poorest of the poor in this country and communities of color. And one really startling factor that many people don't realize is that areas where communities of color live in this country tend to be hotter than areas where white people live. So for example, a study was done in Oregon in Portland where they found that one area of the city where white people lived was 10 degrees cooler than the area where Black neighborhoods were. And the reason for that was tree cover. That white neighborhoods had tree cover. They had that urban planning. So they had that type of shade to be given. But Black neighborhoods didn't have those types of resources. The public did not invest in tree cover or parks or nature in those areas. And on top of that, public housing is incredibly decrepit with very bad insulation. So even if you are cooling, it escapes the house because the envelope is so porous. And so these factors for shutoffs are especially, especially dire for communities of color and, and other poor communities across the country.

Kousha Navidar: It is so striking to hear you frame it that way, and I guess part of the striking thing is that it makes tragic sense, right? Like it's, it's an almost a tax on being poor. Is that the. Infrastructure that you need to save on something as fundamental as your electricity bill just isn't there. And the way that it is, like a couple zip codes over.Which reminds me, you brought up a statistic that struck me significantly when I was reading your report. In the report you said, Jean, only 1.4% of the more than $6.8 billion the utilities spent on shareholder dividends from January through September, 2024, could have covered the cost to prevent these shutoffs. So this is Kousha talking here, you're saying 1.4% of billions of dollars in shareholder dividends, which is like profit more or less, right? It's we're talking about profit here. That would be enough to cover these shutoffs. Why don't these utilities just cover the cost of nonpayment?

Jean Su: I think that's a fantastic question, Kousha, and that, that is the heart of our crisis right now of electricity in this country. We have a system that is a public good. Electricity is a human right for many, many people. Without it, you cannot survive; your food will go bad. You cannot get internet. You cannot cool your house, you cannot heat your house. In some areas, this is a basic human right, and yet private companies that have shareholders control the ability to turn off or turn on your electricity. And for some people, that is a life and death decision. There was a woman in Arizona in 2018. She was a 72-year-old woman. She was unable to afford her rising electricity bill because Phoenix is hit the worst you know, during the summer for heat from climate change, and she was unable to pay her bill. Her outstanding debt was $51 and the local utility cut her power off. And that woman ended up passing away. So when we say electricity is a basic human right, and it's a life and death matter, it really is a life and death matter. And so it's abominable to me that private utilities have the ability to control that. And , this all circles back to they are driven by private profit. They guarantee their shareholders a certain amount of profit every single year. And just a de minimis, a

tiny, tiny amount a, a really a drop in the bucket for them, pennies, can be dedicated to wiping out debt and actually saving lives. But our capitalist system, tThese private corporations that is not part of their calculus, and we have no regulations right now to make that part of the system.

Kousha Navidar: It is difficult to hear that life and death over $51, like that is definitely difficult to hear. I'm trying to understand the side of the utility companies here. What is their argument for why they, they don't help out? Those vulnerable populations over bills like $51. Is there like, I'm trying to think, is there like moral hazard argument where they're saying, well if we do it for this, it'll incentivize some kind of behavior that'll make the whole system impossible 'cause no one will pay their bills. Like what is it that stops them from taking 1.4% and just making everybody's lives better?

Jean Su: Utilities are private corporations, so they're like every other company that we know of, whether it's Facebook, Google, et cetera, but the problem that we have in the electricity sector is that this is a public good. It's in the public interest. All utilities are actually under some type of contract with local governments that say that they should be acting in the public interest. Part of that is supplying electricity. And so one of the, the ways that you know, is out there to regulate them. Better are state utility commissions, But over the past 100 years, those state utility commissions are not doing that role as, as guards for the public against the utility. They instead have become oftentimes people who have worked for the utility and go regulate them and then go back to the utility sector and they are not guarding the public interest.

Kousha Navidar: I, I think of the Arizona woman that you just talked about, are there not like. Laws in place to stop 'em from slipping through the cracks. Is there policy that exists in different states in Arizona, for instance, to stop the most vulnerable from experiencing this kind of tragic situation?

Jean Su: So there are laws in place to help with extreme temperatures. And so I'll, I'll, I'll unpack that briefly. One is that across the country, most states actually have a winter moratorium, and so that means that when it gets too cold, this is particularly relevant for gas companies because most people still heat through gas versus electricity. But there are gas moratoria where if it hits, you know, below zero in, in 44 states around the country, a moratorium kicks in and gas companies aren't allowed to cut off gas. So good. The opposite though is not true on the extreme heat side. Less than half of the states, 22 states do have some type of summer moratorium on shutoffs. So oftentimes it is either a temperature based one where at a hundred degrees, it kicks in or it's, um, time-based. So, you know, starting in June for example, which happened in Arizona. , And so, you know, first of all, not all the states have that and given the huge heat dome that ripped across the country last year, on average killing 154 people per day. That is no longer acceptable not to have a moratorium. But even for the temperature based or, or date based things that exist, they aren't good

Kousha Navidar: So you're saying that like 100 degrees isn't, isn't the right threshold?

Jean Su: 100 degrees is not the right threshold. So scientists have been working with workers in particular in unions to isolate what is the right temperature because heat is actually not just temperature based, it's also humidity based. And so there's something called the heat index. So even if it's a hundred degrees, it might feel like 115 because of the humidity. So, scientists have been able to tackle the heat index and so we need, , far more stringent temperature thresholds for when these moratoria kick in.

Kousha Navidar: Where, where laws do exist to prevent shot offs, are they successful? Is there anything that you can point to on the other side of, of the, the results spectrum, I guess you would call it?

Jean Su: So on, on temperature based stuff, those can all be improved. But I, I think on the other side of your question, is like deeper questions about what can change. and there are several things along the spectrum here, probably the most progressive thing to do or, or the most transformational part is to reimagine our entire system of how electricity should be developed and create utilities that are public and that are accountable. And so I put those two together because we have many public utilities in this country that still do the same things, if not worse than private corporation utilities. And that's because they are not accountable at all.

Kousha Navidar: So I want to look at that accountable word because I think there's a lot of room there to make things accountable no matter how they are operated. So like, let's talk about data transparency, for instance. What's the state of that? Is there a policy recommendation that can improve the outcome for data transparency?

Jean Su: Great. So Kousha, you went to the exact opposite of the spectrum, which is great. These are the lowest hanging fruits and that aren't even being, that aren't even being picked from the tree right now. So, we don't know how bad the shutoffs crisis is in this country because only half of states actually require their utilities to report on it. So one of the first steps that we need is data transparency. We need to require every single utility, every private utility, every public utility, to give out their numbers of how many people are being shut off, and do it regularly, because even those who give it right now, some are reporting at random times, some are doing it every quarter. That's not good enough to actually get real data in time for us to be able to react and do something about it and

Kousha Navidar: How does it feel for you being somebody who literally goes through whatever reporting you can get your hand on? Knowing that these numbers are probably under reported.

Jean Su: It is excruciating. If you understand the State Utility Commission process at all. It is a Byzantine black box and completely anti-democratic, and it is very, very hard to get data about shutoffs. Just knowing that these shutoffs have such lethal consequences in real life, it's heartbreaking to know that we don't have an actual real picture of how bad the crisis is. And one of the other parts about this is that having your electricity shut off is for many people, deeply shameful. So when we have talked to people, they do not want their stories to be reported in the media. They don't want their names to be talked about on this podcast. It's something very personal. And so if we don't have the data and we also don't have stories. But we know that it is a killer in this country, and a perpetuator of the cycle of poverty. Then we're in trouble and we actually need to start untangling that cycle by getting the type of data out there that will tell this story.

Kousha Navidar: Is there other low hanging fruit for addressing this Gordian knot?

Jean Su: Mid-hanging fruit. Yeah, mid hanging fruit here. Yeah, yeah, yeah. Okay. So next, next rung on the ladder there's something called performance rate basing, which means that right now, utilities get to raise your rates by saying that they're going to build a new fossil gas plant. And, they say, yeah, we're gonna build this new fossil gas plant, therefore we need to charge you as the customer this amount. And that's just gonna increase your rates by another 10%. So the utility commissions allow them to do that. This is the way that rates have always been made. It's based on capital intensity, and it's based on that investment that the utility makes and utilities have the right to recover that money from people, from everyday customers. One way to actually change that and flip the scale is to have performance based rates, which allow us to say, Hey, we don't want to get charged based on fossil fuel infrastructure or new energy infrastructure. We actually want to be charged or have utilities be held accountable by their performance. How many blackouts were there? Were there zero blackouts? Were poor people able to come back online and they weren't cut off? What are our ideal performance metrics here? And then be able to rate base off of that. So that's

something that Hawaii has actually been dealing with. And, and right now it's looking like it's, it's better than nothing. So flipping the whole formula of how utilities can recover rates is a huge question, But something that's probably a bit more digestible for people are alternative systems of being able to put up rooftop solar and storage on their homes. And this is something that we find is really, really important in this new era of the climate emergency. So rooftop solar and storage are a cheap way to actually get energy on your rooftop, and have that storage and be able to actually survive the climate disasters around us. We have worked in Puerto Rico, we've worked in North Carolina areas that have huge hurricanes where the only families left with power at the end of these horrific, horrific events are those with rooftop solar and storage. And that has been a huge boon for people to have reliable and affordable energy. Unfortunately, what's been happening is that utilities all across the country have been trying to get rid of your ability to put up rooftop solar. And this comes in the form of, rolling back net energy metering programs, to putting a fixed fee and that disincentivizes people to put up rooftop solar and storage.

Kousha Navidar: Okay, So If you're in the elevator with somebody who was paying their electricity bill every month and actually could afford to pay and wasn't running into these issues, what would you say to them?

Jean Su: I would say get involved in your utility commission proceedings and take a stand. We need to actually democratize energy so that it's affordable for people, , work with their legislatures, go to the commission and hold these utilities accountable. One way to do it. Is everyday people can actually get involved in these public proceedings and just say, no, we refuse this rate hike. Yes, we want a shutoff ban, to protect the poorest of the poor. And no, we don't want our utility to have runaway profits, which they have been doing year after year after year, they are jacking up their rates. People are getting very upset all across the economic spectrum, and they feel powerless about what to do because everybody is beholden to these utilities. We can actually go in front of our commissions, we can lobby our state legislatures and say, we need to hold our utilities accountable, and they are not allowed to raise these rates, and they also need to give us cheap, affordable, and reliable clean energy.

Kousha Navidar: Jean Su is Energy Justice Director and senior attorney at the Center for Biological Diversity. Jean, thank you so much for all of your work and for sitting with us and unpackaging this really important topic. Thank you so much.

Jean Su: Thanks for having me, Kousha.

Kousha Navidar: Coming up, the climate crisis is making many of us more vulnerable to dangerous temperatures. But in many places, protections haven’t kept up.

Sanya Carley: More states have cold weather protections than do states that have hot weather protections, and this is likely plaguing those places that are particularly hot.

Kousha Navidar: That’s up next, when Climate One continues.

Ariana Brocious: Help others find our show by leaving us a review or rating. Thanks for your support!

This is Climate One. I’m Ariana Brocious.

According to the National Energy Assistance Directors Association, one in seven households is behind on their energy bills. And when a utility decides to disconnect a household’s power supply, it can create a vicious cycle that is difficult for people to get out of.

I spoke with Sanya Carley, who co-directs the Energy Justice Lab at the University of Pennsylvania, about how to address the rising number of shutoffs. She explained what happens to a household when a shutoff occurs.

Sanya Carley: When somebody's disconnected, they may lose everything in their refrigerator, for example, they may face disconnection fees, they may lose their entire account, they may face reconnection fees, legal fees, just a variety of other expenses. Uh, it takes them a while to get back on their feet, and then they're already at a disadvantage for paying their next month's bill. These households then are also considered more risky and at more prone to being disconnected in the future, and thereby might be disconnected from their utility provider in the future if they can't recover and pay for their debt.

Ariana Brocious: Considered risky by the utility.

Sanya Carley: That's exactly right.

Ariana Brocious: So to avoid shutoffs, people do a number of things, and these can also be somewhat harmful in different ways. Can you explain what some of those are?

Sanya Carley: I will, and this is something that, that we focus quite a bit of effort on at the Energy Justice Lab are these financial and behavioral coping strategies. and the riskiest strategies are also the most common. So, for example, carrying debt, which is highly risky, is the, the leading, uh, coping strategy with 28% of all low income households. And the second most common strategy is what we term risky temperature behavior. Now this is behavior such as burning trash in your home or using your oven for space heat or using a dryer to warm one's body by sitting behind the dryer as it's running. But there are a variety of other strategies as well, such as keeping your home at incredibly uncomfortable temperatures, either too cold or too hot, or facing the decision of whether to put money towards food or to heat, uh, or other strategies that I think are less risky. But as noted, very much less common, uh, such as calling the utility for help and asking the utility if they have a payment plan, or asking a friend or a neighbor or a family member for help paying a bill.

Ariana Brocious: Well, and a challenge to this: this can be a shameful occurrence for someone and they may be thus less inclined to reach out for help, either to a friend or family, or even to the utility, right?

Sanya Carley: That's absolutely the case in, in fact, we've done quite a few interviews with individuals who have been disconnected, and one of the recurrent themes that we hear is a, a theme of shame. Individuals who are disconnected feel incredibly bad about it. And the, the biggest, um, source or, uh, foundation of shame that we've heard about is with their children who reside in the home that they couldn't provide for their children, that they couldn't keep their children warm and safe and secure.

Ariana Brocious: And I just wanna say here that we're talking about electric rates increasing rapidly. We're talking about an economy that for many people is already very expensive in lots of ways. Um, you know, these are situations that are beyond an individual's control and it isn't somebody's fault necessarily that they can't afford a very high electric bill. Um, but if your power is turned off because of non-payment, um. It could actually be a while before it gets turned back on. So can you explain what this can look like for people after their power is turned off?

Sanya Carley: I think first it's understanding the circumstances,what happened, and then seeking help. Sometimes they may not have a phone charge and they have to go and charge their phone somewhere, which means possibly walking to a neighbor's house or using somebody else's phone. It

oftentimes from what we've heard, means that an individual then desperately needs to get in touch with the utility company. Yet another theme that we've heard many times when speaking with individuals who have been disconnected is that they really struggle to actually get a person on the line at the utility company. We've heard the term robot several times where they, they feel like they're talking to a robot because it is in fact just the system and they end up in this perpetual cycle within the telephone system of not being able to reach somebody that can actually identify their account and take care of, of their circumstances and tell them what they need to

Ariana Brocious: That's maddening and we all experience that in different aspects of our lives, and I, that is just the most frustrating thing.

Sanya Carley: We sure do. And when you've just been disconnected and you're worried about what's gonna happen with the food in your refrigerator and your children that night and where they're gonna sleep, it's just, it's, it's absolutely even more maddening.

Ariana Brocious: So if someone loses their power and they're not able to connect with, or even if they can connect with the utility, what are the steps it takes to get your power restored?

Sanya Carley: Well, uh, I usually it means paying that bill off paying the amount that is owed to the utility company, and sometimes it's just the amount. Sometimes there's extra fees included. It might be a disconnection fee or a reconnection fee. So paying those fees then presumably will lead to the lights coming back on. This is usually the case from the interviews that we've conducted, though we have heard some stories of. Uh, having assistance paying off the bill, but then not knowing that the individual needed to also call the utility company themselves and confirm their final details in order for their new account to be established and to be turned on, which introduced multiple, uh, days of delay before getting the power on. But this is just one specific story.

Ariana Brocious: Just again, to emphasize this point, this is a really dangerous situation especially when we're talking as we are this episode about extreme heat, It can be very harmful to an individual's health. And this risk of electricity shutoff is a problem that faces about a quarter of American households according to the US Energy Information Administration. There are federal funding programs that provide low income bill assistance, like liheap, the Low Income Home Energy Assistance Program. Prior to the Trump administration coming into office, how important was that program in helping with these situations?

Sanya Carley: LIHEAP as a, a federal bill assistance program is absolutely crucial in the face of energy insecurity and utility disconnections. This is a lifeline for millions of households across the country that need that kind of emergency relief in some month when their bills just, they simply can't cover their bills. But we know that LIHEAP actually at. Uh, previous funding levels, which are usually about 4 billion to 6 billion in some of the best years, were already woefully inadequate. At best estimates are about 20% of the eligible at need population for this bill assistance program actually had access to

Ariana Brocious: Just a fifth of people who really need it.

Sanya Carley: That's right. That's right. I'll also note that there's seasonality here too. If we're thinking about extreme heat, the majority of the funds for LIHEAP are used in the cold weather months because that's when it's first allocated, and the best estimate that I've heard is about 70% is already used before the summertime, so there's just a small kind of paucity of funds. In some places. It's entirely exhausted before the summer months, before the extreme heat.

Ariana Brocious: And to make this situation worse in our current moment, um, the Trump

administration has eliminated the health and human services staff that administers this program. And his proposed budget also eliminated the program funding. So what impact do we expect that's gonna have and a half?

Sanya Carley: I think it's just a profound impact, to be honest. This is at the same time as we noted that energy prices are rising all across the country and there are very few other protections and supports available for these households. Uh, I, I think idealists might say, well, states and nonprofits and local governments will step in and fill this gulf. They'll, they'll provide this bill assistance, uh, that the federal government did before. But these are all different entities that are struggling in their own ways right now and don't have, uh, excess funds that they can put towards this, this bill assistance.

Ariana Brocious: Right. So I do wanna turn to what solutions we have because I think this paints kind of a dark picture and, um, that's real. But there are ways to, to minimize this harm. So let's talk about what state legislatures could do.

Sanya Carley: State legislatures can do a lot. Uh, one suite of interventions, if you will, is to tell the utility that they need to offer different kind of rate program plans. So this could be a program plan based on your percentage of income, for example, where you peg you as you, you make a decision about what the energy burden is that anybody should pay, and then you peg it to their income and that's what one then pays on their bill. Another possibility is an arrearage management plan where one can have the opportunity over time to essentially pay off their debt. And then there's a variety of other kinds of payment plans. Prepayment plans and others that, that are, are options for utilities to offer and for states to mandate are included. State governments can also mandate disconnection protections, like they might say from November to February for example, nobody can be disconnected. Or they might say if the temperature's below 32 degrees or above 90 degrees, nobody can be disconnected or they can offer very specific. Protections for vulnerable populations such as households with young children or households that are medically compromised.

Ariana Brocious: there's also measures that can come from the utility or perhaps nonprofits, maybe local governments to do things to incentivize energy savings. Essentially, I'm thinking of weatherization, better sealing a home so you have a more efficient use of your electricity, and that's a lower use right?

Sanya Carley: You're spot on actually, I'm a big fan. I call them preventative solutions, one of the leading indicators of whether a house will be energy insecure and disconnected is if their house is inefficient or deficient. Uh, so the idea is let's do weatherization first. Let's seal up every home. Let's make it as efficient as possible so it reduces people's energy bills, and essentially the cool or the hot air isn't just escaping from their house. Uh, I think that that's a, a, a first, a go-to, but I think there's other preventative options as well to help households avoid that cycle of energy insecurity. One that we've studied at the energy justice lab is residential solar. So we have a study that came out recently where we found that of all low income households across the United States actually have a random sample of them. So representative of low income households across the states, those that have residential solar are significantly less energy insecure than households that look just like them on every other attribute that we could measure, but for the fact that they don't have solar. So solar can reduce one's energy bill and thereby help them avoid energy insecurity.

Ariana Brocious: Right, because even if your solar doesn't cover the full amount of energy you use, it's gonna reduce a significant portion. Um, so your bills, your monthly bills are lower, right?

Sanya Carley: That's exactly right. That's exactly right. And we find this even regardless of whether it was a subsidized solar panel or fully paid outright. Uh, and we also find these spillover effects. So

if one has residential solar, they're better able to pay their other bills, such as their natural gas bills because they have more money that they can use. When you're so tightly budget constrained, there's only so much that you can pay towards your bills.

Ariana Brocious: So we've outlined a lot of the challenges of this situation of electricity, shutoffs, and some of the solutions. And I'm curious, as you've done work with the utility disconnection dashboard, are there bright spots you're seeing? Are there signs of, you know, remedies going into effect that are, that are helping.

Sanya Carley: Yeah, a few bright spots actually. One is that I think more attention is being focused on this issue. And it's not just from consumer advocates, for example. And it's not just from academics, it's from all different stakeholders within this space. And it's frequent that we have conversations with utility companies, for example, and with state legislatures, for example, about what we need to do to, uh, to really address this challenge. Second, the biggest source of inspiration that I've seen is that a lot of states are starting to consider whether they need to modify their disconnection protections again, specifically as it comes to heat, as well as data transparency and data gathering.

Ariana Brocious: Sanya Carley is a presidential distinguished professor of energy policy in city planning at the University of Pennsylvania. Thank you so much for joining us on Climate One.

Sanya Carley: Oh, thank you so much for having me.

Ariana Brocious: Coming up, when utilities help cover the upfront costs for efficiency upgrades, it can be a win-win for everyone.

Tamara Jones: What we found is that when these programs are offered to consumers, you know, 90% or more people are just lining up to say, yes, this benefits me. I want it.

Ariana Brocious: That’s up next, when Climate One continues.

Kousha Navidar: This is Climate One. I’m Kousha Navidar.

We’ve heard a lot today about how serious it can be to have your power shut off. Now I want to discuss what we can do about it, so I invited Tamara Jones, Co-Executive Director of Clean Energy Works, to talk through some possible solutions.

In 2011 Jones was named a “White House Champion of Change” for her work with the Southeast Energy Efficiency Alliance administering energy retrofits across the region. She says her whole career has been about working for justice.

Tamara Jones: I was born and raised in the Caribbean, in Jamaica, and my mother brought my sister and I to, to the States, to New York City when I was 14. And I remember those first winters, we bought plastic sheeting and you duct tape them around the windows, which also had holes in the wall to try to, you know, limit the wind blowing in during a New York winter. And it would be like being on a ship. The sound of the plastic billowing and flapping, you know, when there was, was wind. So I remember, trying to stay warm under blankets and electric space heaters. And my mom never complained, but I saw the bills and so I knew what it meant for a single mother of two in Brooklyn, New York to be keeping the heat on at that time in the mid 1980s. So, you know, my entire professional life has been in service to communities and the public sector. And a large part of that has been doing various kinds of environmental justice work from food justice, land justice, energy justice. And so, you know, this is really answering a call and deeply personal for me.

Kousha Navidar: Yeah, that image that you paint of the wind billowing and it making you feel like you're on a ship is so visceral. And I think a lot of people can relate. 'cause you know, like right now, millions of people all across the country are at risk of getting their power cut off because they can't afford it. And in that, in that climate, so to speak, energy retrofits can really reduce their bills and therefore reduce the risk of non-payment. Right? Like it's a compelling, positive cycle, I would say. Is that fair?

Tamara Jones: Absolutely, and you know, we really need to understand that in the 21st century now more than ever, having access to uninterrupted affordable energy really is a human right. It's impossible to imagine what it looks like to survive and thrive in modern day America without having access to heating and cooling or electrical power.

Kousha Navidar: Yeah, Tamara, it's interesting that you bring up human right, that term. 'cause you know, earlier in this episode I spoke with Jean Su and, and, she echoed that, and she also added that, most vulnerable folks to power shutoffs are the poorest of the poor, which people often equate, I think, to communities of color. But I wanna know, what do you think of that characterization of who is impacted in this context?

Tamara Jones: You know, it's part of the unfortunate history of this country, our failure to really deal with our racial history, right? We don't see all of the ways in which it gets embedded in what we think we know and how we know it. So how we use data, how we interpret data to define and tell us what is normative, you know, goes unexamined. So if one were to look, you know, at per capita, then yes. often communities of color, rise to the top of lists when you're looking at the proportional impact in a community. If you look at just the raw numbers of people who suffer from utility disconnections or not having access who are economically impoverished, working class and poor white folks vastly outnumber communities of color. So the fact that we continue to equate poverty with melanin is itself a reflection of, you know, that, racial ideology. And it does a disservice to white communities who have so much in common with communities of color on these issues, and prevents them from seeing that we have a shared goal sometimes, and that we really need to be working more deeply aligned and in collaboration with each other.

Kousha Navidar: Something like half of Americans don't have more than a thousand dollars of savings or even a thousand dollars of savings. Yeah.

Tamara Jones: 50 million households are low income in this country, and they're not 50 million black folks in this country, so we gotta think about who is elevated to represent certain populations and who is rendered invisible. And so this feeds into one of the challenges we face, right? We talk about energy burdens in this country, which is the percentage of your income, your household income that goes to paying for your energy bills. And the average is for non low income households. Around 3% of your income goes to pay for your energy bills. Well, for –

Kousha Navidar: that's people who are doing pretty well financially, like

Tamara Jones: say middle class. Right. You know, and even, and that's not, you know, pretty well, doesn't mean that you're free from economic insecurity. It just means that when you look at how much you're making on paper, at least you're not low income. So you are middle income and, and above, right around 3% of your annual income goes to paying your energy bills. If you are a low income household, it is three times that it's almost 9% of your income goes to paying your energy bills. And in fact, what we actually see when you zero in even more, there are counties and communities in this country where that can get as high as 30%. 30% of your income is going just to pay your utility bills. So this is a very real crisis that we really need to be talking about. And that's not, again, not limited to black and brown communities.

Kousha Navidar: Let's go on then to some of the work you're doing today with Clean Energy Works and so Clean Energy Works promotes a model called Inclusive Utility Investments. Unpackage that for me. How do you define an inclusive utility investment?

Tamara Jones: Well, let me start with the problem we're trying to solve, right? So for decades we've had the technologies to make our buildings more energy efficient, that is less leaky and to put in clean energy technologies. So whether it's heat pumps instead of your traditional gas furnace, solar panels, those kinds of things. The question is how are you gonna pay for those things? And typically there are only three ways in which those installations are made in your home that are paid for. One is that you qualify for some government program, typically low income households. Second is that the utility might offer some rebate or incentive to offset the cost, and that is usually paid for by all of the customers that the utility company serves, right? Whether they realize it or not, they're. They're pitching in a little bit of money. It goes into a pool, and that's what's used to pay for the rebates and incentives, but the primary way in which we expect people to pay for clean energy where they live is by personal debt. We expect you to make enough money that you can qualify for a loan, that you have good credit, that you are then willing to take out the loan and pay for that over time. And what we've seen is that most Americans are just not willing to do that. So we've spent decades of lots of pretty debt products that are offered that still are not moving the needle. What we champion is

Kousha Navidar: You're saying it's also exclusive? 'cause not everybody has the credit to take on those personal loans, for instance.

Tamara Jones: Exactly right. And I should say there's a fourth way in which you could pay for this. You could just be rich and then you don't need government programs or, or debt. You could just write the check yourself. Right. But that's just not where most Americans are. And so we have not seen any appreciable adoption of these technologies in the, in the market space. So Inclusive utility investments is a way for paying to get those energy efficiency upgrades and clean energy technologies brought into your home and installed where the consumer does not have to pay the upfront costs. So instead we say, look, utility company, this is actually a capital investment that benefits your business model. And so the utility comes to where the building is. They audit the building to identify everything that makes sense for that specific location. Everything that will save energy and save money. Both things have to happen. They put those installs in at the utility's expense, so you are not paying anything out of pocket. as a result of lowering your monthly bill in the utility is allowed to put a fee on that bill to recover the cost that they incurred in doing the work, but that fee has to be less than the savings that were estimated as a result of the work. So it's a win-win, win for the consumer. You're not paying. Anything out of pocket when the program is designed? Well, you're not paying anything upfront. That's the biggest cost barrier that Americans face. It is not tied to your personal income or your credit score. It stays on the bill. So when you sell the home, the new owner is picking it up on the bill. If you're a renter the new tenant, it's picking it up on the bill. It's not following you around personally. And what we found is that when these programs are offered to consumers, you know, 90% or more people are just lining up to say, yes, this, this benefits me. I want it.

Kousha Navidar: Yeah. 'cause the biggest barrier, which is the upfront cost is covered by the utility bill and you're still coming out ahead because they're not allowed to charge you more than the savings that you're experiencing. So like, do you have an, do you have an example of where this is working?

Tamara Jones: Yeah, sure. So there are lots of places where it's working. But I think what I'll start with are, you know, there are different utility entities, right? So if you live in a metropolitan area, mostly you're likely served by what's called an investor owned utility, which is a for-profit company.

But the majority of the geography of the country is outside of the metro areas, and they're served overwhelmingly by rural electrical cooperatives. And we have found that those cooperatives were among the first early adopters for these programs. In North Carolina, Roanoke Cooperative in 2014. They set the goal of achieving whole home energy efficiency upgrades for a thousand of their customers within five years, which is around 7% of their metered locations. So between 2015 to early 2022, they invested over $5 million, um, to upgrade almost 700 homes.

Kousha Navidar: Wow. And how do you get utilities to participate in this? Like what are the key things that need to exist to sell them on the model?

Tamara Jones: Well, it depends on the kind of utility that you're talking about, right? So if we go back to the investor owned utilities, the large, for-profit utility companies, they are largely regulated in each state by state energy regulators. They might be called a public utilities commission, a public service commission but these are bodies that have been empowered by legislators to oversee and regulate those private utility companies. And they can mandate that these utility companies have to offer these programs, whether they're on a pilot braces at first or just whole scale. So some of the motivation is coming from whether or not regulators are asking or mandating that these programs be be put in place. The other thing that we try to show the utilities is that this is just good business sense. You know, if you think about the collectively wasted energy in a utility service area, just some leaky buildings, if you could capture that, that might be the equivalent of building a whole new brick and mortar power plant. This is low hanging fruit. So if you're a utility company, go with the cheapest, quickest, fastest, most effective way to manage the demand on your grid. And that would be through energy efficiency programs. So There are lots of different motivations that we try to tap into because there isn't any one single profile that adequately speaks to all of the different kinds of utility markets that are out there.

Kousha Navidar: What kinds of efficiency upgrades are, are the utilities willing to pay for, like you mentioned insulation, for instance, but like, will they buy me a new fridge?

Tamara Jones: Well, typically not a fridge. So there are two kinds of upgrades that we do. One is to the structure of the building, if you will. Definitely insulation. Sometimes there might be window upgrades, maybe going from single pane to double pane. And then the other is equipment. Heat pumps to replace the, uh, gas furnaces are a good one. It might be solar panels, right? A lot of times we try to tell the utilities, Hey, while you're there, go ahead and put in bidirectional chargers for EVs, because that's coming and you need, rather than the dumb chargers, which just takes energy from the wall and puts it into your car. Put bidirectional so that the utility can actually pull energy from the cars that are plugged in from their batteries when there is high demand on the grid. So you end up having a network of batteries, right? In a city that. Can all return energy and help offset those peak demand loads, that can be a real problem.

Kousha Navidar: Right, and you, I'm gonna talk about regulations for a second 'cause I also realize that regulations governing these utilities also vary widely, but, but generally speaking, are policies already in place to encourage utilities to set up these incentive programs? These like pay as you save programs, or if not, what work needs to be done on the policy or the regulatory level?

Tamara Jones: That's a large part of our work. You know, in the 10 years that Clean Energy Works has been in existence, we have really done a lot to bring this model to the attention of regulators and there's still a lot of work to do to educate them about how these policies need to be formulated properly. But we have been successful in partnering with local community advocates in getting adoption in a couple dozen states and regions. And so that is success and we're very happy for that. Having the policies in place does not mean that we automatically see programs being implemented. So where I live, for example, in Georgia the policy has been in place for quite some time. The

investor owned utility, the for-profit, private utility company offers a program that is only targeted to very, very low income households with very, very high energy bills. And one of the things that really attracted me to Clean Energy works with the fact that this solution was income agnostic. It wasn't asking how much money you made or what class you fell into, or were you on a government program. You know, it doesn't matter because again, this makes sense from a utility business model that the utility should be driving this widely at scale because it needs to be seen as part of the grid flexibility that needs to be put in place. And, again, because it's not linked to upfront cost payments, ideally, there's no pre-qualifying the consumer based on their credit. Right. So, overcoming the utilities' historical practice of making programs like these, an act of charity, something that only is offered to low income folks, is something that has to be overcome as well.

Kousha Navidar: Tamara Jones is co-Executive Director of Clean Energy Works. Tamara, thank you so much for joining us.

Tamara Jones: Thank you again.

Ariana Brocious: And that's our show. Thanks for listening. Talking about climate can be hard, and exciting and interesting — and it's critical to address the transitions we need to make in all parts of society. Please help us get people talking more about climate by giving us a rating or review. You can do it right now on your device. Or consider joining us on Patreon and supporting the show that way.

Kousha Navidar: Climate One is a production of the Commonwealth Club. Our team includes Greg Dalton, Brad Marshland, Jenny Park, Ariana Brocious, Austin Colón, Megan Biscieglia, and Ben Testani. Our theme music is by George Young. I'm Kousha Navidar.