# **Reversing Energy System Inequity:** Urgency and Opportunity During the Clean Energy Transition

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## Introduction

Families in America with the least means pay disproportionately more for their electricity, sometimes lacking basic access to service altogether. It's a fundamental inequity of our current energy landscape, and one that can lead to dangerous repercussions. It's also a challenge we can absolutely address, and the sweeping changes transforming the power sector today are providing unprecedented opportunities to do just that.

As technology, economics, public appetite and policy steadily drive the transition to clean energy, there are frequent decisions to be made at utilities commissions and other venues about how to implement, facilitate and accelerate the needed change. Every year, in more and more places, we see more consideration of solar and electric vehicle programs and infrastructure, proposals for new grid and advanced metering infrastructure, new plans for electricity rates, and new approaches related to storage, energy efficiency, demand response and fuel switching to shift off oil or gas.

All of these developments are creating numerous utility proceedings and decision points that present chances to steer clear of choices that could exacerbate existing inequities. Instead, they can be opportunities to ensure our next energy era is far better in terms of equity for lower-income households.

In this brief paper, we look at three keys to success in this mission. They are by no means exhaustive – there is so much additional essential guidance that we won't touch on here, such as for specific technologies or specific rate designs. But the three keys we highlight are foundational for getting decisions right for residential customers with the least means. They include:

1) DATA: Collection and distribution of comprehensive residential customer data, broken out for low- and moderate-income (LMI) and vulnerable ratepayers.

2) PROCESS: An inclusive regulatory process that formally links identification of equity impacts with consideration and adoption of measures to address them.

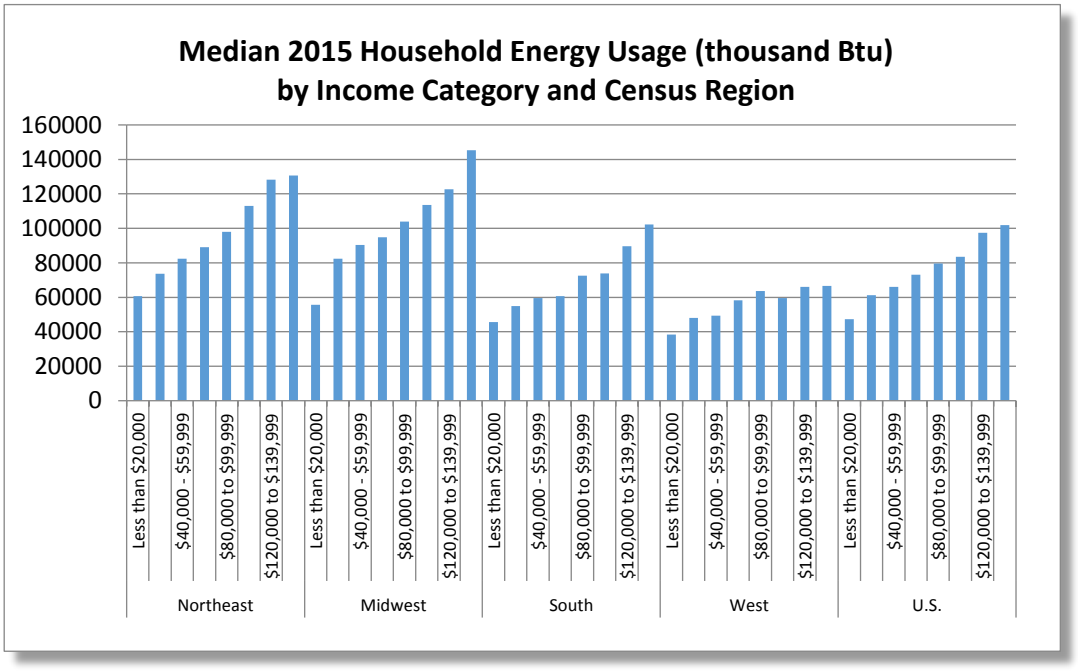
3) EDUCATION: Broad familiarity with the full range of programs and best practice protections to address economic inequities for low-income consumers.

## The need to address equity

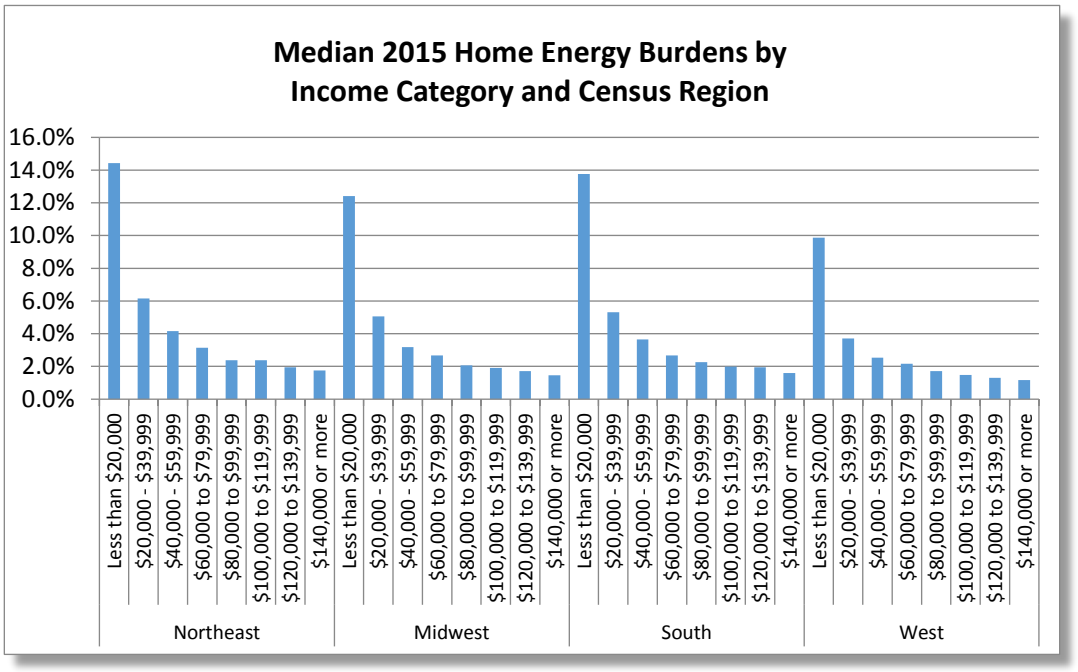
In July 2018, the *Washington Pos*t and local media in Newark, New Jersey reported the story of 68-year-old Linda Daniels, who died of heart failure after the local power company disconnected electricity to her home because of an alleged overdue bill. Ms. Daniels was dependent on an electric oxygen machine to breathe, and the service termination knocked out both her oxygen and air conditioning, with temperatures in the 90s. "She was trying to catch her breath – she was gasping for air," her granddaughter recounted. "She suffered and she passed right in front of us. She was gasping until the time she died."

The story is a potent reminder that electricity must be there when needed, for everyone – and the story is not unique. Electric service is not a "luxury item." In New Hampshire, state statute declares that "electric service is essential and should be available to all customers." State statue in Oklahoma requires "mechanisms that enable… consumers with limited incomes to obtain affordable essential electric service." There are many more states with similar provisions.

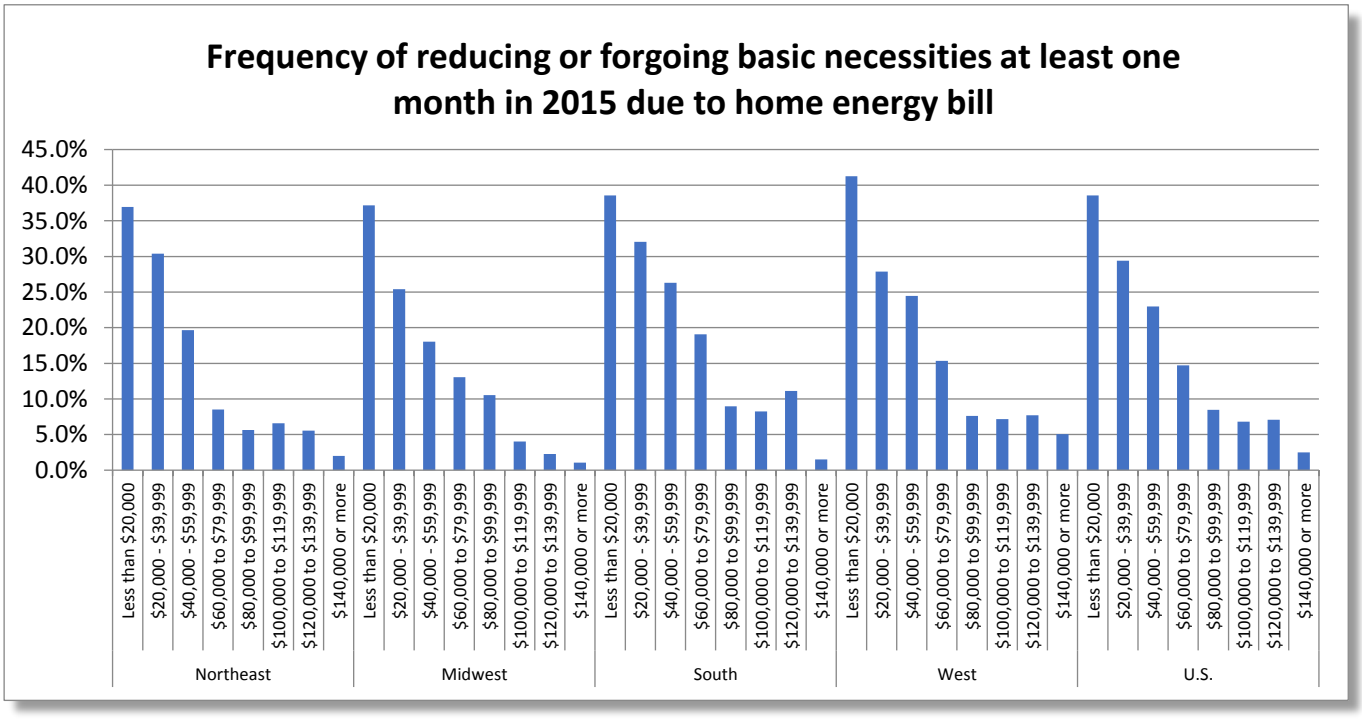
While it's widely recognized that access to electric service is critical to participating fully in American society today, and vital to health and safety, affordable access is not an equal opportunity proposition. First, it's important to remember that households with the lowest incomes are on average the very lowest energy users. This is true all across the country, as the chart below shows (note: the following three charts are all NCLC analysis of U.S. EIA 2015 Residential Energy Consumption Survey Data):




Yet even though households with the least means are using the least energy, they are shouldering the greatest energy burdens – the percentage of total household income that goes toward energy costs – as seen in this graphic:




The real world consequences of high energy burdens for income-limited households are significant; high energy burdens force difficult survival decisions, and can trigger cascading household calamities. As shown in the next chart, one end result is that lower income households forego or cut back on other basic necessities – such as food, clothing or medicines – in order to pay energy bills and maintain service.



Addressing inequities in our current power sector means working to alleviate the struggles faced by households in communities across the country who are disproportionately unable to achieve home energy security.

There are many keys to tackling this effectively as the clean energy era presents a flood of proposals before utilities commissions and other stakeholders. This paper focuses on three that are vital.

## Key 1: Collection and distribution of comprehensive residential customer data, broken out for low-income ratepayers

It may come as a surprise, but most utilities don't actually have good data on hand about their lower-income residential customer base. Despite the high numbers of families struggling with high energy burdens, power companies often know relatively little about exactly who these customers are or how they use electricity.

Customers that seek and obtain support from community service agencies, bill payment assistance programs, and other formal programs appear as clients of those programs, but details about their energy use patterns are not typically gathered. Many lower-income customers never seek such assistance, or obtain services through non-governmental organizations and may likewise never appear in utility databases as lower-income customers. And many more lower-income customers experience periodic or short-term income-related problems with household budgets that may not qualify them for assistance or services from budget-strapped programs.

If companies and utilities commissions don't know the scope of challenges residents are facing now, and who's facing them, it's virtually impossible to understand how they will be affected by a proposal on grid infrastructure, EVs, solar, AMI, energy efficiency, or a new rate design. Without such knowledge, it's virtually impossible to understand what mix of new programs or other adjustments may be needed to ensure that existing challenges will be addressed, not worsened. Thorough baseline and ongoing trend data on every utility's low-income ratepayers is key. Here are some of the most important data points that power companies need to track and make publicly available on a monthly basis, in a readily accessible format, for general residential and for low-income customers in particular:

- Number of residential accounts
- Total billed and receipts amounts
- Total number of "protected" accounts (e.g., for serious illness, elderly, disability)
- Number and dollar value of unpaid accounts 30-60 days after issuance of a bill
- Number and dollar value of unpaid accounts 60-90 days after issuance of a bill
- Number and dollar value of unpaid accounts 90+ days after issuance of a bill
- Number of accounts referred to collection agencies

- Number of new payment agreements
- Number of accounts sent notice of disconnection for non-payment, and number of service disconnections for non-payment
- Number of service restorations after disconnection for non-payment
- Number of customers completing an extended payment plan
- Average duration of service disconnection for restored accounts
- Number and dollar value of accounts written off as uncollectible

Such data is being tracked and disseminated in some places. In Iowa, for example, investor-owned electric and gas utilities have reported monthly since 1999 to the Iowa Utilities Board (IUB) on the number of accounts, the number of accounts in arrears, dollar amounts in arrears, disconnection notices issued, the number of disconnections, number of reconnections, and uncollectible accounts. Except for disconnection and reconnection reporting, power companies in Iowa differentiate between general residential customers and those who have been deemed eligible for energy assistance benefits. The IUB makes all the data available online and also distributes it to interested parties every month.

The need for this robust data collection on arrearages, disconnections and other related points has also been recognized nationally, both in a resolution by the National Association of Regulatory Utility Commissioners (NARUC) and a resolution by the National Association of State Utility Consumer Advocates (NASUCA).

**Statewide approach.** In addition to data collection and analysis at the individual utility level, states can also lead on assessing and addressing energy burden through multi-agency efforts like the one completed recently in Oregon by the state's housing and community services office, energy department and public utilities commission.

## Key #2: An inclusive regulatory process that formally links identification of equity impacts with consideration and adoption of measures to address them

In times of rapid change, good process becomes especially critical. If we are going to capture the opportunity to make our energy systems less regressive as the broader energy landscape is reshaped in the coming years – and avert risk of exacerbating current inequities -- it's going to take focus and formal process; otherwise, equity goals will be lost or ignored in the shuffle.

The following three practices should be formalized as standard approach for all new electric sector proposals before utilities commissions -- whether it's a proposal for grid infrastructure investment or other capital expenditure, for a rate plan change, or for any program or approach concerning distributed energy resources or demand response:

1) **The proposal must include a thorough and transparent assessment of the implications for equity based on comprehensive residential customer data that is broken out separately for low-income households.** Assessments of the proposal's impacts for lower-income ratepayers' access to service and home energy burdens should be conducted for short-, middle- and long-term time frames.

2) **Participation by diverse communities must be ensured throughout the proposal consideration process, in a manner that provides communities influence over outcomes.** While public feedback is sought in proceedings, it often comes from a narrow group of stakeholders. It is important to recognize that more substantial and meaningful participation with real influence in utility regulatory forums is time-consuming and can be expensive. Intervenor funding should be made available more broadly to ensure effective participation from lower income communities, such as is done currently in California and Indiana.

3) **When analysis indicates impacts on access to service or on energy burdens for low-income residents, a full range of the options, programs and best practices available for addressing equity must be assessed for adoption, in close collaboration with impacted consumer groups.** This includes assessment not only of programs and policies that could mitigate harm but also that could make progress toward rectifying current system inequities. A core principle of economic equity is to ensure that low-income customers paying into an energy program's funding source as ratepayers or taxpayers receive direct economic incentives in proportion to their contribution.

## Key #3: Broad familiarity with the full range of programs and best practice protections to address economic inequities for low-income consumers

When it comes to managing change in ways that avoid repeating or worsening inequity in energy burdens and service access – and finding ways to make improvements over the status quo – there are some good tools in place. Broader familiarity with the full range of programs, policies and consumer protection best practices that already exist is a simple but powerful step. The examples we summarize below are not an exhaustive catalog, but provide a sample of the range of existing tools. They fall into two basic categories: (1) bill payment assistance programs, and (2) protections against service disconnections and onerous fees and billing practices.

### *Programs and policies to lower bills of income-eligible households through bill payment assistance*

A choice between paying utility bills or paying for food, rent or medicines is difficult when all are necessities. An increase in a utility bill – whether because of a change in rates or fees, or extreme weather – can easily precipitate a family financial crisis. In fact, utility bill payment is the number one reason that consumers take payday, or other short-term, high-interest loans – a debt trap that leads many to bankruptcy.

Bill payment assistance programs generally aim to reduce home energy burdens and service disconnections, reduce utility credit and collection challenges, and enhance health, safety and equity. Ratepayer funding mechanisms are best, given that federal and state funding is subject to uncertain legislative appropriation, and voluntary "fuel funds" also fluctuate. Bill payment assistance should also be linked to long-term solutions, particularly deep retrofit, whole-house energy efficiency improvements. Administrative efficiency – such as coordinating intake and delivery of ratepayer-funded programs with existing federal LIHEAP program administration – is also key to ensure that as much of the available funding as possible is devoted to bill assistance.

Following are brief descriptions of three different types of bill payment assistance programs:

- ***Straight discounts*** reduce an eligible customer's total electric bill by a set percentage. Some versions are tied to usage in order to incentivize conservation, providing a bigger discount for those who use less energy. California's programs provide an example of using discounts to serve both the lowest-income customers and additional households beyond the lowest-income that also need assistance. In the California Alternative Rates for Energy (CARE) program, households below 200 percent of the federal poverty guideline receive a 30-35 percent discount on their electric bill and a 20 percent discount on their natural gas bill. And for households with three or more people in which total income is at or below 250 percent of the federal poverty guideline, California's Family Electric Rate Assistance (FERA) program provides a 12 percent discount.

- ***Percentage of Income Payment Plans (PIPPs)*** are designed to reduce household energy burdens to an affordable level by capping eligible participants' utility payments at a predetermined percentage of household income. This bill payment program design has an advantage over other discount models in that the participating customer's payment and burden remains fixed, even in the event of extreme weather conditions or an energy price spike. The PIPP in Illinois includes electric and gas service customers with income at or below 150 percent of the federal poverty guideline, and caps payments so that total home energy burdens do not exceed six percent of gross household income. As with straight discounts, conservation can also be incentivized in a PIPP program design, such as by reducing a customer's PIPP payment by a half or one percentage point if there are reductions in monthly usage. Similarly, by incorporating an "arrearage management" component, a PIPP may be structured to provide an incentive for participants to make timely utility bill payments. Through such an incentive, a portion of any outstanding account balance is forgiven through timely payment of current bills.

- ***Tiered discounts*** are another type of PIPP approach, and generally less complex and less expensive to administer. While a PIPP includes a calculation of the bill payment for each individual household, tiered discounts base the payment amount on the average household income within a few different income tiers (e.g., 0%-75% of poverty, 76%-125% poverty, 126%-150% of poverty).

### *Protections against service disconnections and onerous fees and billing practices.*

- ***Reasonable payment plans.*** Access to reasonable payment plans as an alternative to service disconnection, and as a means of restoring service, is essential. Some states require these plans, but payment terms and other features vary widely. Some variations are highly punitive, where a missed payment, irrespective of circumstances, automatically triggers a higher monthly payment. More sensible approaches provide some recognition for difficult financial circumstances and good faith payment efforts. In Iowa, for example, customers who have received a disconnection notice must be offered a one-year payment plan. In the event that this initial payment plan fails after the customer has demonstrated a good-faith effort to make timely payments, a subsequent payment plan of equal or greater duration must be offered.

- ***Protection against onerous security deposit tactics.*** As utility debt and the write-off of uncollectible accounts increase, many utilities are requiring security deposits from targeted customers in order to minimize company risk. These upfront collections can both increase cost of service as well as block basic access. In some states, power companies are allowed to demand and collect four or more months of service payments upfront from the customers they deem risky. The best practice is to eliminate security deposits for utility service altogether – as Massachusetts and Rhode Island have done – or to enact rules to keep the deposits to a minimum and crack down on problematic credit scoring practices used to assess customers' finances.

- ***Late payment fee protections***. When a customer bill payment is late, many states allow utilities to levy a fee – typically a percentage of the bill. Like security deposits, late payment charges can significantly increase cost of service and threaten access. As a result, some states (Massachusetts is one example) have prohibited late payment fees for residential customers. Another best practice is for states to adopt measures to avert the risk of late payments in the first place by extending bill due dates to 30 days for low-income customers enrolled in bill assistance programs. This helps ensure that customer bills aren't due before the household has received the income assistance needed to pay the bill. Finally, in cases where a bill is late, fees should either be waived for low-income customers or set at a one-time charge of no more than five percent of the bill.

- ***Protections against service termination.*** All states should develop utility service disconnection protections for vulnerable customers, as well as seasonal moratoriums on service termination for customers in places where weather conditions make it necessary. Currently, states are all over the map on this – many do very little to protect vulnerable customers while others do a lot. In Massachusetts, for example, utilities are prohibited from terminating service in low-income households where an occupant is elderly or disabled, or where there is an infant under 12 months. Massachusetts utilities are also prohibited from terminating service between November 15 and April 15 in households where there is financial hardship. Washington has a similar statutory prohibition on winter service disconnections for low-income households. These kinds of best practices, and others, can be a model for all. Descriptions and citations for many of the state disconnection consumer protections may be found on the LIHEAP Clearinghouse website.

- ***Ensuring fair terms for disconnection notices and service restoration.*** Service termination should not be allowed for arrearages of less than 90 days, and states should require utilities to provide secure notice by mail that includes information on how to make a payment arrangement as well as contact information for the state consumer advocate or utilities commission. In New York, for example, after at least two notifications by mail utilities must make a site visit in person before disconnecting a customer, even when AMI enables remote disconnection. Terms for restoration of service have also become increasingly important as high and volatile energy prices lead to higher arrearages for low-income households. States need to ensure that service restoration fees and outstanding arrearage payment requirements are not so onerous that families are unable to get reconnected. In states that are using smart meters for remote disconnection and reconnection, any meter fees should be waived.

- ***Offsetting bill volatility through equal pay or budget billing options.*** Monthly electric bills can vary a lot, especially in areas where customers rely on electricity to heat or cool their homes seasonally. These swings can make budgeting difficult for low- and moderate-income customers. A good practice now at many utilities – which should be adopted broadly – is to offer optional "equal pay" (or "budget") billing where the total annual average electricity payment is equally divided among a customer's monthly payments. This provides a regular bill total customers can budget for every month, avoiding a surprisingly steep monthly bill in the winter or summer that can lead to an arrearage or eventual disconnection. Equal pay is based on actual usage, so the customer is credited or billed for any amount that deviates from their estimated annual total – ensuring that the customer does not overpay (or underpay) for service. Best practices allow any overages to be rolled into the full next year of equal pay billing, so the customer is not hit with a large bill at the end of a billing cycle. Equal pay is an important billing tool that can help low-moderate income households stay on track with their payments and avoid all the risks that come with arrearages and service interruption.

***Holistic approach.*** Good coordination of programs and streamlining of the energy assistance process for low-income residents is another important factor to effectively address equity in the power sector, and there are good models to draw from. Colorado, for example, is recognized as a national leader in developing holistic approaches to reducing household energy burden, ensuring that low-income customers see reductions in energy expenditures for both home heating and electric use through the adoption of energy efficiency measures, connection to solar, and bill payment assistance. The Colorado Energy Office often works collaboratively with Energy Outreach Colorado, an independent nonprofit organization created by the state that serves as a one-stop shop for low-income energy services. These include energy efficiency upgrades, home weatherization and emergency home furnace repair, consumer energy education and behavior change outreach, energy efficiency grants for nonprofit organizations and multifamily affordable housing, energy bill payment assistance and advocacy for affordable energy policies. Energy Outreach Colorado administers all of these programs together to streamline the energy assistance process.

## Conclusion

We've looked at the ongoing data collection and distribution needed for addressing inequities in our energy system; the inclusive and intentional decision-making process necessary for making effective headway; and a partial toolkit of programs and best practices at hand for states, utilities and regulators. These are core building blocks for arriving at the right results for all in the different local contexts in which they are applied. There's always risk and challenge with change, and that's true for low-income consumers amid the clean energy transformation ongoing and ahead for our power sector. But the flip-side of risk is opportunity. With the imperative to curb climate pollution everywhere we can, as quickly as we can, this time of transition should be viewed as the time to achieve another imperative simultaneously – building a more equitable energy landscape in America, hand in hand with a cleaner one.