

# RETHINKING PREPAID UTILITY SERVICE

CUSTOMERS AT RISK



June 2012

**NCLC**<sup>®</sup>  
NATIONAL  
CONSUMER  
LAW  
CENTER<sup>®</sup>

© Copyright 2012, National Consumer Law Center, Inc. All rights reserved.

Revised June 19, 2012.

## ABOUT THE AUTHORS

**John Howat** is a senior energy analyst at the National Consumer Law Center (NCLC) with more than 30 years of experience in energy policy. Areas of expertise include: design and analysis of low income energy affordability and efficiency programs, low-income utility consumer protections, prepayment and advanced metering, utility credit reporting and utilization of credit scores, and utility rate design. John has managed a range of regulatory, legislative, and research projects across the country in support of low-income consumers' access to affordable energy and utility services. He has represented public agencies and non-profit organizations in a range of capacities in 27 states and as an expert witness in proceedings before state utility regulatory commissions in 11 states. John is author of numerous publications, including co-author of NCLC's *Access to Utility Service*. He has a Master's Degree from Tufts University's Graduate Department of Urban and Environmental Policy.

**Jillian McLaughlin** is a research assistant at the NCLC. She graduated from Kalamazoo College with a degree in political science.

## ACKNOWLEDGMENTS

The views and opinions expressed in this report are solely those of the NCLC. The authors wish to thank Jerry McKim of the Iowa Bureau of Energy Assistance for invaluable input and support of this project, as well as the Mississippi Center for Justice and Atlantic Philanthropies for their support.



## ABOUT THE NATIONAL CONSUMER LAW CENTER

Since 1969, the nonprofit National Consumer Law Center® (NCLC®) has used its expertise in consumer law and energy policy to work for consumer justice and economic security for low-income and other disadvantaged people, including older adults, in the United States. NCLC's expertise includes policy analysis and advocacy; consumer law and energy publications; litigation; expert witness services, and training and advice for advocates. NCLC works with nonprofit and legal services organizations, private attorneys, policymakers, and federal and state government and courts across the nation to stop exploitive practices, help financially stressed families build and retain wealth, and advance economic fairness.

# RETHINKING PREPAID UTILITY SERVICE

## CUSTOMERS AT RISK

### TABLE OF CONTENTS

Executive Summary	2
Current and Proposed Prepaid Utility Programs in the United States (Map)	6
I. Introduction: Prepaid Utility Service Can Pose Grave Risks for Customers, Especially Low Income Children, Elderly and Seriously Ill People	8
II. Utility Consumer Protections	9
A. <i>Bill Payment Timeframes</i>	10
B. <i>Notification of Disconnection by Mail</i>	10
C. <i>Establishment of Payment Plans</i>	10
III. Prepayment Does Not Enhance Affordability of Utility Service, Provide Customers with Added Control, or Enhance Energy Efficiency	10
A. <i>Claims of Affordability</i>	11
B. <i>Claims of Added Control</i>	12
C. <i>Claims of Energy Efficiency and Conservation</i>	13
D. <i>Utility and Shareholder Advantages</i>	13
IV. Rates, Charges, and Fees	14
V. Prepayment Experience in the United Kingdom and the United States	15
A. <i>United Kingdom</i>	16
B. <i>United States</i>	17
C. <i>Marketing</i>	19
D. <i>Disconnections</i>	20
E. <i>Reported Customer Satisfaction</i>	21
VI. Technology	22
A. <i>Early Technologies</i>	22
B. <i>“Smart” Meters Advance Prepayment Programs</i>	23
VII. Recommendations	24
VIII. Conclusion	25
Appendix A	
Customer Service Questions that Utilities with Prepaid Service Programs Should be Required to Answer Annually	27
Endnotes	29
Tables	
Table 1: PayGo Projections of Utility System Benefits of Prepaid Service	14
Table 2: Surveying Great Britain Prepayment Customers	16

## EXECUTIVE SUMMARY

Electric and natural gas utilities in numerous states have sought to replace traditional “credit-based service” with “prepaid service” delivered through prepayment meters or advanced, digital meters with remote disconnection and reconnection capabilities. (See map of the United States on page 6 identifying currently-operating prepaid service programs.) Traditionally in the U.S., electric and natural gas service has been billed on a post-paid basis where a utility company tracks a customer’s usage during the previous monthly or quarterly period and then mails a bill to the customer based on that usage. The customer is then required to make payment within a predetermined time frame or face disconnection procedures. In most states a utility must offer a customer facing disconnection a payment plan to pay down an arrearage over a period of months while retaining access to service.

Prepaid service, as the name implies, requires customers to pay in advance for their service with prepaid account balances decreasing as service is delivered. In most instances, service is automatically suspended when account balances are depleted. While consumers using prepaid service may receive electronic notification that billing credits are running low, there is no obligation on the part of the utility to deliver shutoff notification securely through the mail, to continue providing service for some period of time (e.g., days or weeks) after credits are exhausted, or to work with payment-challenged customers by offering reasonable payment plans or other means of retaining access to basic utility service.

The movement to prepayment allows companies to sidestep critical consumer protections that have evolved over decades while altering the utility’s incentives to interact creatively and constructively with payment-troubled customers. State legislators and utility regulators have long recognized that utility service is a necessity of modern life and that loss of service poses a threat to health and safety. Toward this end, they have adopted important utility consumer protections regarding bill payment timeframes, and secure, reliable notification by mail prior to disconnection of service. Many states help to ensure utility bill affordability through discounted rate structures and “arrearage management” programs. In some states, consumer protections include prohibitions or limitations on residential customer late payment fees and security deposits. The movement to prepayment effectively guts these important consumer protections.

Experience in the United Kingdom and the United States demonstrates that prepaid metering and billing is targeted toward and concentrated among low- or moderate-income consumers, particularly those who are facing unaffordable security deposit requirements or disconnection for nonpayment under traditional service. In the largest prepayment program operating in the United States (Arizona's Salt River Project's M-Power program), prepaid electric service is increasingly concentrated among racial minorities. Additionally, prepayment results in more frequent service disconnections or interruptions (a 1997 customer service survey conducted by Centre for Sustainable Energy National Right to Fuel Campaign found that 28 percent of prepayment

customers in Great Britain were disconnected from service over the past year). Also, customers sometimes pay higher rates than they would under traditional credit-based service. Low-income customers using prepaid utility service tend to make numerous, small payments on a monthly basis to retain electricity or natural gas service, often incurring transaction fees that add to the customer's total cost for basic service.

Households with the least means are trapped under prepayment, often paying higher costs and transaction fees while experiencing more frequent, disruptive, and dangerous loss of service. Such a system creates a two-tiered system, favoring wealthier, credit-paying households.

Increased disconnections of gas and electric service that come with prepayment threaten the health and safety of customers, particularly the elderly, disabled, and low-income families with children. Disconnecting natural gas or electric service has caused house fires and extreme indoor temperatures, which can result in illness and death. Implementing prepaid utility service, with the increased rates of service disconnection that result, increases the risk that such tragedies will occur.

With prepaid utility service, low-income customers who struggle to pay their bills often end up paying more for second-class utility service. Access to essential service, delivered by regulated, franchised monopoly utility companies, should not be compromised by a service model that leads to the forfeiture of regulatory consumer protections. **Rather, payment issues related to the inability of some households to afford a basic level of uninterrupted utility service should be addressed through delivery of comprehensive, effective low-income energy efficiency programs, bill payment assistance and “arrears management” programs, reductions of burdensome late payment fees and security deposits, and implementation of deferred payment agreements that are truly reasonable and based on a household’s actual income and expense circumstances.**

The advent of advanced metering infrastructure (AMI) and digital meters, commonly called “smart meters,” dramatically increases the potential for new utility prepayment programs. Advanced meters—which include remote disconnection and real-time communication capabilities—obviate the need for utility companies to invest in “standalone” prepayment meters, and reduce the related upfront capital investment required to implement a new prepayment program. The recommendations that follow are based in large measure on provisions of a resolution adopted by the National Association of State Utility Consumer Advocates on June 11, 2011.

## Recommendations

The National Consumer Law Center opposes prepaid electric and gas services. However, if a company is allowed to implement prepaid service, state regulatory commissions should require each of the following provisions.

1. **Regulatory consumer protections and programs should be maintained or enhanced.** These include existing limitations or prohibitions on disconnection of service, advance notice of disconnection, availability of payment plans, availability of bill payment assistance or arrearage forgiveness, and the right to dispute bills.
2. **Health and safety risks must be reduced.** When the billing credits of a customer receiving prepaid residential electric or natural gas service are exhausted, the customer must be given a five-day disconnection grace period, after which the customer must be restored to traditional, credit-based service, subject to all rules and customer protections applicable to such service. Prepayment customers should be allowed to return to credit-based service at no higher cost than the cost at which new customers can obtain service.
3. **Vulnerable populations must be protected.** Prepayment service should not be offered to low-income households or households that include any person who is elderly, disabled, or who has a serious illness. Households with young children should also not be eligible to enroll in prepayment service.
4. **Marketing of service should be voluntary.** Prepaid service should only be marketed as a voluntary service and should not be marketed to customers facing disconnection for non-payment. Conditioning service on the method of payment is not marketing—it's coercion.
5. **Payment assistance and arrearage management programs must be adopted or maintained.** Utilities offering prepaid service to low-income customers must also offer effective bill payment assistance and arrearage management programs to those customers.
6. **Rates for prepaid service should be lower than rates for comparable credit-based service.** This lower rate reflects the lower costs associated with reduced carrying costs, collection costs, uncollectible accounts, and shareholder risk.
7. **Costs should be transparent.** Prior to implementation, utilities should demonstrate the cost effectiveness of any proposed prepaid service program and reveal how costs will be allocated among various classes of customers.
8. **Transaction and other junk fees should be eliminated.** Prepayment customers should not pay security deposits or additional fees that traditional customers are not required to pay. Examples of such fees include initiation fees, equipment charges, or transaction fees to purchase billing credits, or frequent payment fees.
9. **Initiate “on demand” service.** Utilities must ensure there are readily available means for prepayment customers to purchase service credits on a 24-hour a day, seven-day a week basis to prevent potential health and safety risks.

10. **Tracking and reporting should be monitored and disclosed.** Prepaid service programs should be monitored to ensure there is not an increased rate of service disconnections for non-payment. Utilities implementing prepaid service programs should track and report to the state regulatory commission on a monthly basis the following data *separately for credit-based and prepayment residential customers*:
  - Number of customers
  - Number of customers with arrears of 30 days or more
  - Dollar value of arrears
  - Number of disconnection notices sent
  - Number of service disconnections for non-payment
  - Number of service reconnections after disconnection for non-payment
  - Number of new payment agreements entered
  - Number of payment agreements successfully completed
  - Number of failed payment agreements
11. **States should proactively plan for customer protections in case of company default.** States must have adequate financial mechanisms to guarantee that funds prepaid by customers are returned to customers if a company becomes insolvent, goes out of business or is otherwise unable to provide the services for which the funds were prepaid.

## Conclusion

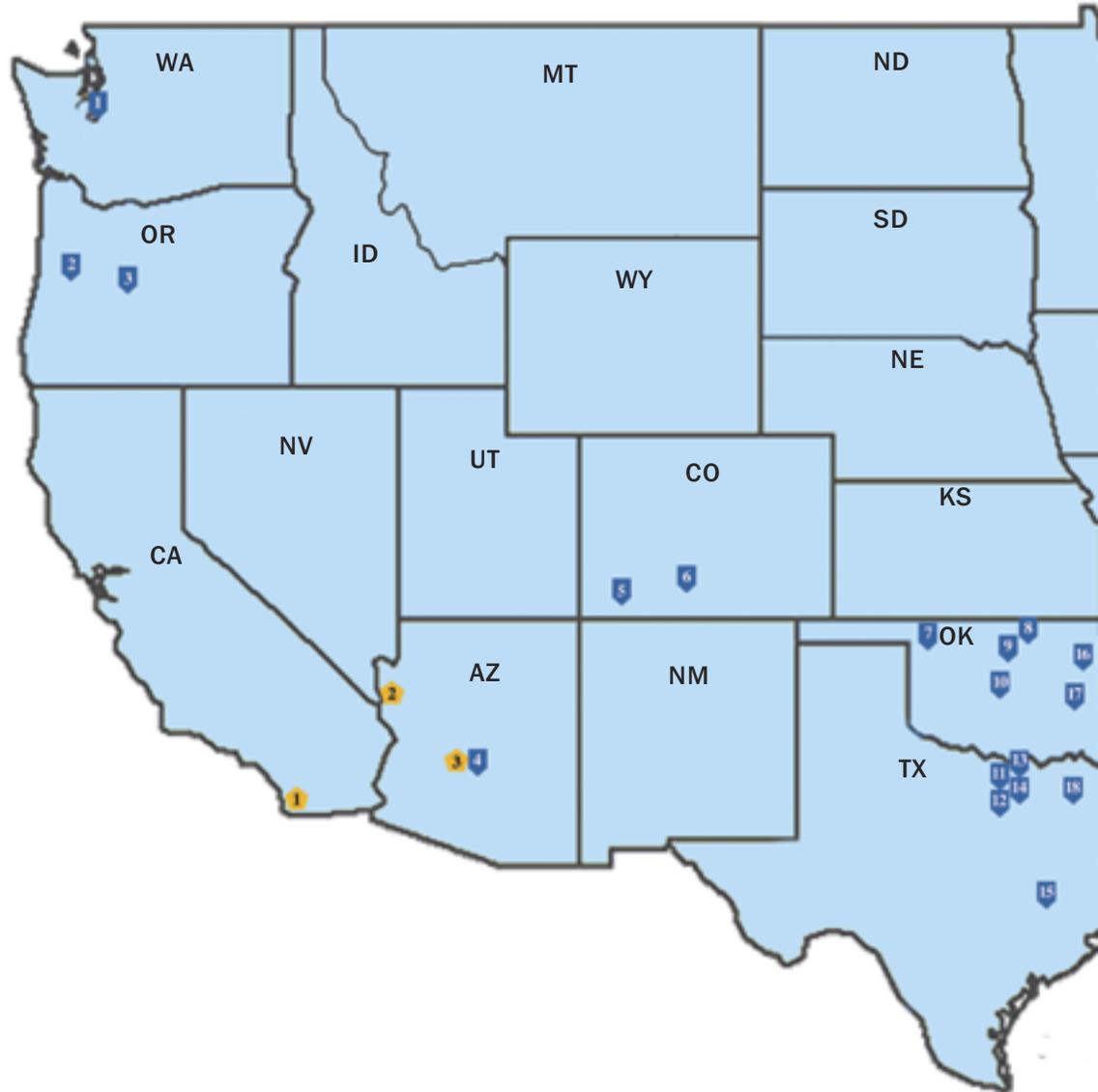
In service territories where prepaid service is already implemented, the implementing utility should answer a series of customer service questions on an annual basis. A list of those questions may be found in Appendix A (page 27).

With prepaid utility service as it currently operates, low-income customers who struggle the most to pay bills often end up paying the most while receiving second-class utility service. Access to essential life-supporting service, delivered by regulated, franchised monopoly utility companies, *should not* be compromised by a service model that allows companies to sidestep important consumer protections that were implemented for health and safety reasons. Instead, payment issues should be addressed through delivery of comprehensive, effective programs and policies that account for a household's actual income and expenses, rather than a punitive prepaid program.

If a utility company is allowed to roll out a prepayment program, it is critical that state governing bodies enact provisions that will not put customers' lives at risk and avoid setting up a two-tiered system which targets low-income and minority customers.

## CURRENT AND PROPOSED PREPAID

(current as of

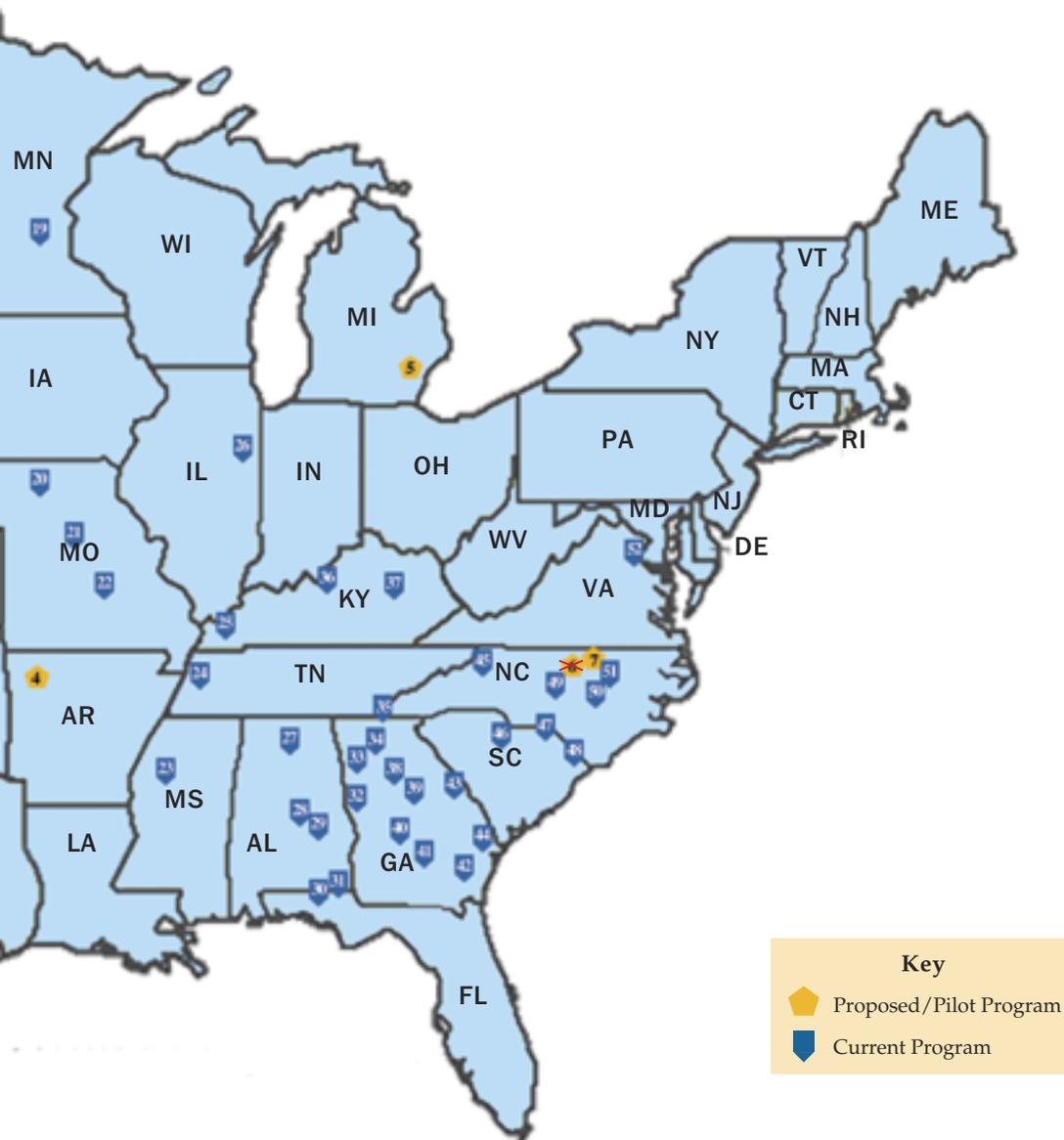


### Current Programs

- |   |   |  |
|---|---|--|
| 1. Tacoma Public Utilities                    | 10. Oklahoma Electric Cooperative         | 22. Intercounty Electric Cooperative     |
| 2. Lane Electric Cooperative                  | 11. Payless Power                         | 23. Delta Electric Power Association     |
| 3. Midstate Electric Cooperative              | 12. United Cooperative Services           | 24. Southwest Tennessee EMC              |
| 4. Salt River Project                         | 13. First Choice Power                    | 25. City of Mayfield                     |
| 5. La Plata Electric Cooperative              | 14. Direct Energy                         | 26. Eastern Illini Electric Cooperative  |
| 6. San Luis Valley Rural Electric Cooperative | 15. Mid-South Synergy                     | 27. Cullman Electric Cooperative         |
| 7. Northwestern Electric Cooperative          | 16. Lake Region Electric Cooperative      | 28. Central Alabama Electric Cooperative |
| 8. Indian Electric Cooperative                | 17. Kiamichi Electric Cooperative         | 29. Dixie Electric Cooperative           |
| 9. Central Rural Electric Cooperative         | 18. Wood County Electric Cooperative      | 30. Choctawhatchee Electric Cooperative  |
|   | 19. Minnesota Valley Electric Cooperative | 31. West Florida Electric Cooperative    |
|   | 20. Farmers' Electric Cooperative         | 32. Diverse Power Incorporated           |
|   | 21. Co-Mo Electric Cooperative            | 33. Caroll EMC                           |

# ELECTRIC PROGRAMS IN THE U.S.

(March 31, 2012)



**Key**

- ▮ Proposed/Pilot Program
- ▮ Current Program

- |   |                                      |
|---|--------------------------------------|
| 34. Greystone Power Corp.                 | 46. Fairfield Electric Cooperative   |
| 35. Tri-State EMC                         | 47. Pee Dee Electric Cooperative     |
| 36. Nolin Rural Electric Cooperative      | 48. Hory Electric Cooperative        |
| 37. Jackson Energy Cooperative            | 49. Central EMC                      |
| 38. Central Georgia EMC                   | 50. South River EMC                  |
| 39. Tri-County EMC                        | 51. Town of Selma                    |
| 40. Middle Georgia EMC                    | 52. Rappahanock Electric Cooperative |
| 41. Irwin EMC                             |                                      |
| 42. Okefenokee Rural Electric Cooperative |                                      |
| 43. Jefferson Energy Cooperative          |                                      |
| 44. Coastal Electric Cooperative          |                                      |
| 45. Blueridge EMC                         |                                      |

### Proposed/Pilot Programs

1. San Diego Gas & Electric Company
2. Mohave Electric Corp.
3. Arizona Public Service Company
4. Ozarks Electric Cooperative
5. Detroit Edison
6. Progress Energy\* Program rejected by North Carolina Utility Commission, June 13, 2012.
7. Wake Forest Power

## I. INTRODUCTION: PREPAID UTILITY SERVICE CAN POSE GRAVE RISKS FOR CUSTOMERS, ESPECIALLY LOW INCOME, CHILDREN, ELDERLY AND SERIOUSLY ILL PEOPLE

Prepaid service results in customers experiencing disconnection of service once any billing credits they have paid expire. This poses grave risks for low-income households, households with children, the elderly and seriously ill. Sudden loss of utility service can result in the customer's home becoming dangerously hot or cold, the inoperability of medical equipment, loss of refrigeration of food and medicines, loss of lighting, and loss of the ability to cook food.

Increased remote service disconnections of gas and electric service as the result of prepaid service threaten the health and safety of customers, especially the elderly, disabled, and low-income families with children. Disconnecting natural gas or electricity service can cause house fires or lead to extreme indoor temperatures, resulting in illness and/ or death. Prepaid utility service increases the rate of remote service disconnection, and the risk that such tragedies will occur.

Generally, utilities that are regulated by state commissions must seek permission when proposing to implement prepaid service to eliminate critical consumer protections, including those related to bill payment timeframes, notification of disconnection, and establishment of payment plans. Such protections were initially established for an important reason: electric and natural gas services are essential to customers' health and safety. Proponents of prepaid service seek to work around these vital consumer protections. In Iowa, for example, legislation was recently introduced that would have allowed for automated, remote disconnection of service if the prepaid account balance ran out by defining it as a "voluntary termination."<sup>1</sup> Prepayment should never undermine the consumer protections that have developed over decades.

The proliferation of advanced meters with remote disconnection capabilities improves the utility business case for prepaid service delivery. With advanced metering infrastructure, relatively minor additional software and communications system upgrades are needed to implement prepaid service. Further, because service terminates automatically as soon as billing credits are exhausted, companies implementing prepaid service do not have any incentives to negotiate effective, reasonable payment agreements or to implement programs to assist low- and moderate-income consumers with costly utility bills. Such solutions help low- and moderate-income customers pay utility bills in a timely manner while staying connected to utilities that provide needed heat, cooling, and power.

Finally, electric service delivery companies in at least one state have gone out of business after receiving prepayment funds from customers, resulting in large unpaid fines and customers losing money paid in advance for service.<sup>2</sup> Companies implementing prepaid service, particularly in states where utility distribution services are "unbundled" from distribution and transmission functions, should be required to post a bond or

## Safety Matters in Michigan

Marvin Schur, a 93-year-old Michigan man, had a “limiter” device on his home’s electric meter. Similar to a prepayment meter or advanced meter with remote disconnection capabilities, a “limiter” device caps the use of electricity at an individual’s home. Once consumption exceeds a level set by the limiter, power is disconnected. In January 2009, a neighbor found Schur’s body in his home; he froze to death after his electricity was shut off by the “limiter.” On Schur’s table was cash clipped to his electric bills.<sup>3</sup>

other assurance to protect prepaid customers’ funds. This action helps to level the playing field with traditional credit-based customers who would not experience such a loss.

## II. UTILITY CONSUMER PROTECTIONS

Basic energy and utility service is a life necessity. Yet, the circumstances of lower income households often make that service unaffordable. Many states recognize this principle explicitly in their utility laws.<sup>4</sup> Indeed, in most cases utility payment difficulties stem from affordability problems. While prepaid service may allow some customers to avoid certain deposit charges in the short term, it does not enhance the long-term affordability of service.

As noted, each state has adopted critical utility regulatory consumer protections that are intended to shield vulnerable utility customers from loss of essential service. While provisions vary from state to state, virtually every state has adopted laws that require regulated monopoly utility companies to notify consumers by mail of impending service disconnection, to allow a specified number of days after a bill becomes due before disconnection occurs, and to offer payment plans to customers as an alternative to disconnection. However, consumers who enroll in prepaid electric or natural gas service must surrender these basic consumer protections. When prepaid billing credits are exhausted, service is disconnected remotely and automatically without the benefit of the mailed notifications or the offer of a deferred payment agreement that apply to traditional, credit-based customers.

This consumer protection framework has evolved over decades in many states and is intended to prevent disconnecting vital home energy service, particularly where there is financial hardship and where loss of service poses a threat to human health and safety. Prepaid utility service is designed to allow utility companies to sidestep this critical life-saving customer protection blueprint.

### A. Bill Payment Timeframes

All states require that, before a payment is considered past due, companies provide customers with a fixed number of days to make payment. Some states require payment in as few as 10 days after a bill is postmarked.<sup>5</sup> Other states allow as many as 45 days to expire before a bill is considered past due.<sup>6</sup> Payment due dates are important because they have direct bearing on the amount of time which must expire before a customer faces the possibility of disconnection. Since there are no bills rendered under a prepayment structure, prepay customers lose these important payment provisions which credit-based customers receive.

Prepaid utility service is designed to allow utility companies to sidestep the critical lifesaving customer protection blueprint.

### B. Notification of Disconnection by Mail

Regulations require secure, reliable notification by mail if disconnection for nonpayment is pending. Similar to variations in bill payment timeframes, states have adopted a range of provisions regarding the timing of delivery of mailed disconnection notices. In Arizona, for example, notices must be sent five days prior to actual disconnection of service.<sup>7</sup> Ohio requires a 14-day notice.<sup>8</sup> Prepaid utility customers do not receive notification by mail prior to disconnection. Instead, notification is delivered through less secure, less reliable electronic means.

### C. Establishment of Payment Plans

Most states have adopted rules that require utility companies to offer customers special payment agreements as an alternative to disconnecting service or to restore service. Access to reasonable payment plans is key to protect utility customers, but is lost when a customer accepts prepaid service.

In Iowa, for example, customers who have received a disconnection notice are offered a payment plan of at least 12 months. Should the initial payment plan fail 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.<sup>9</sup> This rule is based on the assumption that most customers want to remain current on their utility bills, but that difficult financial circumstances often lead to payment troubles. The basic right to a reasonable payment plan in Iowa and other states would be lost to customers participating in a prepaid utility program.

## III. PREPAYMENT DOES NOT ENHANCE AFFORDABILITY OF UTILITY SERVICE, PROVIDE CUSTOMERS WITH ADDED CONTROL, OR ENHANCE ENERGY EFFICIENCY

Despite claims of proponents, prepayment does not enhance the affordability of utility service, but instead results in added fees, more frequent loss of service, and forfeiture of basic regulatory consumer protections. Further, features of prepaid service that lead

proponents to claim that the service provides participants with added control over their usage and payments—features such as real-time consumption and expenditure information and the option to make numerous, small payments over a monthly periods—are not unique to prepaid service. Such features may be provided to customers without the threat of immediate loss of service that comes with prepaid service, and may often be provided more cost-effectively than prepayment. Finally, while some proponents cite conservation and energy efficiency gains that come through implementation of the service, there is currently little or no compelling evidence that reductions in usage among prepayment participants are not attributable to deprivation (e.g., sacrifice of other necessities or disconnections that come automatically when billing credits are used up).

### *A. Claims of Affordability*

Given that prepaid service customers must pay in advance while facing heightened risk of disconnection, prepayment customers should arguably pay less than credit-based customers. Yet this is not the case as prepaid service rates are in all cases in the U.S. equal to or higher than those paid by similarly-situated credit-based customers. In addition, although proponents of prepayment point to the prospect of foregone security deposits and late payment fees, companies often charge prepaid customers higher rates, equipment deposits and a range of new service fees. For example, utilities in at least one state impose additional fees on prepayment customers who make payments more frequently than once a month. These fees gouge financially strapped customers and do not enhance affordability of utility service. (Information about rates, charges and fees associated with specific prepayment programs is provided further in this report.)

With respect to the claim that prepaid service allows customers to avoid security deposits, it should be noted that some states simply prohibit utilities from charging residential customers any security deposits or late payment fees. In Massachusetts, for example, no electric or natural gas utility company under the jurisdiction of the state utility regulator may require a security deposit of a residential customer as a condition of providing service.<sup>10</sup> Clearly, imposing prepaid service is not the sole means of addressing the difficulty some customers face in paying security deposits and late fees.

Further, prepaid service does not enhance affordability by decreasing or writing down any arrearages (past due utility bills) that may have accrued. For low-income households, utility arrearages are attributable primarily to inability to afford monthly utility bills, household and living expenses. While prepayment allows utilities to avoid dealing with customers' payment difficulties, it does nothing to change the fact that for many households, there simply is insufficient income to pay for monthly utility service and other necessities of life.<sup>11</sup>

Data from the United Kingdom (U.K.) shows that prepayment customers with arrears pay higher weekly repayment amounts than similar customers using the credit system.<sup>12</sup> Ofgem, the UK energy regulator, noted: "We are concerned by this given that PPM (prepayment meter) customers are more likely to be on low incomes."<sup>13</sup> A 2010 study by Consumer Focus explains the disparity. Only half of prepaid customers surveyed agreed that their repayment rate was mutually acceptable.<sup>14</sup> Thirty percent of those surveyed said they had minimal or no consultation with the supplier about the rate and 14 percent

said the supplier set a rate higher than they were comfortable with.<sup>15</sup> The report notes this trend despite a law stating that suppliers “are required, when setting debt repayment levels, to establish the consumer’s ability to repay.”<sup>16</sup> Surveys of prepayment customers in Northern Ireland reveal a similar tendency. Eleven percent of households with debt reported that their repayment rate was determined by the energy company without consulting the customer.<sup>17</sup> Thus, unless prepayment of current bills is coupled with an “arrearage forgiveness” feature or an arrearage repayment component that is reasonable and affordable to the customer, it does not enhance the ability of customers to retire back bills.

Rather than introducing prepaid service or other punitive means of changing payment patterns, utilities should address problems with customer arrearages and payment difficulties using incentives.

Prepayment does not enhance affordability of utility service. Rather than introducing prepaid service or other punitive means of changing payment patterns, utilities should address problems with customer arrearages and payment difficulties using incentives. Examples include comprehensive, effective energy efficiency programs; bill payment assistance and arrearage management programs; reductions or elimination of burdensome security deposits and late payment charges; and implementation of deferred payment agreements that are reasonable and based on a household’s actual income and expense circumstances.

### *B. Claims of Added Control*

Proponents of prepaid service claim that it provides customers with increased control over their utility bills, that customers reduce consumption, and that as a result utility service is made more affordable for low-income customers. These claims are often misleading and require further scrutiny. For example, the claim regarding greater control over utility bills is often based on the notion that prepayment customers have access to energy consumption and billing information on a real-time basis, and are therefore more likely to reduce consumption and not be surprised by large monthly bills that must be paid after consumption occurs. The claim also hinges on the ability of customers to make payments—large or small—at any time. However, these benefits are not unique or limited to prepaid service delivery. Advanced meters and other “consumer feedback” mechanisms can provide real-time information to customers about the cost of the utility services they are using whether the customer is on a prepaid program or a traditional credit-based service plan. Further, nothing prevents a utility from accepting payments throughout the month from customers who are not on a prepayment program that disconnects service as soon as billing credits expire.

Further, while prepaid service proponents claim that the programs help payment-troubled customers manage their energy budgets, it removes incentives that exist under the credit-based system that encourage a mutual negotiation of payment plans, particularly for customers with conditions or circumstances that entitle them to special protections. If a credit-based customer accrues a debt, it’s in the utility company’s interest to develop an affordable payment plan to collect on the past due balance. Under prepayment arrearages do not accrue. Therefore, utilities can skip the negotiation and mandate

payment under a flat rate that fails to account for household circumstances or ability to pay. This sets up an inequitable, two-tiered system of service delivery to customers.

### C. Claims of Energy Efficiency and Conservation

The claim that prepayment customers use less energy, save money on utility service, and therefore have more affordable utility service must be examined carefully. At least one utility company has proposed a prepayment program as part of its demand response program portfolio (used to reduce use of electricity during peak usage times to reduce strain on the power supply).<sup>18</sup> While there are reports of a “conservation effect” of prepayment,<sup>19</sup> proponents argue that the effect is due, at least in part to the fact that prepayment “requires consumers to pay attention to when and how, they use electricity, *allowing* them to make immediate adjustments in usage to lower their bills.”<sup>20</sup> (emphasis added) However, the extent to which this “conservation effect” is attributable to forced usage reduction to avoid complete loss of light, cooling and heat, or even from reduced usage that occurs after being remotely disconnected is not clear. There is currently no conclusive evidence demonstrating the source of any usage reductions associated with prepayment. Unlike efficiency measures that generate real energy savings for a consistent level of work (e.g., heating, cooling or light), forced usage reduction or remote disconnection of service simply cannot be considered an enhancement to the quality or affordability of utility service.

### D. Utility and Shareholder Advantages

While customers face grave risks from prepaid service, utility companies reap substantial benefits from placing lower-income customers on prepaid service. With prepayment, utilities may reduce or eliminate paper billing and notification of impending service loss. In addition, customer arrears are eliminated or dramatically reduced. Similarly, the risk that uncollectible accounts of prepayment customers will have to be written off is eliminated. Finally, prepayment allows companies to dramatically reduce short-term capital costs, such as those associated with carrying arrears, credit and collection costs associated with billing and notification of disconnection, and costs associated with customer service representatives and call centers.

Because it allows utility companies to simply disconnect customers before they fall behind on their bills, prepayment is the ultimate *utility arrearage management tool*. No longer do companies need to try to collect from customers in debt, nor do companies need to worry about escalating uncollectible accounts. In estimating the utility’s return on investment in purchasing prepayment software, the biggest savings by far to the utility are bad debt savings. According to PayGo, a prepaid service software company, bad debt savings comprise nearly 80 percent of the estimated savings if utilities adopt prepayment:<sup>21</sup>

As PayGo’s estimates show, prepayment serves as an extraordinarily effective collection tool. In contrast to credit meters, prepayment customers cannot accumulate debt if their electric service is unaffordable. They are simply cut off from service. Not only are customers automatically disconnected if they cannot pay, but prepayment guarantees that customers with past arrearages are steadily paying their debt off. Most programs

Table 1: **PAYGO PROJECTIONS OF UTILITY SYSTEM BENEFITS OF PREPAID SERVICE**

	YEAR 1 <sup>22</sup>	YEAR 2	YEAR 3	YEAR 4	YEAR 5	
Number of Customers	2,000	4,000	9,000	12,000	15,000	
Number of Truck Rolls	—	—	—	—	—	
Truck Roll Savings	—	—	—	—	—	
Support Service Savings	\$48,000	\$48,000	\$48,000	\$48,000	\$48,000	0.9%
CSR Savings	\$139,200	\$278,400	\$626,400	\$835,200	\$1,044,000	19.5%
Bad Debt Savings	\$568,000	\$1,136,000	\$2,556,000	\$3,408,000	\$4,260,000	79.6%
						100.0%

*Table Modified from PayGo*

will automatically allocate a percentage of a customer’s electric payments toward paying down past debt. The Minnesota Valley Electric Cooperative assesses a 50 percent repayment rate if a customer enrolls in prepayment and has a past arrearage, meaning that if a customer pays \$1, the customer gets only 50 cents worth of electric credit.<sup>23</sup> Arizona’s M-Power program dedicates 40 percent of a customer’s payment to past due debts.<sup>24</sup>

In short, with prepayment, the costs and challenges associated with low-income customers’ payment difficulties are no longer the concern of the utility company; they rest solely with the low-income customer. But, as discussed previously, low-income customers bear the added health and safety risks when universal access to basic utility service is denied.

#### IV. RATES, CHARGES, AND FEES

As previously described, proponents of prepayment often describe the service as a customer budgeting tool, but the reality is that many low-income customers end up paying more for their electricity bills than credit-based customers. So customers with the least means pay the most for an essential service. While some prepayment customers may avoid traditional security deposits, they rarely, if ever, pay lower rates for prepaid service, even though it brings numerous advantages for utility companies. For example, customers enrolled in the Arizona-based M-Power Prepaid Program with average usage will pay \$38 more than credit customers each year.<sup>25</sup>

Another prepaid program, offered by the Choctawhatchee Electric Cooperative (CHELCO) in Florida, also results in higher costs. CHELCO charges prepaid customers a higher fixed rate for service than it does for credit customers. Over the course of a year, CHELCO prepaid customers will pay an extra \$127.75 in fixed costs than the utility’s

credit-based customers.<sup>26</sup> The increased cost comes from two sources: a contract with an outside company to manage the daily calculations on prepayment accounts and equipment that can remotely disconnect accounts. Customers with prepaid service pay an extra \$54.75 a year to give the utility the ability to seamlessly terminate their power.<sup>27</sup> While the company touts the lower deposit requirement for prepaid customers, other costs quickly erode any cost advantage that prepayment provides.<sup>28</sup>

Prepayment programs often include burdensome junk fees, including transaction fees, monthly program fees, and reconnection fees. The Horry Electric Cooperative in South Carolina, for example, charges prepayment customers a \$12 monthly equipment charge.<sup>29</sup> Customers avoid the \$200 deposit required on other residential accounts, but they pay an extra \$144 annually for prepayment service. Unlike credit customers, they will pay this amount every year whereas customers only need to pay a deposit once.<sup>30</sup>

In the deregulated Texas retail electricity market, numerous Retail Electric Providers (REPs) offer prepaid electric service. The prices, terms and conditions of these products vary, but many involve the imposition of substantial fees on customers. The REP Smart Prepaid, for example, charges a \$2.95 payment processing fee each time a customer refills a prepaid account balance, an enrollment fee, and a variable disconnection fee.<sup>31,32</sup>

The West Florida Electric Cooperative charges a \$2 transaction fee every time a prepayment customer purchases electricity.<sup>33</sup> Prepayment proponents argue that frequent payments help families budget and conserve electricity but transaction fees quickly inflate the cost of prepayment.

While some prepayment customers may avoid traditional security deposits, they rarely, if ever, pay lower rates for prepaid service, even though it brings numerous advantages for utility companies.

## V. PREPAYMENT EXPERIENCE IN THE UNITED KINGDOM AND THE UNITED STATES

Experience in the United Kingdom (U.K.) and the United States (U.S.) demonstrates that prepaid metering and billing is concentrated among low or moderate income customers, many of whom are facing service disconnections for nonpayment. Prepayment results in frequent service disconnections or interruptions, and it is sometimes delivered at a higher rate than traditional credit-based service. In general, prepaid service is offered to customers on what is termed a voluntary basis. Further, when a prepayment customer experiences a service disconnection, it is referred to among many in the prepaid service industry as a “self-disconnection” or “voluntary disconnection.” However, a customer who is facing imminent loss of essential service—often with devastating consequences—may surrender consumer protections and access to a reasonable payment agreement to keep service in the short term.

## A. United Kingdom

In the western world, the United Kingdom (U.K.) took the lead in prepaid electric service, approving prepayment as a billing option in the 1980s. Prepayment meters are now common in Great Britain, which began deregulation of its utility industries even earlier than experiments in the U.S. began. By 1989, about 3.7 million electricity customers and 1.1 million natural gas customers in Great Britain used prepayment meters to pay for utility service. The number of customers using the systems nearly doubled between 1990 and 1997.<sup>34</sup> Currently, about 6.2 million residential natural gas and electric utility customers

in Great Britain use prepayment meters, representing about 13 percent of all installed residential meters.

Historically, a vast majority of prepayment meter users in Great Britain were low-income customers.<sup>35</sup> Utility companies there target marketing of prepayment meters to low-income households in arrears, even though they charge substantially more for service delivered under prepayment than for service paid for by traditional billing means or through direct debit.<sup>36</sup>

Not surprisingly, many utility companies have reported a significant decline in the rate of traditional, utility-initiated disconnections

since the proliferation of prepayment meters in low-income households. However, there has been a steep increase in the number of “self-disconnections,” which occur when a customer’s credit balance is depleted. (For more information on rates of service disconnections, see Section D on page 20.)

In short, utility deregulation in Great Britain has coincided with the proliferation of prepaid service in low-income households. Utility companies have turned to the technology as a means of managing arrearages (past due bills). Prepayment customers pay the highest rates for service. The highest utility rates in Great Britain were paid by those least able to afford them, and a relatively high proportion of customers using prepaid service are disconnected at least once per year.

Prepayment meters in Great Britain are still concentrated disproportionately in lower-income households. Sixty percent of electricity and natural gas customers with prepayment meters in 2010 had annual incomes below £17,500 (\$27,704). Further, over half of prepayment meter customers received a means-tested benefit, nearly half had an unemployed head of household, and more than a third had one or more household members with a long-term physical or mental illness or disability.

Similar to the Salt River Project in Arizona (see page 17) experience, average income among prepayment customers in Great Britain is declining. In 2008, the average household income for prepaid customers was £16,091 (\$27,523). By 2009, the average income fell to

Table 2 **Surveying Great Britain Prepayment Customers**

<b>54%</b>	Used “emergency credit” to retain utility service
<b>45%</b>	Cut back their energy use
<b>22%</b>	Gave up other necessities (e.g. food) to stay connected
<b>16%</b>	Had “self-disconnected” at least once over the previous year

Source: “Cutting back, cutting down, cutting off: Self-disconnection among prepayment meter users” by Hannah Mummery and Holly Reilly, *Consumer Focus* July 2010, page 17.

£13,466 (\$21,929).<sup>37</sup> The number of customers with disabilities increased from 26 percent to 39 percent.<sup>38</sup>

Northern Ireland's prepayment programs provide the only example of a program that enrolls affluent customers in any significant numbers. The country's program is unique, however, because prepayment customers receive a 2.5 percent discount on energy rates.<sup>39</sup> Nonetheless, low-income individuals comprise 58 percent of the prepayment customer base in Northern Ireland.<sup>40</sup>

Utilities in Great Britain do not report the number of service disconnections experienced by customers using prepayment meters or service. However, disconnections for non-payment among credit-based customers are reported to the Office of Gas and Electricity Markets. Not surprisingly, many utility companies have reported a significant decline in the rate of traditional utility-initiated disconnections since the proliferation of prepayment in low-income households, where disconnections are not reported.

## B. United States

At least 52 utilities in 18 states currently operate prepayment electric programs in the United States. Electric cooperatives comprise the majority of utilities that offer prepayment utility service. Implementation of pre-paid utility service is concentrated in service territories served by publicly-owned utility systems that are not subject to the full regulatory jurisdiction of state utility commissions.

Salt River Project (SRP) in Arizona through its M-Power program and Oklahoma Electric Cooperative deliver large-scale prepayment programs. In Texas, which has a largely deregulated retail electricity market, at least six Retail Electric Providers deliver prepaid service through advanced meters. Investor-owned or privately-held utilities have proposed or are considering prepayment programs in Arkansas, Arizona, California, Delaware, Florida, Louisiana, North Carolina, and Oklahoma.

Most of the prepayment programs in the United States—both existing and proposed programs—are in states where utilities are subject to relatively weak regulatory consumer protection and oversight, with the exception of Iowa and California. (In 2011, a prepayment program was proposed in Iowa but after newspaper accounts raised questions regarding the health and safety risks no action was taken by the legislature.)<sup>41</sup>

### A Way to Evade Consumer Protections?

Prepayment should never undermine the consumer protection framework that has developed over many decades. One of the most troubling aspects of prepaid service is the use of the term “voluntary” to describe disconnections and justify the shift from a structure based on consumer protections and regulatory oversight of disconnections to one where loss of service is invisible and undocumented. *The notion that low-income households voluntarily opt to go without service or reduce usage to levels that may have detrimental impacts on well-being is not defensible.*

Prepaid service proposals that are subject to the jurisdictional authority of state utility regulators must include a petition for permission to bypass, modify, or eliminate consumer protections regarding service disconnection notifications and timelines. Protections that require companies to offer a reasonable payment agreement as an alternative to service disconnection must also be bypassed by prepayment proponents. Protections, adopted in various forms by regulators in *every* state in the U.S., reflect that electric and natural gas services are essential to the health and safety of people.

Iowa proponents of prepaid service sought legislation to work around these important consumer regulations by defining a remote disconnection of service as a ‘voluntary termination.’ The filed bill stated that an electric utility may install

a prepaid metering system and equipment that is configured to terminate electric service immediately and automatically when the customer has incurred charges for electric service equal to the customer’s prepayments for such service. *The automatic termination of electric service once the customer’s prepaid limit has been reached shall be considered a voluntary termination of service by the customer and shall not be considered a disconnection by the utility for purposes of this chapter and applicable rules adopted by the board.*<sup>42</sup> (Emphasis added.)

Thirty-eight percent of electric utilities are exploring prepayment as a billing option and industry research has predicted that eleven percent are likely to implement a prepayment program in the near future.

No investor-owned utilities (IOUs) outside of Arizona, Texas, and Michigan have received approvals to deliver prepaid service. However, state utility regulators are considering IOU pilot proposals in a few states, including California.<sup>43</sup> According to a recent study, 38 percent of electric utilities are exploring prepayment as a billing option. A utility industry research firm has predicted that 11 percent of utilities are likely to implement a prepayment program in the foreseeable future.<sup>44</sup>

**Salt River Project (SRP)**, Arizona’s second largest electric utility and the third largest municipally owned utility in the United States, operates the SRP M-Power prepayment meter program, the largest program of its kind in the United States. The program included 100 customers in 1993 but had grown to 20,000 “budget challenged” participants by April 2002. Currently, over 100,000 customers are enrolled in the SRP program.

Lower-income households make up the vast majority of SRP prepayment program participants and the median income of M-Power customers has declined considerably in recent years. In 2007, the median participant income was \$27,500. Within a year, it dropped to \$19,500. In 2010, the median income fell below the poverty level for a family of three or more to \$17,900.<sup>45</sup> In 2010, 82 percent of program participants had household income of less than \$30,000.

A study of customers in the M-Power program shows that the proportion of racial minorities enrolled in prepayment service is increasing. Surveys prior to 2010 showed

that Hispanics comprised 22 to 23 percent of customers but in just two years, that percentage has leaped to nearly 50 percent (they comprise 41 to 48 percent).<sup>46</sup> In Phoenix, the largest city served by the Salt River Project, Hispanics account for only 40.8 percent of the population.<sup>47</sup>

A 2009 analysis showed that M-Power customers are “more likely to be relatively young, have families, be relatively low-income, be low electricity consumers, live in apartments, have been SRP customers for less than five years, and have unsatisfactory or “new credit ratings” compared to other residential customers.<sup>48</sup> On average, the head of a household with a prepaid meter is 36 years old, makes an average annual income of \$24,400, and is Hispanic.<sup>49</sup>

Despite the high participation in the SRP program among low-income households, participants pay a rate that is higher than traditional, credit-based service. SRP prepayment customers pay a flat rate per kWh which varies seasonally, plus a monthly service charge of \$15, which is collected through periodic deductions from the account balance. While summer prepayment and conventional rates and charges are comparable, SPR charges prepayment customers a higher rate during winter months. Thus, assuming consistent consumption levels, prepayment customers—predominantly of lower incomes—pay more than customers using traditional service.

While there are no late payment fees, SRP prepayment customers must pay a variety of fees and deposits before obtaining service and after service is established. There is an initial \$99 deposit for an in-home display box, as well as a \$28 (plus tax) service establishment fee. There are additional fees if the in-home display needs to be cleaned or replaced. If there is a credit balance remaining when a customer wishes to discontinue service, a \$25 fee is charged to obtain a refund. In addition, there are fees charged to customers to use a remote pay center and for some telephone payment activities. Despite making inquiries to SRP personnel, NCLC was unable to obtain information detailing how much an average prepayment customer pays in fees on an annual basis. Further, SRP does not release data on rates of disconnection among its prepayment customers.

### C. Marketing

Many utilities market prepayment service as a customer budgeting tool, describing prepayment as a “pay-as-you-go” plan.<sup>50</sup> Companies highlight the flexibility of smaller, more frequent payments and emphasize that consumers will no longer be surprised by a high bill at the end of the month. First Choice Power, a Texas utility, summarizes a common marketing pitch in their prepayment slogan: “\$0 DEPOSIT. NO CONTRACT. NO CREDIT CHECK.”<sup>51</sup>

Salt River Project’s M-Power prepayment meter program in Arizona is the largest in the U.S., with more than 100,000 customers. On average, the head of a household with a prepaid meter in this program is 36 years old, makes an average annual income of \$24,400, and is Hispanic. What’s more, prepayment customers pay a rate that is higher than traditional, credit-based service customers.

Pee Dee Electric Cooperative (PDEC) in South Carolina stresses that one of the most compelling features about prepayment is that no deposit is required. In a customer information video, PDEC's Vice President of Member Services says they began the program after customers balked at paying high deposits.<sup>52</sup>

Other companies compare prepayment electric service to filling up a gas tank.<sup>53</sup> Rappahannock Electric Cooperative, a Virginia-based municipal utility, discusses its marketing strategy for a proposed prepayment program: "Much like people tend to think about their gas mileage when they fill-up their cars, REC believes that people will think about ways to be more thrifty and conservative in the way they consume electricity when they regularly, at their convenience, elect to add to, or 'fill-up,' their Prepayment Account Balance."<sup>54</sup> Companies emphasize conservation, flexibility, customer control, and increased information.<sup>55</sup>

#### *D. Disconnections*

Proponents of prepaid electric service often argue that such service actually decreases the number of customer disconnections, contributing to increased energy security for customers.<sup>56</sup> KEMA, a utility consulting company, praises prepaid service's high penetration rate in the United Kingdom, arguing that the service drastically reduced disconnections due to debt. They report: "There are fewer disconnections in the UK for reasons of debt (only 1,361 in 2003; versus 70,000 in 1990)."<sup>57</sup> Such claims are misleading. British regulators categorize disconnections under prepaid service as "self-disconnections." The change in categorization is responsible for the staggering reduction in disconnections. An independent report observed, "When self-disconnection occurs it is only the people living in the property who know about it. Even energy supply companies remain unaware that one of their customers has self-disconnected."<sup>58</sup>

Customer surveys, however, have helped fill the information gap. Accent, an independent research firm in the UK, surveyed prepaid customers. They found that 9 percent of prepaid electric customers were disconnected in the past 12 months.<sup>59</sup> Credit customers experienced a disconnection rate of about one tenth of one percent during the same time period.<sup>60</sup> Further, a 1997 customer service survey conducted by Centre for Sustainable Energy National Right to Fuel Campaign found that 28 percent of prepayment customers in Great Britain were disconnected from their service over the past year.<sup>61</sup>

Research shows that the rates of disconnection due to lack of funds are increasing in the United Kingdom. Between 2008 and 2009, the number of customers reporting disconnections for lack of funds increased from 21 percent to 39 percent and an increasing number of customers were disconnecting with greater frequency. The duration of disconnection also lengthened, with less than half of customers disconnecting for more than a day in 2008 whereas most customers disconnected for more than a day in 2009.<sup>62</sup> While most customers are disconnected for short periods, the poorest customers are disconnected the longest.<sup>63</sup>

In the United States, newer advanced metering infrastructure (AMI) systems can track disconnections but not all prepaid electric programs use AMI technology. The lack of

transparency on the true effects of prepaid is exacerbated by the fact that all prepaid electric programs in the U.S. are run by cooperatives and municipal utilities. Cooperatives and municipal utilities are typically not required to report their disconnection rates and they usually fall outside the purview of state utility boards.<sup>64</sup> Arizona's Salt River Project's M-Power program, the largest prepaid electric program in the U.S.,<sup>65</sup> refuses to share any data on disconnections with the National Consumer Law Center, although a 2006 SRP study of eight M-Power households shows that three households reported running out of power. If the households were representative and randomly selected, the rate of disconnection would be quite high.<sup>66</sup> The National Consumer Law Center could not obtain disconnection rates for any prepaid programs, although the Oklahoma Electric Cooperative (OEC) reports, "Less than 50 percent of OEC pre-paid accounts have been disconnected."<sup>67</sup>

Even when customers remain connected, many engage in harmful self-rationing. Self-rationing occurs when households reduce spending on certain household expenses in order to pay for energy. Again, the U.K. is the only source of information available. A 2010 study (see Table 2) found that half of prepaid meter customers self-rationed, spending less on food, heat, or medicine. One customer reported that she had stopped vacuuming her house and cut back on laundry to keep the electric meter running.

"Sometimes I am not able to wash my clothes because I can't afford the washing liquid to do it, which is not right because I do like to have clean clothes to wear."<sup>68</sup> Others prioritized energy bills over other financial obligations.<sup>69</sup> One in ten prepaid service customers spent less on other bills and 6 percent of households reported missing payments on their other bills.<sup>70</sup> Customers reported going without heat, eating microwaveable meals, or skipping meals altogether.<sup>71</sup> Despite these measures, those who self-ration are more likely to disconnect.<sup>72</sup>

### *E. Reported Customer Satisfaction*

In studies designed and conducted or commissioned by the SRP in Arizona, prepayment customers generally report a high satisfaction level with the program. However, the same studies show that customers continue to be dissatisfied with aspects of the program, particularly with payment methods. To re-load the meter, customers must travel to a location with a pay center self-service kiosk. Seventy-one percent of customers surveyed in 2006 said they experienced a problem with an inoperable pay center in the previous year. The longer customers remain in the prepayment program, the more dissatisfied they are with the pay centers. When looking at overall experience, SRP's credit customers reported a better overall experience (50 percent) compared to prepayment customers (44 percent) in 2010.

The National Consumer Law Center is not aware of any Salt River Project customer satisfaction survey that asks customers if they would prefer paying arrearages through a reasonable payment agreement versus taking a service option that entails automatic disconnection as billing credits expire.

This may explain in part why the turnover rate for the M-Power program is high, with customers enrolled in the program for 20 months on average. The Electric Power Research Institute (EPRI) speculates that the population that uses M-Power is more transient than its credit customers but the report did not disclose whether such customers switched back to the credit-based system or any other data that would back up its assertion.<sup>73</sup>

SRP's M-Power customer surveys may not fully capture the extent to which customers are aware:

1. That they are paying a higher rate for service,
2. That M-Power prepaid customer disconnections may be considerably higher than those of credit-based customers, or
3. That in other utility service areas, customers may have access to reasonable payment plans and other consumer protections geared toward helping customers with financial hardships retain access to service.

## VI. TECHNOLOGY

Since its inception, the technologies enabling utilities to implement prepayment programs have evolved and advanced. However, the fundamental concept and motivations behind the service have not changed over time.

### A. *Early Technologies*

In the United Kingdom, the first prepaid customers loaded credit onto the meter by inserting a coin in a slot on the device.<sup>74</sup> The next generation of meters used tokens, keys and cards to load credit. In the United States, SRP's M-Power program in Arizona initially used a configuration where an in-home display (IHD)—a device that displays customer energy consumption and expenditure information—was hard-wired to the customer's meter. Gradually, the program used a Powerline carrier (PLC) to facilitate communication between the meter and the IHD through existing home electrical wiring; but the fundamentals of the program remain. M-Power customers buy credit at a self-service kiosk called a PayCenter using a Smart Card. The customer then inserts the Smart Card into the in-home display, re-loading the meter.<sup>75</sup> The utility's back office personnel can also process transactions by telephone or by check.<sup>76</sup> The meter has remote disconnection capability and there is real-time bi-directional communication between the utility's back office and the meter.<sup>77</sup> SRP integrated the back office systems and the customer information software over time.<sup>78</sup>

In Great Britain, prepaid meter customers bore the added cost of maintaining a separate system of electric service and the transactional costs of frequent payments. Customers often paid rates that were considerably higher than those paid by credit-based customers.<sup>79</sup> Many utilities in the U.S. have historically resisted prepayment in part because of

the high capital and maintenance costs of the technology.<sup>80</sup> However, most utilities currently considering proposals plan to offer prepayment service as part of their AMI, or “smart meter” programs.<sup>81</sup>

## B. “Smart” Meters Advance Prepayment Programs

Advanced or “smart” meters can provide instant communication between the utility company and a customer’s meter. Unlike older prepayment technology, these newer systems can easily switch customers from credit to prepayment service, adjust for fluctuations in energy prices, and provide one billing system for all customers.<sup>82</sup> When a prepayment customer’s credit becomes depleted, advanced meters may remotely disconnect customers immediately and seamlessly. AMI dramatically increases a utility’s economic potential to roll out new utility prepayment programs. Utility companies generally obtain regulatory approval to recover investments in AMI based on assumptions that these investments lead to reduced operating costs or the need to invest in new energy supplies or capacity. AMI avoids the cost to invest in “standalone” prepayment meters, and reduces the upfront capital investment required to implement a new prepayment program. To date, companies have not obtained regulatory approval to proceed with investment in AMI based on plans to roll out prepaid service. However, once approval is granted, the bulk of a utility’s cost for implementing prepayment is covered.

The Institute for Electric Efficiency (IEE) has documented that as of June 2011, there were about 20 million smart meters in the U.S. By 2015, it is estimated that over 65 million new advanced meters will be installed, representing nearly half of all U.S. households.<sup>83</sup> Unless consumers, advocates, policymakers, and regulators take a stand against implementation of prepaid electric and gas utility service, the potential for new programs in the U.S. is immense.

### By the Numbers

Advanced (smart) meter technology dramatically increases a utility’s economic potential to roll out new utility prepayment programs.

#### Smart meters in the U.S.

As of June 2011	20 million
By 2015*	65 million (almost half of all U.S. households)

\*Industry estimate

Source: *Institute for Electric Efficiency*<sup>83</sup>

## VII. RECOMMENDATIONS

The National Consumer Law Center opposes prepaid electric and gas services. However, if a company is allowed to implement prepaid service, state regulatory commissions should require each of the following provisions. The recommendations that follow are based in large measure on provisions of a resolution adopted by the National Association of State Utility Consumer Advocates on June 11, 2011.

1. **Regulatory consumer protections and programs should be maintained or enhanced.** These include existing limitations or prohibitions on disconnection of service, advance notice of disconnection, availability of payment plans, availability of bill payment assistance or arrearage forgiveness, and the right to dispute bills.
2. **Health and safety risks must be reduced.** When the billing credits of a customer receiving prepaid residential electric or natural gas service are exhausted, the customer must be given a five-day disconnection grace period, after which the customer must be restored to traditional, credit-based service, subject to all rules and customer protections applicable to such service. Prepayment customers should be allowed to return to credit-based service at no higher cost than the cost at which new customers can obtain service.
3. **Vulnerable populations must be protected.** Prepayment service should not be offered to low-income households or households that include any person who is elderly, disabled, or who has a serious illness. Households with young children should also not be eligible to enroll in prepayment service.
4. **Marketing of service should be voluntary.** Prepaid service should only be marketed as a voluntary service and should not be marketed to customers facing disconnection for non-payment. Conditioning service on the method of payment is not marketing—it's coercion.
5. **Payment assistance and arrearage management programs must be adopted or maintained.** Utilities offering prepaid service to low-income customers must also offer effective bill payment assistance and arrearage management programs to those customers.
6. **Rates for prepaid service should be lower than rates for comparable credit-based service.** This lower rate reflects the lower costs associated with reduced carrying costs, collection costs, uncollectible accounts, and shareholder risk.
7. **Costs should be transparent.** Prior to implementation, utilities should demonstrate the cost effectiveness of any proposed prepaid service program and reveal how costs will be allocated among various classes of customers.
8. **Transaction and other junk fees should be eliminated.** Prepayment customers should not pay security deposits or additional fees that traditional customers are not required to pay. Examples of such fees include initiation fees, equipment charges, or transaction fees to purchase billing credits, or frequent payment fees.

9. **Initiate “on demand” service.** Utilities must ensure there are readily available means for prepayment customers to purchase service credits on a 24-hour a day, seven-day a week basis to prevent potential health and safety risks.
10. **Tracking and reporting should be monitored and disclosed.** Prepaid service programs should be monitored to ensure there is not an increased rate of service disconnections for non-payment. Utilities implementing prepaid service programs should track and report to the state regulatory commission on a monthly basis the following data *separately for credit-based and prepayment residential customers*:
  - Number of customers
  - Number of customers with arrears of 30 days or more
  - Dollar value of arrears
  - Number of disconnection notices sent
  - Number of service disconnections for non-payment
  - Number of service reconnections after disconnection for non-payment
  - Number of new payment agreements entered
  - Number of payment agreements successfully completed
  - Number of failed payment agreements
11. **States should proactively plan for customer protections in case of company default.** States must have adequate financial mechanisms to guarantee that funds prepaid by customers are returned to customers if a company becomes insolvent, goes out of business, or is otherwise unable to provide the services for which the funds were prepaid.

In service territories where prepaid service is already implemented, the implementing utility should answer a series of customer service questions on an annual basis. A list of those questions may be found in Appendix A.

## VIII. CONCLUSION

With prepaid utility service as it currently operates, low-income customers who struggle the most to pay bills often end up paying the most while receiving second-class utility service. Access to essential life-supporting service, delivered by regulated, franchised monopoly utility companies, *should not* be compromised by a service model that allows companies to sidestep important consumer protections that were implemented for health and safety reasons.

---

Instead, payment issues should be addressed through delivery of comprehensive, effective low-income energy efficiency programs, bill payment assistance programs and “arrearage management” programs, reductions of burdensome late payment fees and security deposits, and implementation of deferred payment agreements. These are examples of effective programs and policies that account for a household's actual income and expenses.

If a utility company is allowed to roll out a prepayment program, it is critical that state governing bodies enact provisions that will not put customers' lives at risk and avoid setting up a two-tiered system which targets low-income and minority customers.

## APPENDIX A

### CUSTOMER SERVICE QUESTIONS THAT UTILITIES WITH PREPAID SERVICE PROGRAMS SHOULD BE REQUIRED TO ANSWER ANNUALLY

In utility service territories where prepaid service is already adopted, the following questions should be posed “on the record” annually to implementing utilities.

1. Does the utility plan to replace prepayment meters with advanced meters?
  - a. If so, will prepayment rates go down?
2. Does the utility track service disconnections among prepayment customers?
  - a. If so, can the utility provide data on
    - i. Duration of disconnections
    - ii. # of “self-disconnections” by month over the past three years
    - iii. Annual and monthly rates of “self-disconnection” (i.e., # residential self-disconnections ÷ # of residential customers)
  - b. Has the utility conducted analysis or surveys among customers who self-disconnect to determine
    - i. reasons for the disconnections
    - ii. income and demographics of customers who self-disconnect?
3. Does the utility track disconnections among customers who post-pay?
  - a. If so, can the utility provide data on
    - i. Duration of disconnections
    - ii. # of “self-disconnections” by month over the past three years
    - iii. Annual and monthly rates of “self-disconnection” (i.e., # residential self-disconnections ÷ # of residential customers)
  - b. Has the utility conducted analysis or surveys among customers who self-disconnect to determine
    - i. reasons for the disconnections
    - ii. income and demographics of customers who self-disconnect?
    - iii. Will the utility provide survey instruments along with results and analysis?
4. Fees
  - a. Does the utility charge prepayment customers fees for
    - i. Paying by phone
      1. how much?
      2. how many customers pay by this method?
      3. Percentage of M-Power revenues that come from this payment method
    - ii. Paying online
      1. how much?
      2. how many customers pay by this method?
      3. Percentage of prepayment revenues that come from this payment method

- iii. Paying at a kiosk
      - 1. how much?
      - 2. how many customers pay by this method?
      - 3. Percentage of prepayment revenues that come from this payment method
    - iv. Paying a third party
      - 1. how much?
      - 2. how many customers pay by this method?
      - 3. What 3rd party fees are involved with this payment method?
      - 4. Percentage of M-Power revenues that come from this payment method
    - v. Other payment method?
- 5. Does any of the utility's post-paying residential customers use in-home devices to track consumption and expenditures?
  - a. If so, how do these devices differ from those used by prepayment customers?
  - b. Has the utility studied the energy savings associated with use of in-home devices without prepayment?
  - c. If so, please provide results of analysis.
- 6. Energy savings
  - a. What is the average energy savings realized by a prepayment customer?
    - i. How is this calculated?
    - ii. Is baseline consumption of individual customers used to develop savings estimates?
    - iii. Has the utility analyzed the factors to which savings are attributable?
      - 1. self-disconnection
      - 2. energy efficiency
      - 3. energy conservation
      - 4. Has the utility studied the extent to which prepayment customers engage in "self-rationing," that is, cutting back on other expenditures, including necessities, to stay connected to their electric service?
- 7. Customer satisfaction surveys
  - a. Will the utility share instruments and results of customer satisfaction surveys conducted over the past five years?
  - b. In customer satisfaction surveys, are respondents asked whether they may prefer a long-term payment agreement to prepayment as a means of managing arrearages?
  - c. How is sampling conducted?
- 8. Marketing and Enrollment
  - a. Among prepayment customers enrolled over the past three years, what proportion came to the program as
    - i. a new the utility customer
    - ii. an existing the utility customer
      - 1. with no outstanding arrearage
      - 2. with an outstanding arrearage
        - a. average vintage
        - b. average dollar value
      - 3. with a pending notice of disconnection
      - 4. with previous disconnections for non-payment

## ENDNOTES

1. See 2011 Iowa Proposed Legislation, House Study Bill158, <http://coolice.legis.state.ia.us/Cool-ICE/default.asp?Category=billinfo&Service=Billbook&menu=false&hbill=hsb158>.
2. Texas Public Utility Commission, News Release, "PUC orders \$3.7 million in penalties: two former retail electric providers fined millions (Jan. 14, 2010), <http://www.puc.state.tx.us/nrelease/2010/011410.pdf>; "Consumer group: Electricity companies have big fees hidden in small print," KHOU11 Houston (April 30, 2011), <http://www.khou.com/news/local/Consumer-group-Electricity-companies-have-big-fees-hidden-in-small-print--121014164.html>.
3. The Associated Press, "93-year-old man freezes to death indoors," (Jan. 26, 2009).
4. See, e.g., Maine Rev. Stat. Tit. 35-A, 3214(1): ". . . electricity is a basic necessity to which all residents of the State should have access"; Mass. St. 1997, C-164, § 1(a), 1(b), 1(j), 1(n): "Electricity service is essential to the health and well-being of all residents of the commonwealth . . . Affordable electric service should be available to all consumers on reasonable terms and conditions"; N.H. Rev. Stat. C-374-F:3(v): ". . . electric service is essential and should be available to all customers"; Okla. Stat. Tit.17§194.4: "mechanisms that enable . . . consumers with limited incomes to obtain affordable essential electric service" shall be ensured."
5. Alabama PSC Gen. R. 12.
6. Mass. Regs. Code tit. 220, § 25.02.
7. Arizona Code 14-2-2-210 and -211.
8. Ohio Admin. Code § 4901:1-18-05.
9. Iowa Admin. Code r. § 19.4(10).
10. 220 C.M.R. § 27.00.
11. There is a growing body of research that demonstrates that for many family types throughout the U.S., income well in excess of 200% of the federal poverty level is required for a household to avoid going into debt. See, e.g., Wider Opportunities for Women, "The Basic Economic Security Tables for the United States," (2010).
12. Ofgem, "Domestic suppliers' social obligations: 2010 annual report," (June 15, 2011), p. 4.
13. *Id.*
14. A report conducted by Accent on behalf of the National Housing Federation found a similar statistic in 2009, with one-third of customers stating they could not afford the rate of repayment (Accent for the National Housing Federation, "Pre-Payment Meter Utilities Customers: Wave 2 Final Report," (April 2009), p. 17).
15. Hannah Mummary and Holly Reilly, "Cutting back, cutting down, cutting off: Self-disconnection among prepayment meter users," *Consumer Focus* (July 2010), p. 11.
16. *Id.*
17. Consumer Council, "In Control? An investigation into the patterns of use and level of self-disconnection by gas and electricity Pay As You Go meter users in Northern Ireland," (March 30, 2006), p. 6.
18. See, e.g., Arizona Public Service Company in Docket No. E-10345A-10-0075.
19. EPRI Report, p. 5-1. Recent claims that prepayment results in usage reduction are usually based on results of analyses provided to the Electric Power Research Institute by Salt River Project. In the cited report, EPRI stresses that it did not conduct an independent assessment of the electric consumption impact of the SRP program.
20. *Id.* at v. Emphasis added.
21. PayGo, "Illustrative Customer Economics\*," available at <http://www.paygoelectric.com/roi.html>.

22. *Id.*
23. Minnesota Valley Electric Cooperative, "Pay As You Go," available at <http://www.mvec.net/my-account/payment-options/pay-as-you-go>.
24. Salt River Project in Arizona reports a 12% conservation effect from its M-Power prepayment program. Bruce Neenan, "Paying Upfront: A Review of Salt River Project's M-Power Prepaid Program," *Electric Power Research Institute* (2010) (hereafter "EPRI Report"), p. 2-2.
25. EPRI Report, p. 3-6.
26. Florida Public Service Commission, "Docket No. 100079-EC- Request for approval for new prepaid metering rates and changes to net metering rates and miscellaneous charges by Choctawhatchee Electric Cooperative, Inc.," (May 6, 2010).
27. In CHELCO's proposed rates, approved by the Commission, they state, "CHELCO will spend \$270.70 for equipment . . . that has remote cut off capabilities. The carrying cost of this additional expense was calculated by the company to be \$0.15 per day." Over a year, customers will pay \$54.75 more due to these special meters. Florida Public Service Commission, "Case Background, Docket No. 100079-EC," (May 6, 2010).
28. The lowest potential start-up cost, including the additional fixed cost incurred as a result of switching to prepaid service, amounts to \$179.75. This number incorporates the installation fee (\$27) and the deposit (\$25). If a customer cannot accommodate an installation between 9:00AM and 5:00 PM, the total costs amount to \$227.75 to reflect the \$75 off-hours installation charge.
29. Horry Electric Cooperative, Inc., "Advance Pay Agreement/Terms and Conditions," available at <http://www.horryelectric.com/documents/AdvancePayAgreementplusTermsandConditions.pdf>, p. 2.
30. Horry Electric Cooperative, "Your Monthly Bill," available at [www.horryelectric.com/monthlyBill.aspx](http://www.horryelectric.com/monthlyBill.aspx).
31. Smart Prepaid Electric, Terms of Service, p. 2; Interview with Prepaid CSR (June 4, 2012).
32. For additional information on fees charged by Texas Retail Electric Providers, see Biedrzycki, C., Texas Ratepayers Organization to Save Energy, "Report on Fees Charged by Retail Electric Providers in the Oncor Service Area," February, 2011.
33. West Florida Electric, "EZ Pay Power," available at [http://www.westflorida.coop/member\\_services/res\\_detail2455.aspx?id=406](http://www.westflorida.coop/member_services/res_detail2455.aspx?id=406).
34. Centre for Sustainable Energy and National Right to Fuel Campaign, "Counting the Hidden Disconnected," (1998), p. 8-9.
35. *Id.*
36. National Right to Fuel Campaign, "Fuel Poverty Fact File: Progress and Shortfall," (2000), p. 23-26.
37. Accent for National Housing Federation, "Pre-Payment Meter Utilities Customers: Wave 2 Final Report," (April 2009), p. i.
38. *Id.*
39. Will Gans, Anna Alberini and Alberto Longo, "Smart Meter Devices and the Effect of Feedback on Residential Electricity Consumption: Evidence from a Natural Experiment in Northern Ireland," *Center for Energy Policy and Economics* (April 2011), p. 39.
40. Gill Owen and Judith Ward, "Smart pre-payment in Great Britain," *Sustainability First* (March 2010), p. 15.
41. "Prepaid Meter Proposal Stirs Worry," *Des Moines Register* (March 3, 2011).
42. 2011 Iowa House Study Bill 158. Emphasis added. No action was taken on this legislation during the 2011 Legislative Session.

43. San Diego Gas & Electric Company, "Application of San Diego Gas & Electric Company (A.11-10-002) For Authority to Update Marginal Costs, Cost Allocation, and Electric Rate Design," (Oct. 3, 2011).
44. Chartwell, "Press Release: Energy conservation, AMI likely to bolster prepay, new report reveals," (Dec. 16, 2008).
45. EPRI Report, Table 4-3, p. 4-6.
46. EPRI Report, p. 4-6.
47. U.S. Census Bureau, "State & County Quick Facts," (2012).
48. EPRI Report, p. 4-6.
49. *Id.*
50. *See e.g.*, Minnesota Valley Electric Cooperative, "Pay As You Go," available at <http://www.mvec.net/my-account/payment-options/pay-as-you-go/>.
51. First Choice Power, "Prepaid Plans," available at <http://www.firstchoicepower.com/plans-services/electricity-plans/prepaid-electricity-service.aspx>.
52. Pee Dee Electric Cooperative, "Pay It Forward," available at <http://peedeeelectric.com/my-pdec/pay-it-forward.aspx>.
53. Minnesota Valley Electric Cooperative, "Pay As You Go," available at <http://www.mvec.net/myaccount/payment-options/pay-as-you-go/>.
54. Rappahannock Electric Cooperative, "Application of Rappahannock Electric Cooperative," (August 11, 2011), p. 4.
55. Okefenokee Rural Electric, "The Power of PrePay," available at <http://www.oremc.com/html/prepayintro.html>.
56. Danyel Ross, "Automation Insight, New Developments in Prepay Services," KEMA (Jan. 2008), p. 4.
57. *Id.*
58. The Consumer Council, "In Control? An investigation into the patterns of use and level of self-disconnection by gas and electricity Pay As You Go meter users in Northern Ireland," (March 30, 2006), p. 3.
59. Accent prepared for National Housing Federation, "Pre-Payment Meter Utilities Customers, Final Report," (June 2008), p. 12.
60. NCLC took the total number of electric customers from the four quarters including and preceding Q2 2008 (Q2 2008, Q1 2008, Q4 2007, Q3 2007) and compiled an average of all electric customers not paying by prepay. Then, NCLC added all the disconnections reported for the same quarters. The total number of disconnections reported was 3220 for that 12-month period. Undoubtedly, many of these customers were disconnected more than once during that 12-month period but since that data is unavailable; NCLC assumed that each disconnection during that period was a different customer, making the percentage a conservative estimate. Using this methodology, the average of the disconnection rates across the four quarters is 0.0035%.
61. Centre for Sustainable Energy and National Right to Fuel Campaign, "Counting the Hidden Disconnected," (1998), p. 20.
62. Accent for National Housing Federation, "Pre-Payment Meter Utilities Customers: Wave 2 Final Report," (April 2009), p. 10, 11.
63. Hannah Mummery and Holly Reilly, "Cutting back, cutting down, cutting off," *Consumer Focus* (July 2010), p. 6.
64. Charles Harak et al. *Access to Utility Service*. 3 ed. (2004), §1.5.1.
65. Danyel Ross, "Automation Insight, New Developments in Prepay Services," KEMA (Jan. 2008), p. 4.

66. Karen Smith, Personal Communication to Jillian McLaughlin (August 19, 2011), EPRI Report, p. C-3.
67. Charles Barton, "Prepaid: The Tangible Benefit of Smart Grid for Consumers," *Oklahoma Electric Cooperative*, Slide 2.
68. Hannah Mummery and Holly Reilly, "Cutting back, cutting down, cutting off: Self-disconnection among prepayment meter users," *Consumer Focus* (July 2010), p. 19.
69. *Id.*, p. 19.
70. *Id.*, p. 21.
71. *Id.*, p. 20, 21.
72. *Id.*, p. 23.
73. EPRI Report, p. 4-7.
74. Gill Owen & Judith Ward, "Smart Prepayment in Great Britain," *Sustainability First* (March 2010), p. 10.
75. EPRI Report, p. 1-2.
76. *Id.*, p. 2-2.
77. *Id.*, p. 3-2.
78. *Id.*, p. 3-5.
79. Ben Smith, "Pre-payment meters," *House of Commons Library* (June 4, 2009), p. 3.
80. R.W. Beck, "Prepaid Electric Service," (March 2009), p. 1.
81. Chartwell, "Press Release: Energy conservation, AMI likely to bolster prepay, new report reveals," (Dec. 16, 2008).
82. Gill Owen and Judith Ward, "The Consumer Implications of Smart Meters," *Sustainability First* (July 2008), p. 4.
83. Ahmad Faruqui, et al., "The Costs and Benefits of Smart Meters for Residential Customers," *Institute for Electric Efficiency* (July 2011), p. 2.



NCLC®

NATIONAL  
CONSUMER

LAW  
CENTER®

Advancing Fairness  
in the Marketplace for All

*Boston Headquarters:*  
7 Winthrop Square  
Boston, MA 02110-1245  
Phone: 617/542-8010  
Fax: 617/542-8028  
[www.nclc.org](http://www.nclc.org)

*Washington Office:*  
1001 Connecticut Ave, NW  
Suite 510  
Washington, DC, 20036  
Phone: 202/452-6252  
Fax: 202/463-9462