Journal of Affordable Housing and **Community Development** Law
Spring, 2001

Article

***285** PREPAYMENT UTILITY METERS, AFFORDABLE HOME ENERGY, AND THE LOW INCOME UTILITY CONSUMER

Roger D. **Colton** [FNa1]

Home energy prices skyrocketed in 2000 and are projected to continue increasing in 2001. The Energy Information Administration estimates that, assuming normal weather conditions, residential customers will pay 70 percent more for their natural gas bills in winter 2001 than in winter 2000. [FN1] In California, as well as New York, Illinois, and elsewhere, electric deregulation has resulted in extraordinary rate increases for residential customers as wholesale prices are detached from any cost basis. [FN2] Whether or not states have deregulated their electric utilities, prices are increasing throughout the nation as high natural gas prices drive up the cost of production. [FN3]

High home energy costs have a direct and immediate impact on the affordability and availability of income for low income households. Home energy is quite clearly essential to the livability of affordable housing. The availability of public utility services has been judicially recognized as essential not only to modern convenience, but to modern health and welfare as well. The U.S. Supreme Court noted in Craft v. Memphis Gas, Light, and Water Division [FN4] that "utility service is a necessity of modern life; indeed, the discontinuance of water or heating for even short periods of time may threaten health or safety." [FN5] It is not merely the need for heat in cold weather that is essential to the health and safety of residents of affordable housing. Severe hot weather can be just as deadly as cold weather. [FN6]

Home energy costs invariably affect the availability of housing as well. There is, for example, a documented relationship between utility disconnection and homelessness. Research in Philadelphia has found that "the relationship between terminations and homelessness is ... clearly discernible." [FN7] Surveys of homeless persons and emergency shelter providers across Pennsylvania "have found the loss of utility service to be a minor, but consistent contributor to homelessness. Among the dominant housing-related reasons for homelessness, utility terminations were cited as the cause 7.9% of the time." [FN8] High energy prices "also undoubtedly contribute ***286** to the other, more frequently cited reasons for homelessness, such as 'lack of housing in income range,' and 'eviction for nonpayment.' " [FN9]

This Philadelphia research is confirmed by a survey conducted by the Northern Kentucky Coalition for the Homeless. The coalition reported that the disconnection of utility services was one of the reasons consistently cited as a reason for homelessness in its study. [FN10] Homelessness obviously damages the quality of life of the person with no home. But it also damages the larger community to experience the presence of numbers of individuals with no regular ties to a stable residence. Homeless people have difficulty finding and keeping work, and their presence in the community is a visible reminder of the failure of the social and economic base of the community to provide a place for everyone.

However, it is not merely disconnections that result from unaffordable home energy bills. A 1995 study that examined 813 Head Start families in Missouri [FN11] found that nearly two-fifths were "frequently mobile." [FN12] The frequent mover population represented more than 500 children, or more than two children per family. Forty-five percent lived at or below 50 percent of the poverty level. Nearly 73 percent lived at or below 100 percent of the poverty level.

Unaffordable home energy bills represent a substantial cause of frequent mobility among these families. Of the five-year frequent mover households identified by this study, more than 41 percent listed unaffordable heating bills as a "very important" factor contributing to their most recent move; another 11 percent listed these bills as "somewhat important." Of the frequent mover population, unaffordable energy bills played a role in the move for more than half of the respondents.

The Missouri data also revealed that it is indeed unaffordable energy bills and not merely the disconnection of service that contributes to the forced mobility of the low income Missouri households. Three-fourths of the low income households that moved because of unaffordable energy bills did so notwithstanding the fact that they either had been paying their bills, or had at least not fallen so far behind as to warrant the disconnection of service.

The legal connection between energy and housing is frequently recognized by the courts under a variety of circumstances. For example, a landlord's failure to resolve utility metering problems is considered a breach in the covenant of quiet enjoyment. [FN13] The disconnection of utilities by a landlord is considered a constructive eviction. [FN14] A failure to provide heat and water is considered to be a breach of the landlord's warranty of habitability. [FN15] Many states have adopted explicit statutory provisions providing tenants with specifically enumerated remedies against a utility shut-off. [FN16] When a landlord files for bankruptcy under Chapter 7, 11, or 13 of the Bankruptcy Code, tenants, either individually or as a group, can petition the court to allow them to withhold rent to pay the utility bills directly so as to maintain utility service. [FN17]

***287** Even as electric prices spiral upwards, utility companies push to place more and more customers on meters that require those customers to pay in advance. [FN18] As the nation experiences dramatically increasing electric prices, however, it is particularly appropriate to consider the effects of **prepayment meters** on low income consumers.

A prepayment meter works the way prepaid phone cards do. Consumers purchase a plastic card with a designated amount of energy encoded on the card's magnetic strip. The customer then inserts the card into the home electric meter, which operates until the amount of energy on the card is exhausted. At that time, all energy through the meter is blocked. Generally, **prepayment meters** give a warning two to four days before the stored dollars run out. [FN19] "Cold weather protections" can be programmed into the meters. [FN20] **Prepayment meters** can also be programmed to reflect differing rate blocks: flat (where the charge remains the same for all units of energy used), inclining (where the charge increases as the amount of energy used increases), or declining (where the charge increases as the amount of energy used increases).

Consumers typically purchase cards at the utility company, any other utility pay station, a local drug store, or by mail. **Prepayment meters** allow consumers to buy electricity in blocks of dollars. In other words, a consumer would purchase $50 of electricity rather than purchasing blocks of energy (e.g., purchasing 500 kWh that happens to cost $x).

Utilities prefer **prepayment meters** because they simplify credit and collection services. Meters are often promoted as less intrusive than disconnecting service. Virginia Electric and Power Company, for example, said it intended to solicit customers "who historically meet certain criteria, i.e., transient nature, frequent disconnections for nonpay, fixed income, difficult to access meters, etc." [FN21]

There is little question that using **prepayment meters** as a means to address nonpayment issues will disproportionately affect low income consumers. One 1995 census report, [FN22] for example, found that while 9.8 percent of nonpoor families could not pay their utility bills in full, 32.4 percent of poor families could not do so. According to the U.S. Census Bureau, while 1.8 percent of nonpoor families had their electricity or natural gas disconnected for nonpayment, this occurred to 8.5 percent of poor. This percentage increased even further for welfare recipients (10.5 percent). [FN23]

This article considers the impact of **prepayment meters** on low income households. The article reaches three primary conclusions. First, **prepayment meters** will not generate the benefits generally claimed if the meters are aimed primarily at the poor. Second, because **prepayment meters** tend to "hide" low income inability-to-pay rather than seeking to redress the inability, **prepayment meters** are inappropriate to use as a collection device. Third, **prepayment meters** violate important procedural safeguards to protect consumers against unnecessary service terminations.

Will Prepayment Meters Generate the Benefits Sought?

Prepayment meters are not likely to bring about the benefits their proponents claim. These benefits tend to be variations on two common themes: ***288** meters will allow consumers to gain control over their usage and will help impose discipline on consumer budgets. [FN24] For low income consumers in particular, the assumptions underlying claims of benefits are unfounded.

Allow Consumers Control over Usage

Prepayment meter proponents claim that such meters will allow consumers to gain control over their energy consumption. By allowing customers to monitor their consumption on a constant basis, the meters will provide the information necessary to better decide which appliances to buy and which behaviors to pursue and which to avoid. This claim assumes that low income consumers have control over their usage and can make conscious adjustments in the amount of electricity they consume. In fact, this is not generally the case.

Energy consumption can be divided into two different kinds: (a) discretionary consumption; and (b) nondiscretionary consumption. Nondiscretionary consumption is by far the biggest block of the two. Consider, for example, the three largest uses of electric energy in a typical electric household: [FN25] space heating, water heating, and refrigeration, [FN26] each of which is largely beyond most consumers' ability to control.

According to the U.S. Department of Energy (DOE), while low income households use less energy in their homes overall than their higher income counterparts, their rate of consumption is much higher. In other words, the "intensity" of energy use is directly related to income, with low income households consuming 14 percent more energy per square foot than the average household. [FN27] The DOE explained that the higher intensity of energy use arises because of less efficient housing. [FN28]

The use of energy to heat space is often driven by factors largely outside the consumer's ability to control, including the age and size of the dwelling unit, the number of household members, and the extent to which household members are home during the day. [FN29] Also beyond the household's ability to control is the condition of the physical structure, including not only the structural integrity of the unit but factors such as the location of an apartment within the multifamily structure, the weatherization characteristics of the unit, and the orientation of a home or apartment vis-à-vis direct sunlight.

Refrigeration, too, depends largely on factors beyond a household's ability to control. The age and relative energy efficiency of the appliance itself is the primary driving factor in energy consumption. For example, refrigerators produced in 1990 were on average 96 percent more efficient than those produced in 1972. [FN30] Yet, in 1997, the DOE reported that two million of the 9.4 million households eligible for federal fuel assistance had refrigerators twenty or more years old; an additional 3.4 million of these low income households had refrigerators that were from ten to nineteen years old. [FN31]

In addition to these factors, the geographic location of the household affects the energy consumption of a refrigerator. When a refrigerator is in a hot climate, it has to work harder to keep its interior cold. The U.S. Department ***289** of Energy's Residential Energy Consumption Survey presents refrigerator consumption figures for the country as a whole, as well as for each census region. As the survey states, the average refrigerator consumption for the total United States is 1,323 kWh per year. However, the annual refrigerator energy consumption for the South Census region is 1,579 kWh a year. [FN32] A December 1997 study of energy efficiency in Florida households reported that "experience indicated that refrigerator energy use in Florida homes is often 10-20 percent greater than the label values due to higher interior temperatures." [FN35]

Hot water consumption is largely driven by factors outside the ability of the household to control. The American Society for Heating, Refrigeration and Air-conditioning Engineers (ASHRAE) has determined that specific demographic characteristics correlate to different levels of hot water consumption: high, medium, and low. [FN36] ASHRAE's categorization follows: [FN37]

Demographic Characteristics Correlation to DHW Consumption (ASHRAE 1996)

No occupants work	High
Public assistance and low income (mix)	
Family and single-parent households (mix)	
High percentage of children	
Low income	
Families	Medium
Public assistance	
Singles	
Single-parent households	
Couples	Low
Higher population density	
Middle income	
Seniors	
One person works, one stays home	
All occupants work	

NOTE: Demographics listed in order from highest consumption to lowest consumption.

ASHRAE then set national standards for sizing hot water equipment for multifamily buildings. According to ASHRAE, the average daily per person usage to be assumed for purposes of sizing a hot water heater appears on the following page. [FN38]

The American Society of Plumbing Engineers has adopted these ASHRAE guidelines for its standards for sizing domestic hot water systems as well. [FN39]

In addition, high hot water consumption is often driven by leaks, particularly in low income households. According to the American Housing ***290** Survey (AHS), performed by the Census Bureau and the U.S. Department of Housing and Urban Development (HUD), while only 13 percent of all occupied units in the country were occupied by households living below the poverty level, nearly 20 percent of all households with leaking pipes were in low income homes. [FN40] In addition, the AHS reports, nearly one-quarter of all leaks that were "unreported" but discovered upon inspection were in homes occupied by households living below the poverty level. [FN41] Overall, nearly one in six low income households (16 percent) had water leaks. [FN42] The AHS reports that 22 percent of the occupied households experiencing "severe" physical problems with their plumbing were low income households, and 34 percent of the occupied households experiencing "moderate" physical problems with their plumbing were low income households. [FN43]

National DHW Sizing Guidelines (Low-Medium-High) (ASHRAE 1996)

	Average Per Person Per Day
Low	14 gallons
Medium	30 gallons
High	54 gallons

NOTE: These data are for centrally fired units. Consumption for individually metered are likely to be somewhat lower.

Finally, electric appliance consumption is often outside the ability of a low income household to control. One component of appliance usage that is recognized today involves electric "leaks." Many appliances use power even when they are turned off. According to research by Lawrence Berkeley National Laboratory, TVs and VCRs are the two appliances with the largest aggregate standby losses. Some other common sources of leaking electricity are cable television boxes, compact video equipment, and computer peripherals. Altogether, according to the laboratory, leaking electricity represents about 5 percent of total residential electric use, or about fifty watts per home. [FN44] Many appliances use as much standby energy when they are off as they do when the appliance is on.

It is easy to imagine people frugally shutting off lights, turning down thermostats, and taking other steps to control consumption by behavioral changes. The savings potential through such steps, however, is insufficient to justify introducing an entirely new generation of meters based upon such savings. It is also easy to overestimate the savings that would arise if low income consumers turned off "wasteful" appliances, because low income consumption levels are driven more by the age, condition, and efficiency of the basic appliances and the housing structure. Arguments that **prepayment meters** will help low income consumers better control their energy consumption by making the consumer more aware of energy use appear to ignore the nature of low income energy usage.

***291** Helps Impose Discipline over Consumer Budgets

In addition to helping households conserve energy, prepayment meter proponents argue that these meters will encourage consumers to impose a "discipline" over the family budget process. Within the context of low income households, however, this argument erroneously assumes that the inability to pay is a budgeting problem.

In fact, low income households have an absolute mismatch between household income and household expenses. A 1995 study of low income energy use in Washington State, for example, found that actual median incomes for low income households do not allow households to live a "minimum but adequate" quality of life. A one-person household receiving federal fuel assistance, [FN46] for example, was found to have an average income of $4,334 in Washington State. In contrast, the "standard of need" for the Aid to Families with Dependent Children (AFDC) program [FN47] reported that an income of $8,340 was necessary to lead a minimum but adequate quality of life. [FN48] Washington State's low income households, the study found, pay more than 19 percent of their annual income for their annual household energy bills. The findings for Washington State households of various sizes are presented below: [FN49]

Annual Low-Income Standard of Need in Washington State vs. Average LIHEAP
Income by Family Size

HH Size	Standard of Need	Average LIHEAP Income
1	$ 8,340	$4,334
2	$10,548	$5,601
3	$13,056	$6,980

Utilities using **prepayment meters** in the United States report that "credit-challenged" households make up the majority of customers in their prepayment programs. Care must be taken, however, not to equate the term "credit challenged" with "low income." For example, the Salt River Project (SRP) in Phoenix, Arizona, reports that "the typical prepayment family owns its own home (58 percent), the family income is $31,000 a year, and the head of the household tends to be under 35 years old. The average household consists of four people and has been an SRP customer for more than 10 years." [FN50]

In spite of the lack of resources--or perhaps because of it--low income households' energy service is not typically put at risk because of poor budgeting. A 1985 Pennsylvania State University study looking at payment-troubled households in Pennsylvania [FN51] debunked the myth that nonpaying households are characterized by "deadbeats." The Penn State study found that "payment troubled households are experiencing considerable socio-economic stress when compared to the pattern for the average (general) customer sample." [FN52] The study noted that families encountering payment ***292** problems have a higher number of female heads of household, dependents, disabled members, nonmarried heads of households, and unemployed household members while also having lower levels of education, income and home ownership than households that do not experience difficulties.

Ultimately, the study concluded that "with regard to their socio-economic and demographic characteristics, the groups that encounter payment problems have higher proportions of the type of customers intended for protection by public policy." [FN53]

The Penn State study found that six of ten late paying customers indicated that some unusual condition hindered paying their utility bill on time. Customers who had received shutoff notices or actually had their service terminated most frequently cited employment-related problems (such as being laid off, having reduced working hours, or being unemployed) as the cause for late payment. [FN54] The next two most common reasons for termination of service were unusually high medical expenses (resulting from hospitalization or illness) and unusually high bills (resulting from seasonal usage variations).

The Penn State study concluded that "in view of the lower income levels and higher number of dependents in the payment troubled households when compared to the general sample, it is not surprising that these difficulties readily manifest themselves in the form of overdue bills." [FN55] Moreover, Penn State found that 20 percent of the households with payment troubles reported that they simply lacked adequate income. The reasons underlying household payment problems are set forth in the table below.

Comparison of Three Study Groups on Circumstances Surrounding the Overdue Bill

Unusual Condition for Overdue Bill	Notice	Terminated	PUC-BCS [FNa1]
No income/No money	18%	18%	6%
Illness/Medical	15%	19%	21%
Extra high utility or other large bill	22%	18%	16%
Laid off/Less work	21%	21%	32%
Other	14%	16%	11%
No unusual condition	10%	8%	4%

FNa1. These include the complaints submitted to the Bureau of Consumer Services, Pennsylvania Utilities Commission, regarding service disconnections, payment plans, and the like.

Finally, the Penn State study found that payment-troubled customers "made changes in their spending or lifestyle (or both) to deal with inflation and the high cost of energy." In general, the study found that "payment troubled groups report cutting back more on essentials such as food, clothing, and medical care than the general sample, and they also cut back more ***293** in other areas such as recreation, vacations, and gasoline for automobiles." [FN56] Indeed, the Penn State study reported that "the payment troubled groups, which may be living near or below the margin of adequacy for necessities, exhibit greater propensity to cut these items than the average residential consumer. Furthermore, the more serious the degree of utility payment problems, the higher the rate of reported cutbacks." [FN57]

Adverse Effects on the Consumer

The meters will also impose substantial adverse effects on low income households. The primary problem with **prepayment meters** is that customers who cannot afford to pay their meter often simply disconnect the service themselves. In addition, **prepayment meters** present problems for low income households that would otherwise benefit from budget billing.

Self-Disconnection and Related Problems

Consumer advocates frequently worry that one adverse effect of **prepayment meters** involves the extent to which low income customers will self-disconnect their electric service by failing to purchase additional energy when that energy becomes unaffordable. In this circumstance, the disconnection of service is not avoided, but rather merely "hidden" from regulatory, and public, oversight. A self-disconnection occurs when, rather than having a utility disconnect service for nonpayment, a consumer's meter runs out of money and, because the consumer lacks the necessary resources, the consumer fails to purchase additional energy to keep the meter operating. As a result, the flow of electricity into the housing unit stops.

The concern of consumers in this regard appears to be well founded. Great Britain has more than four million customers who use **prepayment meters.** [FN58] An August 1999 study by a national consumer organization in Great Britain reported that "the number of people having their electricity supplies cut off has declined dramatically in recent years, mainly because people are being offered **prepayment meters** as an alternative to disconnection." [FN59] However, this study found that "while electricity disconnection levels may be falling, this does not mean that the problems that many people face in paying their bills have gone away. Many people with **prepayment meters** can't afford to 'feed' them and are effectively self-disconnecting their electricity supplies." [FN60] The consumer organization reported that a third of gas customers surveyed had self-disconnected in the last year. In addition, more than one-quarter of electricity customers had run out of electricity in the last year. "If these figures were nationally representative, it could mean that around 428,100 gas and 926,000 electricity consumers were self-disconnecting last year." [FN61]

These payment problems, however, tell less than half the story of unaffordable home energy bills. Excessive home energy bills results not only in an inability to pay. Low income consumers are frequently forced to decide between competing household necessities (e.g., heat or eat), and are forced to engage in a wide variety of dangerous and/or unhealthy activities ***294** in an effort to keep paying their utility bills. In addition, these energy burdens impede low income consumers' efforts to take constructive actions to address their inability to pay. [FN62]

For instance, in order to stay afloat, low income consumers sometimes increase high cost debt by purchasing food and fuel on credit cards; turn down thermostats to dangerously low temperatures; use alternate (and unsafe) energy sources for heating (such as ovens, burners, and charcoal grills); burn "alternative fuels" in fireplaces and wood stoves, including furniture, clothes, siding, used tires, doors, and woodwork; turn off water heaters; abandon homes for weeks at a time during cold weather; engage in dishonest or unlawful activities, such as writing bad checks and tampering with meters; forgo purchasing food, medical care, dental care, and medicine; and forgo paying other bills such as rent and water. [FN63]

The Iowa State Department of Human Rights further documented the effects of unaffordable home energy bills. According to a study performed by that agency, recipients of federal fuel assistance in Iowa exhibited the following characteristics in the 1999-2000 winter heating season as a result of unaffordable home energy bills:

. More than 12 percent went without food to pay their home heating bill, meaning that about 7,600 low income households (representing 20,000 Iowa citizens) went without food at times as a result of unaffordable home heating bills. Nearly one in ten Iowa low income households with children under the age of six went without food at times in order to have sufficient funds to pay their home heating bills. More than one in ten households with at least one person over age sixty-five went without food.

. More than one in five went without medical care to pay for heating bills. For example, some did not seek medical assistance when it was needed, did not fill prescriptions for medicine when a doctor had prescribed it, or did not take prescription medicines in the dosage ordered by the doctor.

. Almost 30 percent reported that they did not pay other bills. In addition, many low income households incurred debt in order to pay both their home heating bills and other basic necessities by borrowing from friends and neighbors, using credit cards to pay for food and other necessities, or not paying the heating bill at all. [FN64]

Even if **prepayment meters** didn't increase the likelihood that low income households would disconnect themselves from energy services, they would make it hard for the public to scrutinize the problems associated with unaffordable home energy.

Low Income Budget Billing

One adverse effect of **prepayment meters** is the failure to provide the option of equalized budget billing. Seasonal variations in utility bills make it more difficult for low income households to keep up with payments. Equalized budget billing plans divide total annual bills into twelve equal monthly installments. In this fashion, the burdens imposed by winter heating or summer cooling bills are avoided by smoothing the peaks. **Prepayment meters** do not allow low income households to budget for seasonal ***295** high energy bills. In eliminating such plans, the meters discourage low income households from budgeting for their home energy costs.

Eliminating budget billing plans is unwise policy because, short of outright discounts, one of the most effective utility assistance programs is equalized budget billing. [FN65] One study in the late 1980s, undertaken for the Rhode Island Governor's Office of Energy Assistance, examined that state's Percentage of Income Payment Plan (PIPP). Under PIPP, a household's energy bill is set equal to an affordable percentage of income. Households are required to make equal monthly payments year-round. In exchange, the state pays the difference between the household payment and the actual bill. According to the study, the PIPP program was "overwhelmingly preferred over the old energy assistance program (70 percent versus 17 percent), mostly due to the even copayments." [FN66] Indeed, half as many households cited their even year-round payment requirement (17 percent) as what they "liked best" about the PIPP as cited the lower, more affordable bills (40 percent). [FN67]

Procedural Protections

Preshutoff Notice Requirements

Common Law Requirements: **Prepayment meters** avoid all of the procedural protections now preceding a service disconnection. At common law, public utilities may not discontinue service until after giving notice in accordance with the terms of the contract between the consumer and the utility. [FN68] In Carson v. Fort Smith Light Co., [FN69] a mother successfully recovered damages after members of her family became sick because the utility had disconnected service without prior notice. In Carson, the family had to insert a quarter in a coin-operated meter in order to receive a day's worth of energy. The utility had increased its rates, but the family didn't know that they owed money for a retroactive overdue balance. [FN70] When the utility box collector arrived at the plaintiff's home to remove the coins and to disconnect service for the unknowingly unpaid new balance, he eliminated the remainder of that day's quarter, which was not part of the money owed.

The Carson court found that the plaintiff family had not been notified that as a result of the increase, extra money was owed for past consumption. Nor was the family notified of the utility's power to disconnect the heat in order to encourage payment. Without any discussion of the contract itself, the court held:

> It may be true that the gas company had the right under its contract to shut off the supply of gas ... to compel payment of amounts already due ... but it could not do so until after giving notice in accordance with the terms of the contract .... [FN71]

Thus, it may be argued that a utility's common law right to terminate service to enforce payment is conditional upon its duty to notify the consumer of its intention to do so prior to exercising that right.

***296** Indeed, courts have routinely relied on common law to demand that utilities notify consumers before disconnecting service. [FN72] Such notice requirements are mandatory and binding on the utility. In Mississippi Power Company v. Byrd, [FN73] the court held that a consumer could recover damages after the utility cut off service without prior notice. The plaintiff argued that the utility hadn't followed its own notification rule and claimed actual damages for mental suffering and punitive damages resulting from the two days that he had no electric current.

The Alabama decision in Peddicord v. Tri-City Gas Company held that predisconnect notice is a fundamental aspect of utility service. [FN74] The Peddicord court used common law reasoning to hold that utilities must notify consumers of any threat of termination, holding that "a sudden discontinuance of service may work hardship and even perils to the customer and his family." [FN75] The court reasoned:

> After the relation of a regular customer is established, the customer having made his outlays in the premises, and, in view of the loss, inconvenience, discomfort, and maybe hazard to health involved in a sudden discontinuance of service without warning, the general laws touching the reasonableness of rules, or discontinuance without rules, on the part of a public utility, are not the same as applied to many forms of contract, wherein a breach on the part of one clothes the other with a right to terminate immediately. [FN76]

Indeed, a contract by a public utility with its customer is an agreement to furnish service for an indefinite period of time. [FN77] An implied term of such a contract is that service will not be suddenly terminated without reasonable notice. [FN78] Even if the consumer has the right to contest the service disconnection that consumer still has the right to receive prior notice. "Regardless of whether the plaintiffs had a right to contest the discontinuance of service, they certainly had a right to know that service was being discontinued to enable them to protect themselves from the very damages that did occur." [FN79]

According to National Food Stores v. Union Electric Co., [FN80] utilities must notify the customer of an interruption in order to permit him or her to protect against resulting damages. The Missouri appellate court wrote:

While we do not propose that public utilities ... are insurors or guarantors of the safety of persons or their property, ... we hold there is as a matter of law a duty on Union Electric to protect its customers from foreseeable damage from failure of electrical service.

In this case, it is incumbent upon us to determine if Union Electric's conduct in failing to warn National of its planned interruptions of National's service breached Union Electric's duty to avoid unreasonable risks of damage to National's property. [FN81]

The Missouri court concluded that the electric utility had a duty to give reasonable notice of a service interruption when "the utility knows or should know that by so failing to give notice the interruption might result in loss or harm to its consumers." [FN82]

***297** As can be seen, a common law duty exists to notify customers in writing before disconnecting service. Although a duty to give notice may be implied as a contract term, this duty does not arise strictly from the contract itself. Nor does the duty to give notice arise solely when a regulatory commission affirmatively promulgates a particular rule. Rather, the courts consistently hold, the obligation to provide notice arises by operation of law out of the special duty that a public utility owes the public it serves.

Constitutional Requirements: In fact, if the affected utility involves state action, using **prepayment meters** evades the constitutional due process protections and is thus unlawful. Where a utility's actions are found to involve "state action," the Due Process Clause of the Constitution requires that certain elements of fundamental fairness inhere in denying utility service. [FN83] There is, however, no consensus on what procedures are actually required by minimum due process standards. [FN84]

The Seventh Circuit decision in Lucas v. Wisconsin Electric Power Co. [FN85] stands at the minimal end of the spectrum. According to the Lucas court, due process requires only a five-day written shutoff notice joined with an informal utility review tempered by the availability of formal judicial remedies. [FN86] Moreover, the Lucas court held that requiring the customer to make payment of the disputed portion, subject to refund, was not constitutionally infirm.

The Texas district court decision in Limuel v. Southern Union Gas Co. [FN87] stands at the other end of the spectrum. Limuel held that the minimum requirements of due process included: (1) written notice; (2) an opportunity to be heard in person with testimony and documentary evidence; (3) an opportunity to be represented by counsel; [FN88] (4) the right to confrontation and cross-examination; (5) a "neutral and detached" hearing officer; and (6) a statement of reasons, along with an identification of the evidence relied upon (though formal written "findings of fact" were not required). [FN89]

Within the bounds of these two extremes lies the bulk of constitutional due process doctrine involving public utility consumer protections. In short, the courts have uniformly held that it is not sufficient to provide simply a disconnect notice informing the customer that unless an outstanding bill is paid by a designated date, service will be disconnected. [FN90] The due process cases decided over the past twenty years can be summarized by the commentator who observed, "Essentially, the demand in the principal cases has been for adequate notice of termination coupled with a right to an impartial hearing where there is a dispute as to the propriety of the charge." [FN91]

Duty of Care Requirements: Finally, the use of a prepayment meter may violate a utility's legal duty of care in providing continuing utility service. In general, a supplier of water, gas or electric service has a duty to exercise reasonable care to fulfill its obligation to provide continuing service. [FN92] In determining whether a public utility acted "reasonably" in terminating a customer's service, the utility must "take into account the likelihood of damage to the customer." [FN93] This principle has been recognized for more ***298** than a century. In the 1897 case of Coy v. Indianapolis Gas Co., [FN94] the state court found that a utility might be liable for the sickness and death of children occurring as a result of the unreasonable withholding of utility service. The court held that a natural gas company may not "at its pleasure, give or withhold the fuel at its disposal, and which may be the means necessary for the comfort, health, or even life of the inhabitants." [FN95] In a shutoff situation, therefore, a utility must act with the care that a reasonable person would exercise given the consequences of the shutoff. [FN96]

The degree of care is heightened by the recognition that electric, gas, and water services are essentials of life and the deprivation of such services is likely to be detrimental to life, health, and property. [FN97]

The Maryland case of Washington Gas Light Co. v. Aetna Casualty and Surety Co. [FN98] is a case in point concerning a utility's duty of care. Washington Gas involved a residence that had been sold to the plaintiffs. After the sale, but before the new owner moved into the home, the gas company disconnected service because the new owner had not yet requested service in his own name. The disconnection of service occurred on January 29. When the new owner sought to occupy the home, the water pipes were found to have frozen and burst causing extensive damage. [FN99] The utility was sued for damages in tort. [FN100]

The court held that when terminating service presents "an obvious danger of damage to the premises," the utility "owes an absolute duty to clearly and unambiguously inform the customer of its company regulations and policies and what action it intends to take." [FN101] (emphasis added). The court found that the temperature "had dipped below freezing nightly from January 10." [FN102] It held that "in light of the imminent danger of freezing," the failure of the utility to notify the customer of the company's disconnect policies before terminating service "would amount to negligence on its part." [FN103]

Regulatory Requirements: The use of **prepayment meters** would eliminate important regulatory safeguards protecting low income consumers against the unnecessary or unreasonable termination of service. In Minnesota, for example, Otter Tail Power Company implemented a prepayment meter program without seeking variances from a variety of shutoff protections promulgated by the PUC. Indeed, the commission noted that in implementing the program, the "company emphasize [[d] that the validity of the information gained from the project depended in large part on the customer's understanding the finality of their situation, i.e., that they must pay 'on delivery' and that when that 'delivery' is used up, they will be 'out of' electricity without further notice." [FN104]

The Minnesota PUC then found that Otter Tail Power's prepayment meter program violated the following shutoff protections: (1) permissible reasons for disconnecting service; [FN105] (2) disconnect notice requirements; (3) required premise visit; (4) emergency reasons to suspend disconnections; (5) information provided in billing; [FN106] and (6) declaration of inability to pay and cold weather protections.

***299** In each instance above, the preshutoff duty of a public utility extends beyond making available an opportunity for the customer to pay his or her bill. A public utility's duties are, of course, defined by PUC regulation. Those duties might require a reasonable time within which to apply for fuel assistance; an opportunity to pay an arrears over an extended period of time; and an opportunity to prevent disconnections due to a medical emergency. In addition, consumers are entitled to reasonable notice of these rights and remedies before the utility terminates service. Finally, irrespective of the right of a consumer to dispute the service disconnection, the consumer has a right to written pretermination notice.

Summary and Conclusions

In sum, **prepayment meters** are bad public policy, and the benefits attributed to them are not likely to arise. Low income payment problems do not occur primarily because of undisciplined budgeting practices or an inability or unwillingness to control consumption. In fact, given the absolute mismatch between low income household expenses and resources, a prepayment meter is likely only to hide the problems of inability to pay rather than to redress them. Self-disconnections, as well as extraordinarily counterproductive actions taken by low income consumers in response to their inability to pay for home energy, are not exposed to public scrutiny. Moreover, **prepayment meters** will likely be counterproductive because they preclude reasonable billing approaches such as equalized budget billing plans.

Aside from their substantive problems, **prepayment meters** are likely unlawful. They violate the common law duty to provide pretermination notice. They fail to provide adequate notice and information regarding alternatives to shutoffs, including payment plans, medical certificates, application for fuel assistance, and the like. They violate constitutional notice and hearing requirements when state action is present.

[FNa1]. Roger **Colton** is a principal in Fisher, Sheehan & **Colton,** Public Finance and General Economics in Belmont, Massachusetts. He is an attorney and an economist who designs and implements low income energy affordability programs. He has worked for state and local governments, public utilities, and community-based organizations to design programs in more than thirty states.

[FN1]. ENERGY INFORMATION, U.S. DEPARTMENT OF ENERGY, WHAT CONSUMERS SHOULD KNOW (Jan. 2001).

[FN2]. See, e.g., SCOTT MILLER & ANDREA WOLFMAN, FEDERAL ENERGY REGULATORY COMMISSION, STAFF REPORT TO THE FEDERAL ENERGY REGULATORY COMMISSION ON THE BULK POWER MARKETS IN THE UNITED STATES (Nov. 1, 2000).

[FN3]. The average price of natural gas supplied to electric utility plants in Sept. 2000 (the latest information available as of February 2001) was 64 percent higher than in Sept. 1999. And it will go higher. The estimated wellhead price of natural gas in Dec. 2000 was 189 percent higher than the Dec. 1999 price. ENERGY INFORMATION ADMINISTRATION, U.S. DEPARTMENT OF ENERGY, MONTHLY ENERGY REVIEW, at 115 (Feb. 2001).

[FN4]. 436 U.S. 1 (1978).

[FN5]. Id. at 18; see also Palmer v. Columbia Gas Co. of Ohio, 342 F. Supp. 241, 244 (N.D. Ohio) ("the lack of heat in the winter time has very serious effects upon the physical health of human beings, and can easily be fatal)." An excellent canvas of cases is found in Montalvo v. Consolidated Edison Co. of New York, 441 N.Y.S.2d 768, 776 (N.Y. Sup. Ct. 1981).

[FN6]. ROGER **COLTON &** MICHAEL SHEEHAN, THE OTHER PART OF THE YEAR: LOW INCOME HOUSEHOLDS AND THEIR NEED FOR COOLING: A STATE-BY-STATE ANALYSIS OF LOW INCOME SUMMER ELECTRIC BILLS (Flying Pencil Pubs. 1995):

Hot weather can be deadly to low income households, recent research has found. Without having identified precisely what the most vulnerable population is, there is general agreement that the susceptibility to death due to hot weather varies significantly based on age, sex, and race. Heat-related deaths are concentrated in the northeast and midwestern regions of the country. They generally occur only after certain city-specific threshold temperatures are reached. Deaths attributable to hot weather can be associated with many different factors. Deaths are greater earlier in the summer rather than later. Deaths are greater when there are several consecutive days of hot weather. Deaths are greater when high daily minimum temperatures combine with high daily maximum temperatures.

Id. at 15. During the period July 21-27, 1995, in Chicago, for example, there were 465 deaths specifically attributable to excess heat. Nearly 51 percent were seventy-five years of age or older, 49 percent were African-American (compared to 46 percent white); and 55 percent were males. The Centers for Disease Control established three criteria to isolate heat-related deaths from other causes of death, including a core body temperature of 105° F. at the time of or closely following death. Centers for Disease Control, Heat-Related Mortality--Chicago, July 1995, MMWR 44(31); 577-79 (8/11/1995), available at http://wonder.cdc.gov/wonder/prevguid/m0038443/m0038443.htm.

[FN7]. Energy Coordinating Committee and Institute for Public Policy Studies, Temple University, An Examination of the Relationship Between Utility Terminations, Housing Abandonment, and Homelessness: Preliminary Findings (1991) (on file with author).

[FN8]. Id.

[FN9]. Id.

[FN10]. Northern Kentucky Coalition for the Homeless, Homelessness and Low-Cost Housing in Northern Kentucky: An Analysis and Strategic Action Plan (July 1990) (on file with author). Technical assistance for the study was supplied by Applied Information Resources.

[FN11]. Roger **Colton,** The Road Oft Taken: Unaffordable Home Energy Bills, Forced Mobility and Childhood Education, 2 J. CHILDREN AND POVERTY 23 (Sept. 1996).

[FN12]. Of the 296 frequently mobile households, 259 had moved three or more times in the past five years while thirty-seven had moved two or more times in the past two years. Id.

[FN13]. Roger **Colton** and Janet Labella. Landlord Failure to Resolve Shared Meter Problems Breaches Tenant's Right to Quiet Enjoyment, 29 CLEARINGHOUSE REV. 536 (1995).

[FN14]. DiMassimo v. City of Clearwater, 805 F.2d 1536 (11th Cir. 1986).

[FN15]. Roger **Colton,** Margot Saunders, and Nancy Brockway, NATIONAL CONSUMER LAW CENTER, TENANTS' RIGHTS TO UTILITY SERVICE § 6.3 (1994).

[FN16]. Id. § 6.4.

[FN17]. Id. § 7.2.6.

[FN18]. See, e.g., Karen L. George, Prepayment Metering Services: A Fit for North America?, 1 RES CURRENTS 1 (July 2000).

[FN19]. The meter will project the day on which consumption will be exhausted based on existing rates of usage. In North Carolina, for example, in a thirty-person pilot project, the PowerStat meter continuously blinks and emits an hourly "chirp" when the amount left on the meter is less than four times the amount used on the previous day. Re Virginia Electric & Power Co., 145 Pub. Util. Rep. 4th 507 (N.C.U.C. 1993).

[FN20]. Cold weather protections will permit continued consumption with service limit constraints. If, in other words, the coincident demand placed on the meter exceeds designated levels after the purchased consumption amount is exhausted, the meter will provide an audible warning--most often times a series of beeps--and then cut off power for a designated period of time (measured in increments of an hour). At the end of that time, the meter will check to determine whether the demand has been reduced below the permitted levels. In Missouri, Union Electric's thirty-three participant pilot project provided that power of not less than 2,000 watts shall be provided during the cold weather months when the "amount remaining" display on the PowerStat meter reaches $0 from November 15 through March 31; the wattage is to be increased to 15,500 for electric heating customers. This limited electric service, Union Electric's tariff said, shall permit heating, lighting, and refrigeration during the cold weather period. Any electric service used after the "amount remaining" display reaches $0 during the cold weather months shall accumulate as a negative amount on the meter and be subtracted from any new card purchase. Participants with a negative balance are then required to make purchases of at least $75 or the amount remaining, whichever is less, each thirty-day period to avoid the disconnection of service. Union Electric Company, Tariff Sheet 120.1-120.4 (Rider P, PowerStat Program Rider), (effective May 5, 1991). The Union Electric experimental program was terminated in January 1995.

[FN21]. Re Virginia Electric, 145 Pub. Util. Rep. 4th at 507.

[FN22]. The 1995 report was based on 1992 data.

[FN23]. U.S. CENSUS BUREAU, EXTENDED MEASURES OF WELL-BEING: 1992, P70-50RV (Nov. 1995).

[FN24]. In justifying its experimental prepayment meter program in 1991, Southwestern Electric Power Company wrote: "The PowerStat system provides many benefits for the customer, including no monthly electric bills, allowance for setting up their own electric payment schedule, greater knowledge and control of their electricity use, and less initial set-up costs for new customers. ... The PowerStat system provides convenience and control by allowing customers to buy their electricity when they have money available, and in any amount they choose." PowerStat Put to the Test, THE SOUTHWESTERn, AUG.-SEPT. 1991, AT 1-2.

[FN25]. **Prepayment meters** are generally confined to electric usage.

[FN26]. In 1997, refrigerators consumed roughly 13 percent of all electricity consumed by households in the United States. U.S. DEP'T OF ENERGY, 1997 RESIDENTIAL ENERGY CONSUMPTION SURVEY 15 (Nov. 1999). Four of ten households (40 percent) used electricity for hot water heating in 1997 (40.2 million households out of 101.3 million total households with water heating). Id. at 180. Use of electricity as the main space heating fuel in 1997 reached nearly 30 percent (29.6 million households out of a total of 100.8 million households with space heating). Id. at 140.

[FN27]. A.D. LEE ET AL, U.S. DEP'T OF ENERGY, AFFORDABLE HOUSING: REDUCING THE ENERGY BURDEN (1995).

[FN28]. Id.

[FN29]. This might be a function of whether household members are employed outside the home or not.

[FN30]. See 1990 RESIDENTIAL ENERGY CONSUMPTION SURVEY, supra note 26, at 23, 25.

[FN31]. Id. at 77.

[FN32]. Id. at 214 (Table CE5-13c).

[FN33]. J. PROCTOR & G. DUTT, PROCTOR ENGINEERING GROUP, PACIFIC GAS & ELECTRIC COMPANY REFRIGERATOR REBATE EVALUTATION MONITORING REPORT (1994); A. MEIER & A. MEGOWAN, LAWRENCE BERKELEY LABORATORY, THE NEW YORK STATE REFRIGERATOR MONITORING PROJECT, LBL-33708 (1993).

[FN34]. LAURENCE KINNEY & MICHAEL STILES, AMERICAN COUNCIL FOR AN ENERGY EFFICIENT ECONOMY, REFRIGERATOR MONITORING SYSTEM DEVELOPMENT AND FIELD TESTING RESULTS: SUMMER STUDY ON ENERGY EFFICIENCY IN BUILDINGS 2-209 (1994).

[FN35]. DANNY PARKER ET AL., FLORIDA SOLAR ENERGY CENTER, MEASURED ENERGY SAVINGS OF A COMPREHENSIVE RETROFIT IN AN EXISTING FLORIDA RESIDENCE (Dec. 1997).

[FN36]. The American Society for Heating, Refrigeration and Air-Conditioning Engineers (ASHRAE) is a national standard setting body.

[FN37]. AMERICAN SOCIETY OF HEATING, REFRIGERATION AND AIR-CONDITIONING ENGINEERS, ASHRAE SYSTEMS HANDBOOK Ch. 44 (1996).

[FN38]. Id. at Ch. 44.

[FN39]. AMERICAN SOCIETY OF PLUMBING ENGINEERS, DOMESTIC WATER HEATING DESIGN MANUAL 24-25 (1998).

[FN40]. U.S. CENSUS BUREAU, AMERICAN HOUSING SURVEY FOR THE UNITED STATES IN 1989 46, Tables 2-7 (July 1991).

[FN41]. Id.

[FN42]. Id.

[FN43]. Id.

[FN44]. ALAN MEIER & WOLFGANG HUBER, LAWRENCE BERKELEY NATIONAL LABORATORY, REDUCING LEAKING ELECTRICITY TO 1 WATT, Report 42108 (Aug. 1998); LEO RAINER & STEVE GREENBERG, AMERICAN COUNCIL FOR AN ENERGY EFFICIENT ECONOMY, YOU WON'T FIND THESE LEAKS WITH A BLOWER DOOR: THE LATEST IN 'LEAKING ELECTRICITY' IN HOMES (1996). LBNL devotes an entire web page to "leaking electricity." See Standby Power Homepage (visited Feb. 13 2001) <http://eetd.lbl.gov/Leaking/>.

[FN45]. PARKER, supra note 35.

[FN46]. The federal fuel assistance program is the Low Income Home Energy Assistance Program (LIHEAP). 42 U.S.C. § 8621 (2000).

[FN47]. The AFDC program has since been renamed Temporary Aid to Needy Families (TANF).

[FN48]. See MICHAEL SHEEHAN ET AL., WASHINGTON STATE DEP'T OF COMMUNITY DEV., AN ASSESSMENT OF LOW INCOME ENERGY NEEDS IN WASHINGTON STATE 35-37 (1995).

[FN49]. Id.

[FN50]. George, supra note 18, at 5.

[FN51]. Drew Hyman et al., Optimizing the Public and Private Effects of Utility Service Terminations, PUBLIC UTILITIES FORTNIGHTLY, Dec. 29, 1985, at 29.

[FN52]. The statewide study examined representative samples of four groups of households involving over 1,800 interviews. The four groups included: (1) general residential utility customers; (2) customers who received a termination notice; (3) households whose service was actually terminated; and (4) households that sought to have a proposed termination mediated by the Public Utility Commission Bureau of Consumer Services. Id. at 30 n.1.

[FN53]. Id. at 30.

[FN54]. Id. at 32, Table 2.

[FN55]. Id. at 32.

[FN56]. Id.

[FN57]. Id.

[FN58]. See George, supra note 18, at 1.

[FN59]. CONSUMERS' ASSOCIATION, ENDING FUEL POVERTY: FINAL DEMAND 2 (August 1999).

[FN60]. Id.

[FN61]. Id.

[FN62]. ROGER D. **COLTON,** FISHER, SHEEHAN AND **COLTON,** Measuring LIHEAP's Results: Responding to Home Energy Unaffordability 12-13 (May 1999).

[FN63]. Id. at 19-23.

[FN64]. JOYCE MERCIER ET AL., IOWA DEPARTMENT OF HUMAN RIGHTS, IOWA'S COLD WINTERS: LIHEAP RECIPIENT PERSPECTIVE (June 2000).

[FN65]. See, e.g., NORA GAMIN BARNES, A STUDY OF CLIENT SATISFACTION: THE PERCENTAGE OF INCOME PAYMENT PLAN (1987).

[FN66]. Id. at 11.

[FN67]. Id.

[FN68]. 28 C.J., Public Utilities, § 29(d), 567.

[FN69]. 158 S.W. 129 (Ark. 1913).

[FN70]. Nineteen days elapsed between the effective date of the increased amount and the day the utility came to the plaintiff's house to adjust the meter.

[FN71]. Id. at 457 (emphasis added).

[FN72]. See generally, 64 AM. JUR. 2D, Public Utilities, 62 (1972).

[FN73]. 133 So. 193 (1931).

[FN74]. 168 So. 166 (1936).

[FN75]. Id. at 447.

[FN76]. Id. at 447 (emphasis added).

[FN77]. Cates v. Electric Power Bd. of Nashville, 655 S.W.2d 166, 170 (Tenn. App. 1983).

[FN78]. Id., citing First Flight Associates v. Professional Golf Co., 527 F.2d 931 (6th Cir. 1975); Chattanooga R. and C.R. Co. v. Cincinnati N.O. and P.Ry. Co., 44 F. 456 (C.C. Tenn. 1890).

[FN79]. Cates, 655 S.W.2d at 170. "If plaintiffs had known of the discontinuance of electric service, they could and undoubtedly would have drained the pipes, or at least closed the water valve so that water would not flow profusely in event of a freeze and rupture of plumbing." Id.

[FN80]. 494 S.W.2d 379, 383 (Mo. App. 1973).

[FN81]. Id. (emphasis added).

[FN82]. Id. at 384.

[FN83]. Memphis Light, Gas, and Water Division v. Craft, 436 U.S. 1 (1974).

[FN84]. O'Brien, Protecting the Consumer in Utility Service Terminations, 21 ST. LOUIS U. L.J. 452, 469 (1974).

[FN85]. 466 F.2d 638 (7th Cir. 1972).

[FN86]. Id. at 647-53.

[FN87]. 378 F. Supp. 964 (W.D. Tex. 1974).

[FN88]. Counsel, however, need not be provided.

[FN89]. Limuel, 378 F. Supp. at 969.

[FN90]. Bronson v. Consolidated Edison Co. of New York, 350 F. Supp. 443, 450 (S.D.N.Y. 1972).

[FN91]. Anthony Ilardi, The Right to a Hearing Prior to Termination of Utility Services, 22 BUFF L. REV. 1057, 1067 (1973).

[FN92]. 26 AM. JUR. 2D, Electricity, Gas and Steam, § 112 (1966).

[FN93]. See generally Wrongful Termination of Electric Service, 15 AM. JUR. Proof of Facts (2d) § 125 (1978). "This article is concerned primarily with the question of the liability of an electric power supplier for the deliberate shutoff of electrical power furnished a patron. As used herein, the term 'patron' refers to a single or individual consumer of electric power, as distinguished, for example from the community as a whole, or persons having no contractual relations with the supplier." Id. at 129-30 (1978) (footnotes omitted).

[FN94]. 46 N.E. 17 (Ind. 1897).

[FN95]. Id. at 21.

[FN96]. A tort action should be contrasted to actions based on constitutional theories in this regard. In the constitutional cases, the courts acknowledge that utility service is considered an essential of life. See, e.g., Memphis Light Gas and Water Div. v. Craft, 436 U.S. 1 (1978); Palmer v. Columbia Gas Co., 342 F. Supp. 241, 244 (N.D. Ohio 1972); Stanford v. Gas Service Co., 346 F. Supp. 717, 721 (D. Kan. 1972). The courts continue, however, to make clear that the nature of the service has no impact on whether utility service is a "property interest" the deprivation of which cannot occur without due process requirements attaching. According to the Seventh Circuit, for example, the question of whether utility service is an "absolute necessity of life" is "irrelevant to the question of whether there is an entitlement" subject to constitutional protection. Sterling v. Village of Maywood, 579 F.2d 1350 (7th Cir. 1978). The Seventh Circuit continued: "as the Supreme Court has made clear, it is the nature and not the weight or importance of the plaintiff's interest that determines whether a property interest exists." Id. at 1354. Clearly, a different standard is applicable in a tort action. The duty of care is to be measured by the foreseeable consequences of the termination of service.

[FN97]. See, e.g., Consolidated Edison Co. v. Jones, 444 N.Y.S.2d 1018 (1981). Indeed, a number of utility tort cases indicate that, because of the consequence of the action, a utility owes the "highest standard of care" when seeking to terminate service. Kohler v. Kansas Power and Light Co., 387 P.2d 149, 151 (Kan. 1963); accord, Washington Gas Light Co. v. Aetna Casualty and Surety Co., 242 A.2d 802, 804 (Md. App. 1968).

[FN98]. Washington Gas, 242 A.2d at 802.

[FN99]. Id. at 803.

[FN100]. A similar case, with similar results, is found at Cates v. Electric Power Board of Metropolitan Government, 655 S.W.2d 166 (Tenn. App. 1983).

[FN101]. Washington Gas, 242 A.2d at 805 (emphasis added).

[FN102]. Id. at 803.

[FN103]. Id. at 805.

[FN104]. Re Otter Tail Power Co., No. E-017/M-91-817, 1992 WL 230579 (Minn. PUC 1992).

[FN105]. There were nine "permissible reasons" to disconnect service, of which failing to make a payment toward a prepayment meter was not one.

[FN106]. Hence, it was not simply the disconnect regulations that were implicated. A prepayment meter implicates PUC regulations regarding the process of billing as well.

END OF DOCUMENT