

DETERMINING
THE COST-EFFECTIVENESS OF
UTILITY CREDIT AND COLLECTION TECHNIQUES

PREPARED BY:

Roger D. Colton
National Consumer Law Center, Inc.
Eleven Beacon Street, Suite 821
Boston, MA. 02108
617-523-8010

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EXECUTIVE SUMMARY

The following analysis looks at examining the cost-effectiveness of a variety of traditional public utility credit and collection techniques. Cost-effectiveness is measured in terms of whether each technique results in the least-cost provision of service. The analysis posits that the ultimate goal of *any* utility activity is to provide reasonably adequate service to its ratepayers at least-cost. This goal is enforced through the dictates of such seminal cases as *Hope* and *Bluefield* that utility management be "efficient and economical."

The requirement that utility activity contribute toward the provision of least-cost service pervades every aspect of a utility's business. It governs whether a utility should provide coal, oil or nuclear capacity; whether a utility should pursue new central station capacity, cogeneration or conservation; whether a utility should self-insure or purchase insurance policies; whether a utility should maintain compensating bank balances or pay bank fees; whether a utility should raise debt or equity capital. The requirement of least-cost service, too, should govern utility collection activities. In reviewing these alternatives, expenses devoted to the collection of arrears should be measured by the same least-cost tests as any other utility expense.

The following analysis looks at four areas of credit and collection activity in particular:

1. THE DISCONNECTION OF SERVICE: The disconnection of service should be viewed as one mechanism, but by no means the exclusive mechanism, to collect a customer's bill. Moreover, given the menu of available collection options, it cannot be assumed that the disconnection of service *ipso facto* results in the least-cost provision of service. If the disconnection of service is *not* the collection means which results in least-cost service to remaining ratepayers, it should not be relied upon as a collection tool. Among the factors to consider in assessing the cost-effectiveness of the disconnect process are the expenses associated with disconnections and the revenue stream which is lost when customers are removed from the system.

2. SECURITY DEPOSITS: In undertaking a cost-effectiveness review of security deposits, the purpose of deposits must be used as the benchmark for evaluation. Given the fact that deposits are designed to protect a utility against revenue loss due to bad debt, to be cost-effective, a utility's deposit scheme must be shown to result in savings in uncollectibles at least equal to the expense of obtaining and maintaining the deposits. Just like insurance which provides coverage beyond the value of the insured property, in the event that a utility is "oversecured," i.e., the deposit exceeds the utility's potential loss due to bad debt, the maintenance of the deposit creates only costs and provides no benefits. The cost-effectiveness of deposits depends on a careful assessment

of the risk of loss due to bad debt against which security would be needed. This cost-effectiveness analysis should be applied to evaluating whether deposits should be demanded at all as well as to assessing the appropriateness of the size of particular deposits. If there is a systematic mismatch between the amount of cash deposits held by a utility, and the risk of loss to that utility, the utility's ratepayers are being penalized by the utility's uneconomic behavior.

3. LATE PAYMENT CHARGES: Late payment charges are often used to compensate a utility for delinquent payments. A utility may experience both out-of-pocket collection expenses and carrying costs when a bill is not paid by its due date. In assessing the reasonableness of late charges, a utility must distinguish between classes of late payers to ensure that compensation is provided only when expenses are truly incurred. When compensation *is* provided, it should be calculated using a decremental cost analysis. When a late payment charge is not used as compensation for a utility's expenses, but rather as an inducement to make prompt payment, whether the level of the charge actually results in the acceleration of payments is necessary to determine. For low-income households in particular, increasing costs in response to nonpayment may retard rather than accelerate eventual payment of the arrears.

4. DEFERRED PAYMENT PLANS: Public utilities often offer deferred payment plans as an option through which households in arrears can pay their debt over an extended period of time. With moderate or high arrears, these plans can call for payments over several years. To obtain a stream of payments over time, however, is not the same as receiving full immediate payment. Through deferred payment plans, a utility loses the time value of the stream of payments. It is possible to calculate a discounted immediate lump-sum payment that is the "indubitable equivalent" of a stream of payment plan payments over time. If by discounting the arrears and accepting immediate payment, a utility can receive the equivalent of the payment plan payments, it reduces its risk of not eventually receiving full value and should accept the immediate payment. Any calculation of "equivalence" depends on a determination of an appropriate discount factor. The determination of that factor is governed by well-accepted legal and economic principles. The two options that seem most appropriate for the utility payment plan process are either (1) a U.S. Treasury rate for securities of similar term to the payment plan, as adjusted for risk; or (2) a rate based upon a survey of what local or regional lenders would demand for a loan of similar type, term and duration.

INTRODUCTION

National Consumer Law Center
Plymouth Beacon St., Suite 821
Boston, MA. 02108
617-523-8010

The purpose of this manual is to examine the economics and finances which underlie certain utility collection techniques. Unfortunately, on too frequent of a basis, utility credit and collection activities are based entirely on supposition and presumption. Little effort has gone into identifying the specific purposes that underlie credit and collection efforts; examining whether the means proposed bear some reasonable relationship to those purposes; and calculating what the financial and economic consequences are should those means be pursued.

Far too often, utility credit and collection activities have escaped the scrutiny that is applied to other aspects of a utility's business. The disconnection of service is assumed to be a rational and economic response to nonpayment of bills, without considering the impacts of the lost stream of revenue which ensues. The collection of security deposits is asserted to reduce bad debt, without looking at whether further reduction ceases after some level of security, leaving only the costs of deposit maintenance. Long-term deferred payment plans are offered without consideration of whether collecting \$80 today may be financially and economically more sensible than possibly collecting \$100 tomorrow.

This manual attempts to remedy these traditional shortfalls in analysis.

The purpose of this manual is three-fold:

(1) From a business perspective, to identify the costs, both direct and indirect, which are associated with a variety of utility credit and collection techniques.

(2) From a regulatory perspective, to examine whether these established credit and

collection techniques result in the provision of least-cost service to all ratepayers, with a focus on those ratepayers *not* subject to the credit and collection activity.

(3) From an economic perspective, to assess whether economic and cost-effective alternatives exist to credit and collection techniques now endorsed more by "conventional wisdom" than by reasoned analysis, which alternatives would redound to the benefit of a utility's payment-troubled customers as well as to the benefit of all its remaining customers.

The thesis of this manual is grounded squarely in the dictates of *Hope*¹¹ and *Bluefield*:¹² that utilities are required to operate in an economic and efficient manner and that they should take advantage of all reasonable efficiencies in operation. Just like any other utility practices, credit and collection activities that are found to impede or to interfere with the provision of least-cost service should be modified or abandoned.

The analysis presented here is applicable to unregulated utilities, such as Rural Electric Cooperatives (RECs), as well as to regulated investor-owned utilities. The discussion tends to concentrate on energy utilities, although the reasoning which is presented can be transferred easily to water, sewer and

¹¹*Federal Power Commission v. Hope Natural Gas Company*, 350 U.S. 591 (1944).

¹²*Bluefield Water Works v. Public Service Commission of West Virginia*, 262 U.S. 679 (1923).

telecommunications as well.

With these observations in mind, this manual looks at the following areas:

- oThe disconnection of service
- oThe collection of security deposits
- oThe imposition of late payment charges
- oThe offer of long-term deferred payment plans

Each Part below examines one of these issues. Because each analysis is intended to operate as a stand-alone evaluation, there may be some duplication as between Parts.

PART I: DISCONNECTION OF SERVICE

Given the problems that low-income households face today with high energy bills,¹³⁾ as well as with high telephone bills,¹⁴⁾ little question exists but that low-income households simply do not have sufficient funds.¹⁵⁾ This lack of funds results in payment problems to public utilities. Late payment, partial payment and nonpayment all are representative of these problems.

The disconnection of service¹⁶⁾ is the almost universal response to less than complete payment by low-income households.¹⁷⁾ The disconnection of energy service to a low-income household can pose a serious threat to the home, health and perhaps even life of the consumer. As the U.S. Supreme Court has noted, "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."¹⁸⁾ Similarly, an Ohio federal district court stated that "the lack of heat in the winter time has very serious effects upon the physical health of human beings, and can easily be

¹³⁾National Consumer Law Center, *Energy and the Poor: The Forgotten Crisis* (1989).

¹⁴⁾National Consumer Law Center, *Customer Service Regulations for Residential Telephone Customers in the Post-Divestiture Era: A Study of Michigan Bell Telephone Company* (1989).

¹⁵⁾See, notes Error! Bookmark not defined. - Error! Bookmark not defined., *infra*, and accompanying text.

¹⁶⁾Several phrases will be used coterminously in this discussion. The disconnection of service, service terminations, and utility shutoffs are all intended to mean the same thing. These terms are intended to cover the situation where there is an involuntary disconnection of service for nonpayment. The "voluntary" disconnection of service is not included, even if that disconnection is because the household determines that service is unaffordable. Included within the concept of "disconnection" in this analysis is the denial of an application for service. Hence, if a household applies for service but is denied because of an outstanding unpaid bill, that household is deemed, by definition, to have been "disconnected."

¹⁷⁾Innovative programs such as Philadelphia Electric Company's Consumer Assistance Program (CAP) and Maine's Special Payment Arrangement (SPA) winter payment plans program demonstrate that alternatives exist to the disconnection of service.

¹⁸⁾*Memphis Light, Gas and Water Division v. Craft*, 436 U.S. 1, 18 (1978).

fatal.^{9\}

The loss of telephone service can be an equally threatening event. The lack of telephone service jeopardizes continuing energy service by denying a household any ability to enter into payment plans, make contact with social service agencies, or otherwise respond to its inability to pay.^{10\} Moreover, the entry level jobs, often short-term, for which the poor compete are almost inevitably filled through telephone calls to the prospective employee; if the potential employee cannot be reached by phone, the employer or job counsellor simply goes on to the next name. Based on testimony of this nature in a case concerning public benefits, the Montana Supreme Court identified the lack of a phone as a significant "barrier to employment."^{11\}

In addition to these serious impacts on consumers, the disconnection of service for nonpayment can be bad business from the perspective of the utility and its ratepayers. This conclusion is based on the fundamental principle that the disconnection of service must lead to the provision of least-cost service to

^{9\}*Palmer v. Columbia Gas Co. of Ohio*, 342 F.Supp. 241, 244 (N.D. Ohio 1972) (citations omitted); see also, *Stanford v. Gas Service Company*, 346 F.Supp. 717, 721 (D.Kan. 1972). An excellent canvass of cases is found in *Montalvo v. Consolidated Edison Company of New York*, 110 Misc. 2d 24, 441 N.Y.S.2d 768, 776 (N.Y. 1981).

^{10\}See, e.g., National Consumer Law Center, *An Evaluation of Low-Income Utility Protections in Maine: Winter Requests for Disconnect Permission* (1988). (80 percent of households who were disconnected during the winter months lacked telephone service.)

^{11\}*Butte Community Union v. Lewis*, 745 P.2d 1128, 1131 (Mont. 1987).

ratepayers as a whole. The disconnection of service, in other words, is not an end unto itself. It is a means to an end: the provision of least-cost service. This principle is so well-accepted, it is not open to serious question.

Unfortunately, despite its universal acceptance, the principle of least-cost service is often ignored when public policy regarding the disconnection of service is considered.¹²⁾ The purpose of this evaluation, therefore, is to outline an analytic framework within which the disconnection of service can be considered. The purpose of this analysis is to rationalize the disconnection process within the context of least-cost service provision. Eliminating disconnections when they are unnecessary and costly can result in gains both to the utility and its consumers.

In order to perform this type of analysis, several tasks must be performed. The first task is to define with precision the function played by the disconnection of service. Second, the effectiveness in accomplishing that function must be measured. Finally, the total system costs incurred in accomplishing that function must be determined.

I. IDENTIFYING THE PURPOSE OF UTILITY DISCONNECTIONS.

Most utilities argue that the disconnection of service is a collection tool to be used to minimize uncollectible accounts. The assumption behind this argument (often unstated) is that the disconnection of service thus leads to the least-cost

¹²⁾The discussions consider only when a utility "may" disconnect service, not when it "should" disconnect service.

provision of service to remaining, paying, customers.^{13\} As will be seen, however, even if the premise is true (that the disconnection of service is an effective collection tool), the conclusion (that it results in least-cost service) does not necessarily follow.

The disconnection of a nonpaying customer can serve two distinct functions. On the one hand, a shutoff can be said to remove the nonpaying customer from the system. In this way, the customer is prevented from incurring additional future unpaid bills. On the other hand, a shutoff can be said to be a means of collecting the current arrears. In this way, the disconnection of service is a device to obtain payment toward past bills. Neither of these stated goals, however, can withstand the illumination of close examination.

In reality, the disconnection of service is rarely used to permanently remove customers from the system. Information from Vermont, for example, indicates that utilities nearly universally do not permanently disconnect a household's utility service. A recent proceeding before the Vermont Public Service Board found for every utility reporting data that households remain disconnected for a mere matter of hours. (Table A).

Vermont is not unique. Pennsylvania utilities are required each fall to

^{13\}This argument has been advanced from the earliest days of utility regulation to the most recent. See, e.g., *Re. AT&T Communications of the Mountain States*, 72 P.U.R.4th 494, 495 (Colo. PSC 1986); *Re. New York Telephone Company*, 64 P.U.R.4th 515, 520 (NY PSC 1984); *Short v. Baltimore Gas and Electric Co.*, 63 P.U.R.3d 493 (Md. PSC 1966); *Re. Guarantee and Deposit Rules and Disconnect Procedures*, 11 P.U.R. (n.s.) 439 (1935) (Wis. PSC).

survey the households which have had service disconnected within the past 12 months to determine whether families are entering the winter season without heat.¹⁴⁾ Those utilities report that in virtually every instance, the service has been reconnected for the household either at the same or at a new service address. According to Columbia Gas of Pennsylvania, for example, from January 1, 1989 through November 30, 1989, 1,807 "heat related properties" had their service terminated for nonpayment. As of December 13, 1989, 897 of those "heat-related residential properties" had not been reconnected. In turn, 380 of those 897 were vacant

¹⁴⁾ 56 *Penn. Admin. Code* §100 (1989).

TABLE A

TIME BEFORE RECONNECTION FOR DISCONNECTED HOUSEHOLDS

IN VERMONT ^{15\}

Company Time Before Reconnection

Allied Less than 12 hours
Barton 2 hours
Citizens Less than 24 hours^{16\}
Central Vermont Public Service 24 hours
Franklin 3 hours
Green Mountain Power Less than 24 hours
Hardwick 2 - 3 hours
Hyde Park Less than 24 hours
Lyndonville 4 hours
Morrisville 4 - 6 hours
Northfield 4 hours
Orleans Less than 24 hours
Stowe 3 hours
Vermont Marble 2 hours
Washington Electric Co-op Less than 24 hours

^{15\} Before the Vermont Public Service Board, *Board Investigation into the Adoption and Implementation of Energy Programs for Low-Income Households*, Docket 5308, Direct Testimony and Exhibits of Roger D. Colton, presented on behalf of the Department of Public Service (October 1989).

^{16\} Roughly half are reconnected within 24 hours.

premises, indicating the household had moved subsequent to the shutoff. Similar results were experienced in 1988. From January through November, 1988, 1,902 households had service disconnected for nonpayment. As of December 13, 1988, 1,041 of those households were not reconnected. In turn, 439 of those 1,041 represented vacant premises.

Neither is the disconnection of service used to obtain immediate payment of outstanding arrears. Most households who are reconnected to the system, do not pay all of their arrears before reconnection. For those households, while the arrears may not be entirely paid prior to reconnection, the utility enters into deferred payment agreements whereby the arrears underlying the disconnection are retired over time.¹⁷

The conclusion follows that the real goal of a utility in disconnecting service is neither to obtain immediate full payment nor to permanently remove nonpaying customers from the system. Disconnection is instead used to force households who have ignored other collection devices to contact the utility and to directly address their payment problems.¹⁸

¹⁷In most states, to be reconnected, a household must make a downpayment toward the arrears equal to a designated portion of the outstanding bill and enter into a payment plan for the remainder.

¹⁸Compare, National Consumer Law Center, *An Evaluation of Low-Income Utility Protections in Maine: Winter Requests for Disconnect Permission*, at 36 (July 1988). "The interposition of the Consumer Assistance Division (CAD), in particular, appears to be successful in assisting households to make both full and partial payments toward their utility bills after final utility efforts would have led to the disconnection of service." The report noted, however, that "one intangible which is impossible to factor into an analysis such as this is the extent to which some households "do nothing" until receipt of a CAD communication, having previously learned that it is that CAD letter which is the final step in the collection process." *Id.*

Each goal sought through the disconnection of service raises cost-effectiveness issues unique to itself. The goal of removing nonpaying customers from the system, in other words, raises cost-effectiveness issues different from the goal of coercing payments. Both raise issues different from forcing the customer to make contact with the utility. Nevertheless, in all instances, the *ultimate* goal of the utility is the provision of least-cost service to all ratepayers.

II. THE ECONOMICS OF OBTAINING PAYMENT TOWARD CURRENT ARREARS.

Reliance upon the disconnection of service to collect bills from low-income households can be a self-defeating proposition. This is true when there is a fee designed to pass on the cost of the disconnect/reconnect process to the affected household as well as when there is not. Without a fee, the cost of collection often exceeds the amount to be collected in the first instance. Even when the cost of disconnection and reconnection is fully recovered from the nonpaying low-income household, however, that fee tends to divert limited household funds from the payment of current usage to the payment of the costs of the collection process, to the detriment of all involved.

A utility does not benefit its "paying" ratepayers if, through the disconnection process, it *increases* the unpaid debt of the disconnected household. In the event that a customer makes no payment toward her

outstanding arrears, the utility goes uncompensated for both the initial arrears plus the uncompensated cost of the disconnection process. All the utility has thus accomplished through the disconnection process in this case, therefore, is to increase the loss to remaining ratepayers.

Where no fee is imposed to cover the cost of collection, the process of disconnecting and reconnecting a household's service can be equal to or greater than the cost of the outstanding arrears with which to begin, a not uncommon occurrence. Again, Vermont provides the data. Table B sets out the cost of the disconnection/reconnection process.^{19\} As can be seen, these Vermont utilities frequently incur a cost in the process of disconnecting and reconnecting delinquent households which is greater than the outstanding arrears which underlies the disconnection with which to begin. From the perspective of providing least-cost service to ratepayers, the rationality of this process can thus well be questioned.^{20\}

TABLE B

THE COST OF DISCONNECTING AND RECONNECTING SERVICE

IN VERMONT ^{21\}

^{19\}The process is assumed to include the following steps: (a) a reminder notice; (b) a shutoff notice; (c) an effort to make personal contact (by telephone); (d) an effort to make personal contact (by premise visit); (e) a service disconnection; and (f) a service reconnection.

^{20\}In those instances where the cost of the collection, disconnection, reconnection process is *not* recouped through a fee, the cost of the process should represent a limit below which disconnections should not take place. In no event, in other words, would a utility be justified in spending \$80 in uncompensated expenses to collect a bill of anything less than \$80.

^{21\}Before the Vermont Public Service Board, *Board Investigation into the Adoption and Implementation of Energy Programs for Low-Income Households*, Docket 5308, Rebuttal Testimony and Exhibits of Roger D. Colton, presented on behalf of the

Company Total Cost Percent Below Cost¹²²⁾

Vermont Gas	\$ 70	42.4%	
Central Verm. Pub. Serv.	\$ 70		47.2%
Green Mountain Power		\$103	58.5%
Citizens Utilities	\$ 66	44.3%	

Even assuming that the disconnect/reconnect process is paid for through disconnect/reconnect fees, a household which is not permanently removed from the system, but which instead merely has its service disconnected and reconnected, ends up necessarily owing *more* than the arrears underlying the disconnection in the first instance. At the time of reconnection, in other words, in addition to the arrears which led to the disconnection, the household is responsible also for paying any disconnect and reconnect fee.

Because of these additional payment obligations, when the household is poor, everyone loses. Illustration A sets out a hypothetical detailing the impacts of imposing a disconnect/reconnect fee on a low-income household. As discussed in detail below,¹²³⁾ one distinguishing characteristic of a low-income household is the limited corpus available to pay month-to-month utility bills. In Illustration A, the low-income household has an arrears at the time of disconnection of \$75; the cost of disconnecting and reconnecting the account is (. . . continued)

Department of Public Service (December 1989).

¹²²⁾Percent of disconnections where outstanding arrears were less than the combined cost of the disconnection and reconnection process. Figures estimated using data provided by each utility.

¹²³⁾See, notes Error! Bookmark not defined. - Error! Bookmark not defined., *infra*, and accompanying text.

\$60 and is fully recovered through a disconnect/reconnect fee. After the process of disconnecting and reconnecting the household in this Illustration, therefore, the total bill owed by the customer is \$135 (\$75 arrears plus \$60 disconnect/reconnect fee). The household is assumed to be capable of making only a partial payment. In the Illustration, the customer makes a payment of \$55, leaving a total arrears after the disconnection and reconnection of \$80.

ILLUSTRATION A

THE IMPACT OF DISCONNECT/RECONNECT FEES

FOR LOW-INCOME PAYMENTS

Customer arrears at time of disconnect:\$ 75

Cost of disconnect and reconnect:\$ 60¹²⁴⁾

Customer bill in total after disconnect:\$135

Customer payment: \$ 55

Customer arrears after payment:\$ 80

As can be seen, even when the disconnect/reconnect fee is "cost-based," charging such a fee does not necessarily serve the best interests of all customers. In this Illustration, *everyone* loses. The customer is \$5 worse off. She started by owing \$75 and now owes \$80, despite having exhausted her ability to make payments to the utility. The utility is \$60 worse off. It started with the customer \$75 in debt and willing and able to make a \$55 payment; that would have left a \$20 arrears. Instead it has a customer \$80 in arrears (with no further ability to make payments). The remaining ratepayers are worse off. Instead of devoting its limited resources to paying the bill for consumption, the low-income household has devoted its \$55 in resources to paying the disconnect/reconnect fee, leaving the initial arrears plus the uncompensated cost of disconnection and reconnection to

¹²⁴⁾ Assume that entire cost of disconnection/reconnection is compensated through some type of fee.

be potentially passed on through bad debt.^{125\}

The conclusion that imposing a disconnect/reconnect fee can be a losing proposition, however, does not depend for its efficacy on an assumption of nonpayment or partial payment. Even in those instances where the customer makes full payment of the outstanding arrears, the utility cannot be found ipso facto to have benefitted from the disconnect/reconnect process. So long as the late paying household has a limited corpus, if some part of the household's ability-to-pay is diverted to paying disconnect/reconnect fees, there is that much less left to pay current bills.

This conclusion has a sound basis in fact. That low-income households often have, quite literally, more expenses than income from which to pay their utility bills is beyond dispute. A 1989 NCLC study in Utah,^{126\} for example, found the cost of a minimum standard of living to be \$9,708 (in 1986 dollars). In contrast, the average income of a LIHEAP^{127\} recipient in that state (for a family of three) was only \$6,400. Similarly, a 1986 NCLC study in Pennsylvania^{128\} found that a minimum standard of living was \$8,445 in that state for a family of two. In

^{125\} Compare, pages 75 - 77, *infra*, and accompanying text for a discussion of how late fees can be subject to this same analysis.

^{126\} National Consumer Law Center, *Losing the Fight in Utah: Low-Income Households and Rising Energy Costs* (January 1989).

^{127\} LIHEAP is the Low-Income Home Energy Assistance Program (LIHEAP), the federal fuel assistance program. 42 U.S.C §§8621 et seq (1979).

^{128\} National Consumer Law Center, *The Crisis Continues: Addressing the Energy Plight of Low-Income Pennsylvanians Through Percentage of Income Plans* (1986).

contrast, a two person household living at 100 percent of the federal Poverty Level had \$7,050 in annual income.

This income level simply does not provide sufficient dollars for a household to pay all of its necessary expenses. One 1989 study in Philadelphia found that 100 percent of households living below 50 percent of the federal Poverty Level in that city had negative monthly income left after paying essential home expenditures, but before paying home heating bills; 75 percent of households at 50-99 percent of the Poverty Level had negative income (with another 10 percent having less than \$24 per week left).^{129\}

A national study performed in 1989 by NCLC^{130\} looked at the population of households receiving LIHEAP benefits, most frequently defined to be those households at or below 150 percent of the Poverty Level. That study found that in 10 of the 16 states which collect and report income for LIHEAP recipients, after paying their winter home heating bills, those households had less than \$75 per week left for all other household expenses, including housing, food, transportation, medical care and clothing. To put this figure in perspective, national figures indicate that, on average, low-income households spend \$67 per week on food alone, \$60 per week on housing alone (excluding energy) and \$39 per week on transportation alone.

^{129\}Before the Philadelphia Gas Commission, *In Re. Philadelphia Gas Works*, Direct Testimony and Exhibits of Eunice Grier, presented on behalf of the Public Advocate (June 1989).

^{130\}National Consumer Law Center, *Energy and the Poor: The Forgotten Crisis* (May 1989).

As with the partial payment, given this information, the question which a utility must face is whether, by increasing the total outstanding bill owed by the low-income household, the utility is in effect diverting scarce household resources from the payment of current monthly bills to other expenses. If indeed this is the case, and if indeed the household has a limited amount of money that can be devoted to its utility bill, the presence of an \$60 fee for a disconnect/reconnect expense can only have the impact of putting future payments toward current monthly bills at greater risk.¹³¹

In sum, generally, when a low-income household has its utility service disconnected for nonpayment, the customer remains off the system for a mere matter of hours. As a result, it is not at all clear that the disconnection of service in these instances presents a cost-effective collection device. In those instances where the costs of the disconnection and reconnection of service are not recouped from the household, the utility may well have spent more on the process of collection than the outstanding arrears. Even where the costs of the collection process are passed through to the disconnected household, however, there tends to be a diversion of household resources away from the payment of current bills and to the payment of collection costs.

III. THE ECONOMICS OF REMOVING NONPAYING CUSTOMERS FROM SYSTEM.

¹³¹This same analysis is applicable to the imposition of a late payment fee.

Removing a nonpaying customer from the utility system does not necessarily result in the least-cost provision of service to all remaining ratepayers. Whenever a customer's service is disconnected, two things happen. First, the company avoids the variable cost of delivering that unit of energy to the household.¹³²⁾ Second, the company forgoes the revenue that *would have been* collected from the household but for the disconnection of service. To the extent that the revenue would have exceeded the variable cost of delivering the energy (whether it be gas or electricity), other ratepayers lose a contribution toward the payment of the fixed charges of the company. In this instance, the disconnection of service leaves remaining, paying, customers worse off than had the disconnection not occurred.

In general, there is an advantage to all ratepayers from keeping as many households on the system as possible. So long as households pay the variable costs of delivering the energy they consume, other ratepayers are no worse off.¹³³⁾ To the extent that households pay anything beyond the variable cost of the energy they consume, they are making a contribution toward the fixed costs of the system and all ratepayers are better off than they would have been had those households been disconnected. It could thus well be cost-effective to the utility, and to all remaining ratepayers, to provide payment-troubled customers with an incentive to make some partial payments (even if full payment cannot be made) by deciding

¹³²⁾ For an excellent discussion of variable costs, see, generally, Bonbright, *Principles of Public Utility Rates*, at 423 - 24 (2d ed. 1988).

¹³³⁾ See, generally, Kahn, *The Economics of Regulation*, Vol. I, at 140 - 41 (1970).

not to disconnect so long as the customers continue to pay more than the variable cost of providing service.¹³⁴⁾

Unfortunately, many times people react to nonpayment by assuming that disconnection of service to the nonpayers results in least-cost service. That assumption, however, is not a priori correct. Illustration B sets out a hypothetical that reveals the fallacy in this assumption. This Illustration assumes the simplest system possible, a system with two natural gas ratepayers identical in all respects except that Ratepayer 1 (RP1) is about

**THE RATE IMPLICATIONS OF NOT DISCONNECTING
NON-PAYING CUSTOMERS**

<u>FULL BILL</u>	<u>VAR BILL</u>	<u>REDUCED BILL</u>	<u>FULL CONTRIBUTIO N</u>	<u>REDUCED CONTRI- BUTION</u>	<u>DIFF- ERENCE</u>
\$840	\$504	\$552	\$336	\$288	\$48

Ratepayer 1:Ratepayer who is a non-paying customer.

Ratepayer 2:Ratepayer who pays fully and on time.

¹³⁴⁾ An increasing number of utilities are finding that a simpler way to obtain this same result is to provide a reduced rate. In this way, the contribution from the low-income household is obtained while at the same time avoiding all of the futile collection expenses. See, National Consumer Law Center, *The Energy Assurance Program: A New Cost-Effective Collection Technique*, a presentation to the National Association of State Utility Consumer Advocates (NASUCA) (June 1990).

to be disconnected and Ratepayer 2 (RP2) is not. Average annual consumption is 120 MCF. The variable price is \$0.42 per CCF (\$504 for 1200 CCF) and the retail price is \$0.70 per CCF (\$840 for 1200 CCF). Ratepayer 1 is facing an involuntary disconnection of service due to nonpayment. In this hypothetical, the utility agrees not to disconnect RP1 so long as that ratepayer pays an amount equal to \$0.46 per CCF (\$552 for 1200 CCF) toward her natural gas bill.

What Illustration B shows is that there are two ways to look at the operation of this utility collection policy. The first is to look at what RP1 is paying under the reduced bill vis a vis what that ratepayer would have paid if she paid her full bill. Viewed from this perspective, there is a \$288 shortfall and Ratepayer 2 is \$288 "worse off." The RP2 bill under the utility policy is \$1,128 (\$840 full bill + \$288 shortfall from Ratepayer 1).

The second way to look at the utility's policy is to recognize that if RP1 was removed from the system permanently as a nonpayer, RP2 would have to pay the entire amount of what had been RP1's contribution toward fixed costs. In this hypothetical, if Ratepayer 1 is disconnected for

nonpayment, Ratepayer 2's bill would be \$1,176 (\$840 full bill + \$336 lost contribution).^{135\}

Clearly, therefore, the disconnection of service to Ratepayer 1 is not without a very real monetary cost to Ratepayer 2. Indeed, in this instance, Ratepayer 2 is \$48 better off by having Ratepayer 1 remain on the system, paying less than the full bill, than by having Ratepayer 1 disconnected.

If low-income customers cannot afford to pay their current bill in full, the utility should accept something less than full payment. If such customers pay a sufficient portion of their future bills so as to cover their variable costs plus make some contribution, disconnection should not occur. In this instance, remaining ratepayers cannot lose. If the household on this system does not make regular payments, the household loses the right to be free from disconnection. If the household *does* make payments, remaining ratepayers have obtained some contribution toward the fixed costs of the system, which fixed costs would otherwise have been payable in toto by the remaining ratepayers.

For this approach to work in the hypothetical, the utility would need to structure the payment obligations to recover the variable costs of the system plus

^{135\}One might question why there is a lost contribution at all since RP1 had not been making payments in any event. There are two responses. First, all that this points out is that lost contributions do not arise solely from disconnections. From the perspective of determining whether there is a contribution or not, there is no difference between nonpayment and disconnection. In neither case is there a contribution toward the fixed costs. From a rate perspective, disconnection simply "formalizes" the lost contribution that had occurred in any event. Second, the whole point of accepting a reduced payment is to make energy bills more affordable. If bills are made affordable, payments can be made and shutoffs will be avoided.

make some contribution. In essence, this proposal is no different than the treatment that many states accord their large natural gas and telecommunications customers who have the ability and inclination to engage in bypass. In effect, these residential customers who, because of their inability to pay their utility bill, would be disconnected from the utility system and forced to move to alternative sources of home energy, would be treated as opportunity sales by the utility.

If the program is structured so that it will recover the variable costs of delivering natural gas to program participants, all other ratepayers on the system are no worse off because of the program. To the extent that the program can be structured so as to make some contributions toward fixed costs, other ratepayers benefit from keeping those customers on the system.¹³⁶

¹³⁶See, note Error! Bookmark not defined., *infra*, and accompanying text.

SUMMARY

In sum, the ultimate goal of any utility activity is to provide reasonably adequate service to its ratepayers at least-cost. This goal is enforced through the dictates of such seminal cases as *Hope* and *Bluefield* that utility management be "efficient and economical."

The requirement that utility activity contribute toward the provision of least-cost service pervades every aspect of a utility's business. It governs whether a utility should provide coal, oil or nuclear capacity; whether a utility should pursue new central station capacity, cogeneration or conservation; whether a utility should self-insure or purchase insurance policies; whether a utility should maintain compensating bank balances or pay bank fees; whether a utility should raise debt or equity capital.

The requirement of least-cost service, too, should govern utility collection activities. The disconnection of service (and steps leading up to it), in other words, should be viewed as one mechanism, but by no means the exclusive mechanism, to collect a customer's bill. Expenses devoted to the collection of arrears should be measured by the same least-cost tests as any other utility expense.

This policy becomes important when one recognizes that the disconnection of service is one, but only one, of an entire menu of collection devices. Given the menu of available collection options, it cannot be assumed that the disconnection

of service ipso facto results in least-cost service. Accordingly, regulators should insist that the means of collection which results in least-cost service be utilized. If the disconnection of utility service is *not* the collection means which results in least-cost service to remaining ratepayers, it should not be relied upon.

PART II: SECURITY DEPOSITS

Given the problems that low-income households face today with high energy bills¹³⁷⁾ as well as with high telephone bills,¹³⁸⁾ it is vitally important for policymakers to ensure that undue burdens are not placed on already overburdened households. Little question exists but that low-income households simply do not have sufficient funds to pay their utility bills.¹³⁹⁾ This lack of funds carries over to the payment of deposits.

An onerous and unnecessary deposit jeopardizes continuing energy service to a low-income household.¹⁴⁰⁾ The loss of telephone service because of unpayable deposit demands¹⁴¹⁾ can be an equally threatening event.¹⁴²⁾

¹³⁷⁾National Consumer Law Center, *Energy and the Poor: The Forgotten Crisis* (1989).

¹³⁸⁾National Consumer Law Center, *Customer Service Regulations for Residential Telephone Customers in the Post-Divestiture Era: A Study of Michigan Bell Telephone Company* (1989).

¹³⁹⁾See, National Consumer Law Center, *Losing the Fight in Utah: Low-Income Households and Rising Energy Costs* (January 1989) (Utah LIHEAP recipients have average income of \$6,400 to meet minimum needs budget in that state of \$9,708). See also, National Consumer Law Center, *Meeting the Energy Needs of Low-Income Pennsylvanians Through Percentage of Income Plans* (1986) (two person Pennsylvania household at 100 percent of the federal Poverty Level has income of \$7,050 to meet minimum needs budget of \$8,445).

¹⁴⁰⁾See, e.g., *Memphis Light, Gas and Water Division v. Craft*, 436 U.S. 1, 18 (1978); see also, *Palmer v. Columbia Gas Co. of Ohio*, 342 F.Supp. 241, 244 (N.D. Ohio 1972) (citations omitted); see also, *Stanford v. Gas Service Company*, 346 F.Supp. 717, 721 (D.Kan. 1972). An excellent canvass of cases is found in *Montalvo v. Consolidated Edison Company of New York*, 110 Misc. 2d 24, 441 N.Y.S.2d 768, 776 (N.Y. 1981).

¹⁴¹⁾A 1987 Michigan study found that 60 percent of those households who lacked telephone service cited unaffordable deposits as a primary reason. See, Michigan Citizens Lobby, "Low Income Households in the Post-Divestiture Era: A Study of Telephone Subscribership and Use in Michigan" (October 1986).

¹⁴²⁾See, e.g., National Consumer Law Center, *An Evaluation of Low-Income Utility Protections in Maine: Winter Requests for Disconnect Permission* (1988). (80 percent of households who were disconnected during the winter months lacked telephone service.)

In addition to the serious impacts on consumers, onerous and unnecessary deposit demands are bad business from the perspective of the utility and its ratepayers as well. This recognition is based on the two fundamental principles that:

oThe sole purpose of a deposit is to minimize the possible money loss to the utility due to nonpayment of bills.

oThe collection of deposits must lead to the provision of least-cost service to ratepayers as a whole.

Unfortunately, despite their universal acceptance, these principles are often ignored when public policy considering deposits is considered. The purpose of this evaluation is to outline an analytic framework within which utility demands for deposits are to be considered. If unnecessary deposits can be eliminated, benefits will redound both to the utility and to the low-income population.

This analysis involves three steps. First, the function which a deposit is to serve must be defined with precision. Second, the effectiveness in

accomplishing that function must be measured. Finally, the costs of accomplishing that function must be determined.

I. THE FUNCTION OF A DEPOSIT.

The function of cash deposits required of utility customers is generally defined within the context of bad debt.¹⁴³⁾ That context, however, needs some detailed exploration. Bad debt is an expense to the utility just like any other expense. As such, it is an expense that a utility can and should seek to reduce where possible. The reduction of bad debt, however, is not an end unto itself. Also like any other expense, a utility is not justified in spending more on the means to reduce bad debt expense than the savings that are generated through such an effort.¹⁴⁴⁾ The goal of a utility, in other words, is to minimize total expenses to the ratepayers, not simply to minimize bad debt expenses.

The collection of a cash deposit is one means to gain protection against the potential loss of revenue through bad debt. The deposit serves the function of security to protect against the risk of default. As an expense avoidance mechanism, however, a utility's deposit scheme must be subjected to an economic analysis just like a self-insurance plan which might be pursued in lieu of the purchase of insurance policies, just like backing out oil-fired capacity with coal, just

¹⁴³⁾ For purposes of this analysis, "bad debt" will be deemed to be coterminous with uncollectibles.

¹⁴⁴⁾ See, e.g., Synergic Resources Corporation, *Evaluation of the Cost-Effectiveness of a Bad Debt Conservation Program: Final Report* (September 1988); see also, Colton and Sheehan, "A New Basis for Conservation Programs for the Poor: Expanding the Concept of 'Avoided Costs'," 21 *Clearinghouse Review* 135 (June 1987).

like maintaining compensating bank balances in lieu of paying bank fees, and the like. Again, the ultimate goal is the provision of least-cost service.

II. THE COSTS OF A DEPOSIT.

To require deposits from customers is not without cost to remaining ratepayers. The costs are of two types: (1) out-of-pocket expenses; and (2) foregone revenues. Each must be examined in turn.

The collection of deposits involves out-of-pocket expenses to the utility. When a utility collects a deposit, it must undertake to do several things. It must obtain credit information from some source. Frequently that source will be a "consumer reporting agency."^{45\} In such instances, the utility must take particular actions to ensure compliance with the terms of the federal Fair Credit Reporting Act,^{46\} a statute that imposes certain obligations on the users, as well as the distributors, of "consumer credit reports."^{47\}

Second, the utility must service the deposits. In particular, it must keep track of the deposits in such a manner that they can and will be refunded at the

^{45\}"Credit reporting agencies" are governed by the federal Fair Credit Reporting Act (FCRA) whenever they pass on credit and collection histories to third parties. See, 15 U.S.C.A. §1681 (1982). A "credit reporting agency" is defined by the FCRA as any person who "for monetary fees* * *regularly engages in* * *the practice of assembling or evaluating consumer credit information or other information on consumers for the purpose of furnishing consumer reports to third parties* * *." 15 U.S.C.A., §1681a(f) (1982).

^{46\} 5 U.S.C.A. §§1681 et seq. (1982).

^{47\} See, generally, National Consumer Law Center, *Fair Credit Reporting Act*, Ch. 2 & 3 (2d ed. 1988 and Supp.).

appropriate times. Finally, the utility must pay interest on the deposit. That interest is usually set at a rate that compensates the customer for the loss of the time use of the amount of the deposit.

In addition, demanding a deposit from a customer who cannot afford to pay it may well cost the utility in foregone revenue.¹⁴⁸⁾ In the event a low-income customer cannot afford to pay a deposit, that customer is denied service. Whenever a customer's service is denied, two things happen. First, the company avoids the variable cost of delivering that unit of energy to the household. Second, the company forgoes the revenue that *would have been* collected from the household but for the denial of service. To the extent that the revenue would have exceeded the variable cost of delivering the energy (whether it be gas or electricity), other ratepayers lose a contribution toward the payment of the fixed charges of the

¹⁴⁸⁾ See, notes Error! Bookmark not defined. - Error! Bookmark not defined., *supra*, and accompanying text.

company. In this instance, the denial of service leaves remaining, paying, customers worse off than had the disconnection not occurred.^{149\}

III. THE SYSTEMWIDE SAVINGS FROM DEPOSITS.

A utility must justify its collection of deposits in light of the costs inherent in obtaining and maintaining them. A utility, in other words, must demonstrate that the collection and maintenance of deposits reduces its uncollectible accounts in an amount at least equal to all costs associated with the collection and maintenance of such deposits, including the payment of reasonable interest.

Without such information, remaining customers may well be paying for a myth. That myth is that the collection of deposits results in a reduction of bad debt and *thus the reduction of overall utility expenses*. Even if the premise is true (that deposits help reduce bad debt), the conclusion does not necessarily follow.

Determining the cost-effectiveness of deposits involves an examination of two different issues: (1) whether a deposit should be required; and (2) if so, what level the deposit should be. Each of these aspects is examined below.

A. WHETHER A DEPOSIT SHOULD BE REQUIRED.

Aside from basic fairness, for deposits to be cost-effective from a utility's business perspective, they must result in a reduction in uncollectibles at least

^{149\}See, pages 22 - 25, *supra*.

equal to the cost of obtaining and servicing the deposits. In order for this reduction to occur, the customers from whom deposits are demanded must represent a risk of loss to the utility.^{150\} If, in other words, the customer does not represent a potential situation where the utility will experience a permanent loss of arrears, any deposit collected from that customer --whatever the size-- has no relation to the risk of loss due to uncollectibles.^{151\} In that instance, to collect a deposit will impose only costs on the system and result in no benefits to offset those costs.

Two situations exist in which utilities often collect unjustified deposits. First, the automatic imposition of a deposit after a disconnection for nonpayment is not ipso facto justifiable. Second, the imposition of a deposit based on a bad credit history reported for non-utility transactions is not justifiable.

The first way in which utilities oversecure themselves is to automatically seek deposits after a disconnection for nonpayment. To automatically seek deposits in such circumstances may appear to be facially attractive at some cursory level of analysis. To demand deposits in such instances, however, in fact, does not a priori represent a rational means of protecting against the risk of bad

^{150\}It should be remembered that the "risk of loss" is an elliptical term. The ellipsis relates to the amount of the loss entailed by various types, values and lengths of time involved.

^{151\}This risk, it should be noted, is only a significant problem to the extent that it is not "set right" after the fact. A default on payments is not, in other words, necessarily a risk of permanent loss of the entire remaining balance of payments. Either a complete, albeit late, payment or a partial payment reduces the risk of loss. A utility's deposit must be adequate, but no more than adequate, to offset the losses on that fraction of bills which are involved in default and on which losses are accrued.

debt.^{152\} The underlying question is whether and to what extent the disconnection of service is an indicator of the risk of loss due to bad debt in the future.

A disconnection of service, standing alone, provides no information as to the risk of revenue loss to the utility. Indeed, most data supports the opposite conclusion: that the disconnection of service tends to successfully coerce payment from households in arrears, thus *minimizing* the risk of loss due to bad debt from those households. Most households, for example, are reconnected to the system. Moreover, most households pay some substantial part (though not all) of their arrears before being reconnected to the system. For those households, while the arrears may not be entirely paid prior to reconnection, the utility enters into deferred payment agreements whereby the arrears underlying the disconnection are retired over time.^{153\} As can be seen, therefore, the mere disconnection of service, standing alone, does not represent a risk of loss due to bad debt.

In deciding upon whether a deposit is justified, the risk of late payment should be distinguished from the risk of permanent loss.^{154\} The costs associated

^{152\}Deposits can be instructively compared to other consumer transactions in this regard. Traditionally, the law abhors penalty clauses. An amount that is to be collected, in response to a contract default, that bears no relation to the actual or potential damages, is held to be a "penalty." The deposit, under these conditions, must bear a demonstrated reasonable estimate of the actual damages. See, notes Error! Bookmark not defined. - Error! Bookmark not defined., *infra*, and accompanying text.

^{153\}In most states, to be reconnected, a household must make a downpayment toward the arrears equal to a designated portion of the outstanding bill and enter into a payment plan for the remainder. The existence of an outstanding bill at the time of reconnection, therefore, does not necessarily represent a risk of permanent loss. Indeed, the fact that such an arrears is made subject to a deferred payment agreement should reduce the risk of permanent loss.

^{154\}For example, customers who pay late because of a mismatch in timing between receipt of income and receipt of a utility bill, as

with late payment cannot be addressed through a deposit. A deposit is to protect against loss due to bad debt. The disconnection of service, standing alone, is no indication of the risk of permanent loss to the utility through bad debt.^{155\}

The risk of permanent loss is from households who permanently leave the system after a disconnection of service. It is the arrears of those households which end up in bad debt, not the arrears of households who a utility successfully places on a deferred payment plan. Before a utility can conclude that the disconnection of service ipso facto is an indicator of the risk of loss to the utility from bad debt, the company must show that households which are disconnected remain disconnected and do not pay the arrears underlying the disconnection. That showing cannot likely be made.

A second failing in the determination of whether deposits should be sought is the use of third-party, non-utility, credit information. Utilities who use third-party supplied information as a basis for deposit demands may face particular problems with justifying their deposits on cost-effectiveness grounds. Third party information is used by some companies to determine whether or not new applicants for service are "creditworthy." Rather than directly denying service, a utility simply requires a household deemed to be non-creditworthy to post a cash deposit.^{156\}

(. . continued)

well as customers who pay late as a money management technique, do not represent a risk of permanent loss to the utility.

^{155\}See, Table A, page 11, supra, and accompanying text.

^{156\}In this fashion, a utility may in effect deny service even though such denial does not occur "directly." Making a deposit a

The use of third-party supplied credit information as a basis for making utility deposit decisions constitutes a problem when the third party information is not itself comprised of utility payment histories. Several reasons support this conclusions. First, substantial research has found that consumers tend to pay their utility bills before paying nearly any other outstanding credit (other than rent or mortgage obligations).^{157\} Second, it has been found that low income consumers frequently acquire poor credit ratings by refusing to complete payments on installment purchases of defective or shoddy merchandise. Finally, a person who has never borrowed from a reputable institutional lender, or maintained a charge account at a large store, may have difficulty establishing that his credit is good. As a result, information from a credit reporting agency that indicates a lack of creditworthiness based on non-utility transactions does not provide useful information as to a customer's likelihood of paying a home utility bill. As a result, information from a credit reporting agency that indicates a lack of creditworthiness based on non-utility transactions does not provide useful information as to a customer's likelihood of paying a home utility bill.

To collect a utility deposit from a household that does not pay its Sears bill imposes only costs, and gains no benefits, for the utility system.^{158\} Unless

(. . continued)

prerequisite to obtaining service, when the deposit is beyond the financial ability of the household to pay, nevertheless constitutes a denial of service, however indirectly.

^{157\}See, e.g., Unseld, *The Impact of Rising Energy Costs on the Elderly Poor in New York State*, at 36 (1978), citing, New York State Office for the Aging, *Fuel and Energy Problems Faced by Older New Yorkers* (April 1977).

^{158\}This can be analogized to an insurance policy for which the cost is vastly out of proportion to the risk insured against.

nonpayment of a non-utility bill is an indicator of risk to the utility --a conclusion disproved by existing literature-- collecting a deposit provides security against a non-existent risk, to the financial detriment of the remaining ratepayers who must pay the cost of maintaining the deposit.

Aside from the business aspects of the issue, to forbid the use of non-utility credit experience is consistent with black letter utility doctrine as well. The denial of service for non-utility related reasons is a violation of long-standing utility regulatory principles proscribing the denial of service for "collateral" matters. It matters not to other ratepayers whether a household fails to pay its Sears bill, for example, if that household *will* pay its utility bill. Given the fact that nonpayment of non-utility bills has little relevance to whether utility bills will be paid, basic fairness requires that third-party credit information on non-utility transactions not serve as a basis for deposit demands.

B. WHAT LEVEL SHOULD A DEPOSIT BE.

The best way to ensure that deposits are cost-justified on a systemwide basis is to ensure that they are cost-justified on an individual basis as well. In addition to needing to justify seeking a deposit with which to begin, the utility needs to justify the size of a deposit. The size of a deposit in individual cases relates to whether a utility is oversecured. It is necessary to determine whether the amount of security bears any relationship to the risk of loss to which the utility is

(. . .continued)

Compare, Re. Baltimore Gas and Electric Co., 71 Md. PSC 249 (1980).

subjected.^{159\}

Conceptually, the risk of loss to a utility is the same as the risk of loss to any other creditor serving debtors who may default. The risk involves all of the different possible types and combinations of default: large, small, partial, total, temporary and permanent. The probability that each will occur, and the loss were each to occur, should be factored into the analysis. To accomplish this, each individual probability is multiplied times the amount of the loss if that particular loss occurs. Utility deposit practices often do not differentiate between the different types of risks that consumers may represent to the system. As a result, utilities tend to oversecure themselves in a number of ways, to the substantial financial detriment of their remaining ratepayers.

One means by which utilities oversecure themselves against the risk of loss by collecting an excessively large deposit is to impose maximum permissible deposits automatically. Some Public Utility Commissions, for example, permit a utility to collect a deposit equal to no more than twice the average monthly bill for a

^{159\}In the insurance area, this issue often arises in the context of credit life and credit casualty insurance. See, National Consumer Law Center, *Usury and Consumer Credit Regulation*, at §7.1.2.2 (1987 and Supp.). "That credit insurance is often overpriced can be measured by reviewing what is called the 'loss-ratio' of credit-insurers. A loss-ratio is the percentage of each premium dollar which is paid out to insured in claims benefits. In other words, if an insurer has a 35% loss ratio, then 35 percent of each premium dollar is paid out to insureds for claims.* * *Insurance with a 'high' loss-ratio means that most of the premium dollar is spent for the benefit of insureds, and that the insurance may be a good buy for consumers." With deposits, the utility is in effect purchasing an insurance policy against loss due to bad debt. Just like other insurance, if there is a high loss-ratio, then the utility is making a good buy; the expenses of obtaining and maintaining the deposits are "worth it." In contrast, if there is a low loss ratio, then the utility is in effect purchasing an insurance policy against a non-existent, or overstated, risk. To the extent that a utility has a low "loss-ratio" with its deposits, it is imposing costs on its customers with no corresponding benefit.

customer.¹⁶⁰⁾ Work undertaken by NCLC in Pennsylvania, Michigan and elsewhere, however, has found that utilities often automatically set deposits at twice the average bill. To automatically set the deposit amount at the allowed maximum is most likely to over-secure against losses since it is probable that households do not frequently represent the maximum risk.

To automatically set a customer's deposit at the maximum permissible level is an abuse of discretion as well. A maximum deposit amount set by PUC regulation implies the use of discretion to set a deposit "up to, but not to exceed" the designated amount. The cap implies, in other words, that deposits are generally to be somewhere below the maximum. To illustrate this point, one can instructively compare state utility commission regulations concerning the offer of deferred payment plans for arrears. Many commissions require that utilities offer payment plans of at least 12 months in length. If, given such a regulation, a utility were to offer payment plans of only 12 months and no more, the utility action would be in violation of the "at least" language. The deposit issue is the converse of the same issue. If a Commission sets a maximum deposit, it should seek to ensure that no utility is routinely requiring the maximum and no less.

A second means by which a utility tends to oversecure itself is by basing its deposit demand on the largest monthly bill (or some multiplier thereof). This policy assumes that out of twelve monthly bills, the bill most likely to remain

¹⁶⁰⁾ Similarly, some state Commissions permit the collection of a deposit equal to no more than twice the maximum monthly bill. The important language is the "no more than."

permanently unpaid is the largest. No empirical basis has been proffered for this assumption. Indeed, the fact that a permanently unpaid bill might be the highest bill in any twelve month period would happen only by happenchance.

The policy of collecting based on the largest bill appears to be based on the notion that the greater the security the better.^{161\} Collecting greater security creates no benefits, however, and instead creates only uncompensated costs, when the increase is not matched to an increased risk due to bad debt. For a deposit to be cost-effective, it must reduce bad debt expense by an amount at least equal to the costs of obtaining and maintaining the deposit. If the risk of loss is not the highest monthly bill, then such a match does not occur.

A third means by which utilities oversecure themselves is by holding deposits for longer than is necessary to protect themselves against bad debt. One rule that utilities often adopt is that deposits will be refunded upon a customer establishing "good credit standing" with the utility. "Good credit standing" is then defined as twelve consecutive months without receipt of a disconnect notice. The question as to cost-effectiveness thus resolves itself into whether receipt of a disconnect notice is any indicator of the risk of permanent loss of revenue to the utility due to bad debt.

^{161\}It is not appropriate to compare the typical secured transaction in this manner. Unlike a typical secured transaction, where the collateral remains in the possession of the debtor, a utility deposit is taken by the creditor. The result is that for the utility deposit, there is a maintenance cost. Ever since the early common law days, utilities have been required to pay interest on deposits. See, e.g., *Union Light Heat and Power Co. v. Mulligan*, 197 S.W. 1081 (1917).

In the one instance where this issue has been directly addressed, the National Consumer Law Center found no connection between the receipt of shutoff notices and the actual disconnection of service (let alone between the receipt of a shutoff notice and the permanent loss of revenue due to bad debt). Consistently fewer than ten percent of all disconnect notices result in an actual disconnection of service for Michigan Bell Telephone, NCLC found. The relationship between disconnect notices and disconnections was studied over a four and one-half year period. NCLC concluded that "to define 'unsatisfactory payment history' through use of a mechanism which fails to measure what it purports to measure in more than 90 percent of the cases is irrational at best."¹⁶²

The association between disconnect notices and bad debt is even more tenuous than the association between disconnect notices and the actual disconnection of service. NCLC's Michigan Bell report found that "a minuscule portion of accounts which become delinquent at any given time will go on to also become uncollectible." Indeed, NCLC found that over the four and one-half year period of the study, the number of disconnect notices exceed(ed) the number of uncollectible accounts by 600 to 700 percent per quarter.

It is important to remember that deposits are to protect the utility against the permanent loss of revenue due to bad debt. They are *not* designed to

¹⁶²In addition, even of that ten percent of households which are disconnected, it is important to remember that most are quickly reconnected, without risk of permanent loss of revenue to the utility. See, National Consumer Law Center, *Customer Service Regulations for Residential Telephone Customers in the Post-Divestiture Era: A Study of Michigan Bell Telephone Company* (1989).

compensate the utility for the carrying costs caused by late payments. That is the function of a late payment charge. Neither are deposits to be held by utilities as punishment for poor payment practices on the part of a utility's customers. Again, the function of a deposit is to protect the utility against the possible loss of revenue due to bad debt. Accordingly, given the information discussed above, if a utility refuses to refund a deposit because of the receipt of shutoff notices, without more, the utility is likely incurring the expense of holding a deposit without attaining any of the advantages which go to offset that expense. The utility, in other words, is forcing its ratepayers to pay for an unnecessary and uneconomic insurance policy against a risk that has not been shown to exist.

One excellent example of this mismatch involves two particularly vulnerable populations: the elderly and the poor. These households often subsist month-to-month on public benefit checks. This might involve AFDC, SSI, Social Security and the like. For many, there is a mismatch between the receipt of a utility bill (when the utility engages in cycle billing) and the receipt of the public assistance check. If a billing due date is the 15th of each month, notwithstanding the fact that the public assistance is not received until the 25th, it is likely that there will be continuing "late" payments. In this instance, the household --who may particularly miss the cash devoted to the deposit-- will receive no refund despite the fact that the late payment each month represents no indication of risk due to bad debt at all.

In sum, from a least-cost perspective, a utility should not be permitted to

systematically oversecure itself against loss. Even aside from the impacts on its applicants, to the extent that a utility pays an interest expense with no hope of a corresponding reduction in bad debt (because its security exceeds its risk of loss), the utility is acting to the financial detriment of its remaining ratepayers. By oversecuring against loss, the utility company is in effect buying an insurance policy that exceeds the value of the loss to be guarded against.

IV. ALTERNATIVES TO DEPOSITS

Given the costs of maintaining deposits, it is in the best financial interests of utilities to seek non-cash alternatives to the collection of deposits. The primary alternative is the solicitation of third-party sureties. A surety is a third-party agreement to take responsibility for a household's bill up to some designated limit. It does not involve the transfer of cash. It is instead an agreement (or contract) to pay.

Sureties: Sureties provide an excellent alternative to the collection of cash deposits. By definition, a surety would offer an alternative to low-income households who might not otherwise have access to sufficient funds to provide an up-front cash deposit. Moreover, since the utility does not hold customer cash in a surety situation, there is no need to provide compensation for the time use of the customer's money. A large part of the expense with maintaining security against loss is thus avoided.

Several utility actions should be encouraged, perhaps even required, in an

effort to substitute non-cash forms of security for the cash deposit.

oFirst, utilities should be required to *offer* to accept surety agreements in lieu of a cash deposit whenever a need for security is found to exist. Mere acceptance of a surety (when offered at the customer's initiative) places the utility in too passive of a role. If a household could provide a surety, but is not aware of the surety alternative, the utility is incurring unnecessary expenses to service a cash deposit to the financial detriment of its remaining ratepayers.

oSecond, irrational limitations on surety arrangements should be eliminated. No reason is apparent, for example, why a surety should be a customer of the same utility.^{163\} A family member, for example, who lives in a neighboring town outside the utility service territory may be an absolutely adequate surety. Neither is there reason why a surety should be an individual (as opposed to an institution such as a neighborhood association or church). There is no reason why the qualifications of a surety for a utility bill should be any more stringent than the qualifications of a surety for any other type of consumer credit.^{164\}

From a straight cost analysis, utilities who determine a need for security in any given instance are well served by seeking out and obtaining non-cash security. The surety situation provides the benefits of security without the expenses of

^{163\}The general rule is that a utility may not disconnect service for nonpayment on a surety agreement. Therefore, there is no collection advantage to having the surety be a customer of the utility.

^{164\}For example, how many banks require that sureties be a customer of the same bank?

servicing a cash deposit.

Equal payment plans: Households placed on equal payment plans may represent a lesser risk to utilities. As a result, deposits for these households can be either reduced or waived. Equal payment plans (or budget billing plans or the like) reduce risks in two ways. First, equal payment plans often provide prepayment of high winter bills. If plans are structured so as to start payments in the warm weather months, households build up a credit when their equal monthly payments exceed their actual usage. In this fashion, the risk of permanent loss due to nonpayment is reduced for any given high winter bill. Second, equal payment plans facilitate household budgeting. A study of the Rhode Island Percentage of Income Payment Plan (PIPP)¹⁶⁵⁾ by the University of Rhode Island, for example, found that the aspect of the program that clients liked most --outside of more affordable payments-- was the fact that they knew far in advance exactly what payment they would be required to make every month.¹⁶⁶⁾

In the event that a household may not be able to afford a deposit, a utility should offer that household an equal monthly payment plan as a deposit alternative. By reducing the risk of nonpayment, the deposit could possibly be cost-effectively reduced or waived.

¹⁶⁵⁾The Rhode Island PIPP involves the distribution of federal LIHEAP dollars. Under the PIPP, a household is required to pay a reasonable percentage of its income toward its home energy bills. LIHEAP benefits are then distributed so as to pay the difference between the household payment and the actual bill. For a description of the PIPP, see, National Consumer Law Center, *Evaluation of Warwick (Rhode Island) Percentage of Income Payment Plan (PIPP) Demonstration Project* (1988).

¹⁶⁶⁾Barnes, "A Study of Client Satisfaction: The Percentage of Income Payment Plan" (December 1987).

LIHEAP recipients: The cost-effectiveness of deposits for households receiving LIHEAP assistance can well be questioned. LIHEAP provides cash grants to apply toward the payment of winter home heating bills. This assistance reduces the risk of permanent nonpayment to the utility in two ways. First, the receipt of public assistance makes it more likely that the household will pay its winter heating bill in a timely and complete fashion. Second, even if the bill is not completely paid, the risk of permanent loss is reduced. Through LIHEAP, the winter heating bill is by definition offset by revenue equal to the amount of the LIHEAP grant. If a utility has a risk of permanent loss, therefore, its risk has been reduced by half or more. As a result, a utility should reduce or waive deposits for households who receive LIHEAP benefits.

V. SOME UNIQUE TELEPHONE ISSUES.

Because of its state of flux, the telephone industry in particular poses unique deposit issues. This industry represents a situation where one utility collects the bills for multiple companies. Moreover, it represents an industry where competitive and non-competitive services are provided by the same utility. The implications of these observations are discussed in detail below.

With telephone customers in particular, even aside from cost-effectiveness considerations, deposits are an important issue. Work done throughout the country has found that households not having telephone service cite the unaffordability of deposits as a major contributing reason. Moreover, the lack of

telephone service can ramify throughout the household's social and economic affairs. The National Consumer Law Center, for example, found that the lack of telephone service impeded the ability to maintain home heating service¹⁶⁷⁾ and to secure employment.¹⁶⁸⁾

The state of telephone deposits is in substantial flux. After the break-up of the Bell System, AT&T no longer had the ability to bill and collect for the long-distance services provided to its customers.¹⁶⁹⁾ As a result, local exchange companies began to sell a new "service" to AT&T. This service, known as Billing and Collection Service, is composed of several parts. The "billing" component largely involves measuring the units of service provided by AT&T to the long-distance consumer¹⁷⁰⁾ and rendering a periodic accounting to the customer along with an invoice for the amount due. The "collection" component is a different service. This service involves the local phone company accepting payments for long-distance bills, crediting customer accounts, and undertaking collection activities for arrears, including sending reminder notices, collecting deposits, and disconnecting service. A third, again distinct, service is "inquiry." This service involves making the local Bell Company responsible for answering questions and resolving disputes regarding any bill for AT&T service.

¹⁶⁷⁾See, note Error! Bookmark not defined., *supra*, and accompanying text.

¹⁶⁸⁾See, note Error! Bookmark not defined., *supra*, and accompanying text.

¹⁶⁹⁾See, National Consumer Law Center, *Denial of Local Telephone Service for Nonpayment of Toll Bills: A Review and Assessment of Regulatory Litigation*, at 21 - 22 (1989).

¹⁷⁰⁾This would, for example, measure such factors as number of calls, length of call, distance of call, and the time of day of calls.

Local exchange companies receive considerable compensation through the sale of these Billing and Collection Services. Estimates of annual payments to the Bell Companies range from \$2.0 million in West Virginia, to \$6.0 million in Maine, to \$426 million in New York. Indeed, in some states, the receipt of revenue from the sale of Billing and Collection Services is considered so important that it is used as a reason to disapprove requests to prohibit local companies from disconnecting local service for nonpayment of a long-distance bill.

In collecting long-distance bills for AT&T, the local Bell Company is not acting in its capacity as a phone company and is not providing a "telecommunications service."⁷¹ The Federal Communications Commission (FCC) recently deregulated the sale of interstate interexchange Billing and Collection Services.⁷² In considering whether to approve this deregulation, the FCC explored in detail what a Billing and Collection Service was (and was not). It found that a Billing and Collection Service was "not inherently a telecommunication service."⁷³ Instead, the FCC found that Billing and Collection Services were fundamentally "financial and administrative services"⁷⁴ and that entities such as

⁷¹As a result of the deregulation of interexchange Billing and Collection Service, the revenue attributable to the sale of that service is not part of the local phone company's regulated accounts. It does not, therefore, benefit regulated ratepayers. The same would be true for the sale of intrastate Billing and Collection Services in states where those services have been deregulated by the state PUC.

⁷²See, *In the Matter of Billing and Collection Services*, 100 F.C.C.2d 607 (1985) (Notice of Proposed Rulemaking); *In the Matter of Billing and Collection Services*, 102 F.C.C.2d 1150 (1986) (Order Adopting Rules).

⁷³*In the Matter of Detariffing of Billing and Collection Services*, 100 F.C.C.2d 607, 611 (1985).

⁷⁴*Id.*, at 609.

VISA and American Express were seeking to enter the market as well.^{175\}

According to the FCC:

the system set up by the carriers for the purpose of billing telephone calls can be used to bill other products and services as well. Thus, for example, a consumer's local telephone service could be discontinued for nonpayment of a department store bill.^{176\}

In light of these findings, it is important to determine how local telephone company actions, including the collection of deposits, are affected by this new scheme.

A. DEPOSITS FOR LONG-DISTANCE SERVICE.

Telephone deposit policies should be significantly revised in light of AT&T divestiture. The divestiture of AT&T from local telephone companies affects the "bill" toward which a company may collect a deposit. Given the fact that deposits are designed only to protect the company against the risk of loss of revenue due to bad debt, local telephone companies have no reason to collect deposits based upon services other than those services provided *by that company*. Revenue other than that associated with services provided by the local company itself are not at risk to the local company.

^{175\}*In the Matter of Billing and Collection Services*, 102 F.C.C.2d 1150, 1158 (1986);

^{176\}*Id.*, at 611.

The appropriate size of telephone deposits is affected by the AT&T divestiture. As with the energy utilities, deposits are often set equal to some multiplier of a household's consumption. Deposits equal to twice the maximum monthly bill and twice the average monthly bill are common requirements. In pre-divestiture days, the customer's combination long-distance¹⁷⁷⁾ and local charges represented the "monthly bill" for service. Due to the affiliated nature of the companies,¹⁷⁸⁾ whether the bill was for long-distance service or for local service was largely irrelevant. That situation, of course, is changed today. While the local operating company may act as a billing and collection agent for AT&T (or for other interexchange carriers), the interexchange toll charges are not the operating company's revenue and the loss of that revenue would not be a loss to that operating company.

The conclusion that revenue collected by a local operating company for interexchange carriers under a billing and collection agreement is not at risk to the local company flows from the contractual arrangement between the two utilities.¹⁷⁹⁾ The interexchange accounts are purchased at a price equal to the value of the account minus an uncollectible factor. The local company is thus protected

¹⁷⁷⁾For purposes of this evaluation, "long-distance" is defined to mean interstate and inter-LATA. To the extent that the local telephone company also provides intra-LATA service, this analysis does not apply.

¹⁷⁸⁾This assumes the local company is a Bell company.

¹⁷⁹⁾The entire business involving the sale of "billing and collection services" has been examined in depth by the Federal Communications Commission. See, *Investigation of Access and Divestiture Related Tariffs*, 97 F.C.C.2d 1082, 1283 (1984); *In the Matter of Billing and Collection Services*, 100 F.C.C.2d 607 (1985); *In the Matter of Billing and Collection Services*, 102 F.C.C.2d 1150 (1986). See also, *AT&T Communications of the Mountain States v. Public Service Commission of Wyoming*, 625 F.Supp. 1204 (D.Wyo. 1985).

against loss due to uncollectibles. Moreover, the local company is not even at risk of loss due to working capital requirements resulting from nonpayments or late payments. The accounts are purchased minus a "cash lag factor" to compensate for that impact.

The fact that accounts are purchased by the local telephone company^{180\} has no impact on the analysis. If the actual uncollectibles differ from the projected uncollectibles that serve as the basis for the discount, there is a periodic true-up whereby the local company and the interexchange carrier remedy the difference. In the New England Telephone Company contract in Rhode Island, for example, there is contract language providing that to the extent that the interexchange carrier's amounts for anticipated uncollectibles exceed its realized uncollectibles, the local telephone company will remit such amounts to the interexchange carrier. To the extent that the carrier's amounts for anticipated uncollectible are less than its realized uncollectibles, the local company will bill the carrier. In Michigan, this language is incorporated directly into the billing and collection tariff.

In short, the revenue to be collected by a local telephone operating company pursuant to a billing and collection agreement is not revenue at risk to the local company. Since the purpose of a deposit is to protect the local company against the risk of loss, deposits collected by local telephone companies should thus not be based upon the interexchange portion of a monthly bill.

^{180\}The local phone company may serve simply as a collection agency, with ownership of the accounts staying with the interexchange carrier. This generally is not the case.

This is not to say that a telephone company should not be permitted to collect security against the risk of loss of uncollectibles attributable to interexchange telephone usage. The only question is *which* company. The appropriate response is to permit each interexchange carrier to collect its own security against uncollectibles. Only in that way are the costs of obtaining and maintaining deposits appropriately matched with the benefits that arise from the deposits.

Moreover, by requiring interexchange carriers to collect their own deposits, customers gain the advantage of competition in the interexchange markets. If, for example, a customer believes AT&T's deposit requirements to be excessive, or if AT&T refuses to enter into a satisfactory payment plan for the deposit, or if the terms of the deposit are unacceptable for any conceivable reason, the customer would have the choice of seeking more favorable terms from a different interexchange carrier. In this fashion, each interexchange carrier would need to balance the need for security against the possible loss of business due to unreasonable, oppressive or otherwise unacceptable business practices.

In short, a local telephone company should be permitted to collect a deposit based upon bills rendered for service provided by that company. Given the constraints relating to matching deposits to the potential risk of revenue loss to the company, anything else is unacceptable both from a cost-effectiveness perspective and from a fairness perspective.

B. DEPOSITS FOR DEREGULATED OR DETARIFFED SERVICES.

Telephone deposit policies should be significantly revised, also, in light of the ongoing process of deregulating (or detariffing) substantial numbers of telephone services. The collection of deposits stands as a substantial obstacle to having low-income households obtain monopoly-provided local exchange service. The collection of deposits is justified, notwithstanding this result in some instances, because the utility is found to need protection against the loss due to bad debt. The underlying assumption behind this balancing of interests (i.e., the interest of the consumer in service versus the interest of the company in protection against bad debt), however, is that the rates which serve as the basis for the deposit have been reviewed by a regulatory agency and found to be "just and reasonable."

When a service is deregulated or detariffed, that underlying assumption is no longer valid. Whether the deregulated service is some type of "enhanced service" (such as call-forwarding), a service contract for inside-wiring, or inter-LATA (or interstate) service, any deposit that is to be collected for security against nonpayment should be collected apart from deposits associated with monopoly-provided local exchange service. To

provide the protection which has historically been provided, deposits collected by local telephone companies should be collected only for services offered pursuant to tariffs reviewed and approved by the state public utilities commission.^{181\}

SUMMARY

Expenses associated with the collection of deposits by a public utility should be subject to the same cost analysis as any other public utility expense. The utility must provide least-cost service to all ratepayers. In this regard, the purpose of deposits must be used as the benchmark for evaluating deposits. Given the fact that deposits are designed to protect a utility against revenue loss due to bad debt, to be cost-effective, a utility's deposit scheme must be shown to result in savings in uncollectibles at least equal to the expense of obtaining and maintaining the deposits.

This cost-effectiveness analysis should be applied to evaluating whether deposits should be demanded at all as well as to assessing the

^{181\}As with long-distance service, deposits for detariffed services could well be collected. They simply cannot be collected by the local telephone company in a manner so as to make monopoly provided local service contingent upon their payment.

appropriateness of the size of particular deposits when some type of security is necessary. If there is a systematic mismatch between the amount of cash deposits held by a utility, and the risk of loss to that utility, the utility's ratepayers are being penalized by uneconomic utility behavior.

PART III: LATE PAYMENT CHARGES

Utilities often seek to impose a late payment charge on those households who do not pay by a designated due date.¹⁸²⁾ The imposition of such a charge is generally designed to serve either of two purposes: (1) to compensate the utility for expenses incurred as a result of the late payment; or (2) to provide an incentive for households to make timely payments. Unfortunately, not only do utility late payment charges often bear little relation to these two stated purposes, but, in overcharging in cases of delinquent payments, utilities often create other adverse impacts.

The primary focus in determining the cost-effectiveness of late payment charges is to examine the components which comprise such a charge. Those components can only be defined within the context of the purposes of the charge as detailed above. Before looking at those specific purposes, however, it is necessary first to delineate the type of customers which are likely to be involved.

I. DEFINING THE LATE PAYER: WHY PEOPLE DON'T PAY THEIR UTILITY BILL ON TIME.

To prevent discrimination in the collection of late payment charges,¹⁸³⁾ a utility must recognize the differences which exist between habitual nonpayers.¹⁸⁴⁾

¹⁸²⁾The name given to these charges does not change their nature. They may be called late payment charges, forfeited discounts, a "net" bill versus a "gross" bill, a penalty and the like. Moreover, there is no conceptual difference between the promise of a lower bill for prompt payment and the threat of a higher bill for late payment.

¹⁸³⁾See, *Coffelt v. Arkansas Power and Light Company*, 451 S.W.2d 881, 882 (Ark. 1970).

¹⁸⁴⁾See, *Jones v. Kansas City Gas and Electric Co.*, 565 P.2d 597, 606 (Kan. 1977); see also, *Guste v. Council of New Orleans*, 297 So.2d 518 (La. Ct. App. 1974), rev'd, 509 So.2d 290 (1975).

Nonpayers can be categorized into three primary groups. Households who "do not" pay because they "can not" pay represent the first group. These households are typified by extremely low-incomes and high bills as a percentage of their income.^{185\} These households simply have insufficient funds to pay their bills. The 1989 NCLC study *The Forgotten Crisis*, for example, found that in 10 of the 16 states which collect and report income on LIHEAP recipients, after paying their winter home heating bills, these recipients had less than \$75 per week left for all other household expenses, including housing, food, transportation, medical care, clothing and telephone service.^{186\} In contrast, on average, low-income households spend \$67 per week on food alone, \$60 per week on housing alone (excluding energy) and \$39 per week on transportation.

Households who experience an ongoing mismatch between their utility cycle billing date and their receipt of public assistance comprise a second group of habitual late payers. A household in this group might, for example, receive a utility bill due on the 15th of each month but not receive its Social Security check

^{185\}One study in Philadelphia found that while customers below 150 percent of poverty, who heat with natural gas, spent 13.6 percent of their income on their gas bill, customers at or above 150 percent of poverty, who heat with natural gas, spent 3.1 percent. Before the Philadelphia Gas Commission, *In Re. Philadelphia Gas Works*, Direct Testimony and Exhibits of Eunice Grier, presented on behalf of the Public Advocate (June 1989). According to the Energy Information Administration of the U.S. Department of Energy, nationwide, while all households heating with natural gas spent on average six (6) percent of their income on their gas bills, households with income less than \$5,000 spent 25 percent and households with income of \$5,000 - \$10,000 spent 13 percent. Similarly, DOE reported, households at or below 100 percent of poverty, who heat with natural gas, spent 19 percent of their income on their gas bill, while households at or below 125 percent of poverty spent 16 percent. U.S. Department of Energy, Energy Information Administration, *Residential Energy Consumption Survey: Consumption and Expenditures, April 1984 through March 1985, Part I: National Data* (1987).

^{186\}National Consumer Law Center, *Energy and the Poor: The Forgotten Crisis* (May 1989).

until the 20th. In such instances, while all monthly payments are likely made, they are routinely made after the due date. The potential for this class to be sizeable is great. Households who depend on public benefit programs such as SSI, AFDC, Social Security and the like have no control over the date on which they receive their income. Moreover, they do not have sufficient funds on a month-to-month basis to be able to set aside some amount for a contingent future liability such as a utility bill in the next month. These households live check-to-check.

Households who use late payment as a money management technique comprise the third and final group of chronic late payers. In these cases, so long as the return on the funds not paid to the utility exceeds any resulting late payment charge, the customer will financially benefit from delaying payment as long as possible. These households are not likely to be low-income households. Households making this type of sophisticated

financial calculation are not likely to include those households lacking in education.^{187\}

Each of these different classes creates different issues for assessing the efficacy and reasonableness of a late payment charge. Accordingly, the implications of each will be assessed throughout the discussion below.

II. THE LATE PAYMENT CHARGE AS COMPENSATION FOR EXPENSES.

The primary purpose of a utility late payment charge is to compensate the utility for expenses associated with delinquent payments. A customer's delinquent payment of her utility bill can result in two types of expenses to the company. The utility may first experience out-of-pocket expenses. A second expense involves the carrying charge associated with delinquent payments. A utility is entitled to compensation for each.

A. COMPENSATION FOR OUT-OF-POCKET EXPENSES.

Late payments by utility customers can create out-of-pocket expenses for the utility. These expenses might include, for example, the postage associated with delivering reminder notices or shutoff notices, the costs of telephone calls to make "personal contact" prior to a shutoff, and the cost of fuel used in making a premise visit to disconnect service. In seeking compensation for out-of-pocket

^{187\} Compare, National Assessment of Educational Achievement, *Mathematics Report No. 04-MA-02* (1975).

expenses, it is as important to determine *how* to collect these expenses as it is to determine *whether* to collect them.

1. The Level of the Late Payment Charge.

A late payment charge designed to compensate a utility for out-of-pocket collection expenses should be based on the decremental cost of collection to the utility. In this fashion, the utility will be compensated for those costs, but only for those costs, that are incurred as a result of the late payment. A decremental cost is the cost that the utility would save should one late payment instead be made in a timely fashion.

Historically, most late payment charges have been based on a fully-embedded cost analysis. This type of analysis posits that if, for example, a utility staffmember spends 1/4 hour on a delinquent account, and the utility staff salary is \$4 per hour, the delinquent account has "cost" the utility \$1. The embedded cost analysis, in other words, assigns an expense to the collection function and per se ascribes the cause of that expense to the collection activity.

A decremental cost analysis approaches the issue in a somewhat different manner. The decremental analysis first calculates total utility costs **with** the late payment. The analysis next calculates total utility costs **without** the late payment. Only the difference is then assigned to the late payment charge. In this case, if the utility uses existing staff for collection, a not uncommon

occurrence, the late payment imposes no decremental cost on the utility.^{\88\}

Paying the staff salary in this instance is not "caused" by the need to engage in collection activity. As a result, the late payment charge should include only the truly decremental expenses: items such as postage, envelopes and the like.^{\89\}

Even within a decremental cost analysis, limits need be placed on the level of late payment fees. Most importantly, given the fixed dollar nature of out-of-pocket expenses, late payment charges tied to a percentage of the bill are inappropriate. A collection expense does not vary as a function of the size of the customer's arrears. A disconnect notice, for example, would cost \$0.32 whether the arrears underlying the disconnection are \$50 or \$500. So, too, do other out-of-pocket expenses --for example, the cost of sending a person to disconnect service-- not vary as function of the size of the bills. Accordingly, late payment charges that are based on a percentage of the outstanding bill (e.g., 1.5% of the monthly arrears) cannot be justified on the basis of providing compensation for out-of-pocket expenses.^{\90\} For very small arrears, such a charge is probably inadequate to cover such expenses; for very large arrears, such a charge is likely to be overly compensatory.

^{\88\}If, in contrast, the utility contracts its collection activity to an external agency, there may well be a decremental cost.

^{\89\}In no instance, should the late payment charge include allocated overhead, such as management salary or building and grounds. The late payment does not in any fashion "cause" those expenses.

^{\90\}A percentage charge, however, may have another basis, such as compensating the utility for the carrying costs associated with late payment. To identify the purpose of the late payment charge with precision is thus important.

2. Inappropriate Situations for Levying Late Payment Fees.

An analysis of late payment fees does not turn solely on what the level of the charge should be. Circumstances exist when late payment fees are inappropriate, regardless of their size. These times generally involve when the late payment fee is designed to compensate for out-of-pocket expenses that have not arisen.

a. Beginning the collection process: Given the fact that late payment charges are intended only to compensate for out-of-pocket expenses, the imposition of such a charge must be triggered by some event that also triggers the incurrence of the expenses. This principle is often violated by utilities which prematurely levy late payment charges. In these circumstances, the utility might set a past due date of the 15th of the month, with a late payment charge levied for all payments made after that date. If, however, no utility collection activity occurs until a bill is 10-days overdue (i.e., the 25th), households making payments during that 10-day interim are paying compensation for collection expenses that were never incurred.

This last realization --that payments must be overdue by some time before the utility begins its collection process and thus before the utility begins to incur expenses --is particularly important to ensure that households who pay late, but who do not have collection activities directed against them, are not discriminated against. Discrimination would exist if a customer is charged for a cost she did not

cause the utility to incur.¹⁹¹ Discrimination would exist if a late payment fee is imposed on the day after the due date, failing to recognize that collection activity is not initiated until some later date.

b. Suspending the collection process: Late payment charges are often inappropriate for low-income customers because of the special credit and collection protections established by state Public Utility Commission (PUC) regulations. Under many PUC rules, utilities are prohibited from seeking to collect a bill through the disconnect process in a variety of circumstances.¹⁹²

oMost states now have special winter protections. Whether it be a strict "winter moratorium" or protections tied specifically to cold temperatures,¹⁹³ the utility is prohibited from disconnecting service during designated times. Under a strict moratorium, the prohibition lasts through the designated cold weather months (often November through March).

oMany states prescribe a minimum arrears, under which the utility may not disconnect service. In Vermont, for example, a utility may not disconnect for arrears less than \$50. Moreover, even absent regulatory directive, some utilities have adopted similar limits as

¹⁹¹See, notes Error! Bookmark not defined. - Error! Bookmark not defined., *supra*, and accompanying text.

¹⁹²In many instances, the protections are not simply for the poor.

¹⁹³Some PUC rules, for example, prohibit the disconnection of service when the temperature falls below 32 degrees.

a matter of internal policy.^{194\}

oMany states require utilities to suspend collection activities when a household presents a "medical certificate" indicating that the disconnection of service would present a particular health problem. Frequently, these health problems are tied simply to the presence of the very old or the very young in a household.

In these instances of special protections against collection activity, it would be inappropriate to collect a late charge. Given the fact that a late charge is designed to compensate the utility for out-of-pocket collection expenses, and given the fact that the PUC regulations result in the suspension of collection activities, to charge a late fee would be to compensate the utility for expenses never incurred.

At the least, in states where utilities operate under a winter moratorium or other similar winter protections, late charges should be suspended or reduced on a seasonal basis. Moreover, late charges should be suspended for any arrears made subject to a payment plan. Finally, late charges should only apply to arrears greater than a minimum amount. That amount should be set equal to the level at which the utility begins to collect through the disconnect process.^{195\}

^{194\}For example, Union Heat, Light and Power Company (UHLP), in Kentucky, will not disconnect service for less than \$50.

^{195\}In circumstances where this amount is not set by state regulation, this amount may vary from utility to utility.

c. Imprudence of the collection process: The collection of a late payment charge designed to compensate the utility for out-of-pocket collection expenses should be limited, as well, by the prudence of the utility in incurring the expenses. If the utility's collection expense is imprudent, the company should not be permitted to pass on that expense through late charges. A collection expense might fail the test of prudence if it is known to be unnecessary, excessive or counterproductive.

A collection cost is unnecessary if the utility has a reasonable belief that the arrears will be paid even without the collection activities. This situation would arise, for example, if the delinquent payer is routinely late because of a mismatch between the date of receiving the bill and the date of receiving some type of public assistance. In these circumstances, the late payment is due to a recurring, but nonetheless temporary, lack of cash flow. If the utility has a history of receiving prompt customer payment when household funds do indeed become available, to initiate the collection process each month serves no function. If a customer can demonstrate that habitual late payment is due to this timing mismatch between receipt of a bill and receipt of public assistance, the utility should not be permitted to impose a late charge to gain compensation for incurring unnecessary collection expenses.

A utility's collection expense is excessive in those instances where the utility spends more on the process of collection than the outstanding arrears.

Unfortunately, this happens in many cases. For example, a 1989 study found that for Vermont's four largest utilities, the expenses of the process of disconnection exceeded the level of outstanding arrears subject to collection in 40 to 60 percent of the cases of disconnection.¹⁹⁶ A utility is not entitled to charge its customers for excessive or unreasonable expenses. This dictate should hold true for late payment fees as well as for other rates and charges.

A utility's collection expense is counterproductive when the utility is further from full payment after the collection process than before it. Particularly in situations involving low-income households, this will often be the case. In these situations, even assuming that the full cost of collection can be charged to the delinquent payer through a late fee, if the nonpayer is incapable of paying her bill in full, the utility ends up worse off. Why this happens is set forth in Illustration C.

As discussed in detail above,¹⁹⁷ one distinguishing characteristic of a low-income household is the limited corpus available to pay month-to-month utility bills. In the Illustration, the hypothetical low-income household has an arrears at the time of disconnection of \$75; the late payment fee is \$20. After the process of disconnection, therefore, the total bill owed by the customer is \$95 (\$75 arrears plus \$20 late fee). The household is assumed to be capable of making only a partial payment. In the Illustration, the hypothetical customer makes a payment of \$55, leaving a total arrears of \$40 after the utility's collection efforts.

¹⁹⁶Vermont Gas=42.4%; Central Vermont Public Service=47.2%; Green Mountain Power=58.5%; and Citizens Utilities=44.3%.

¹⁹⁷See, note Error! Bookmark not defined. - Error! Bookmark not defined., *supra*, and accompanying text.

As can be seen, charging a late fee to this household does not serve the best interests of all customers. In this Illustration, *everyone* loses. The customer is worse off. She started by owing \$75 and now owes \$40, despite having exhausted her ability to make payments to the utility. The utility, too, is worse off. It started with the customer \$75 in debt and willing and able to make a \$55 payment that would have left a \$20 arrears.

ILLUSTRATION C

THE IMPACT OF LATE PAYMENT CHARGES

FOR LOW-INCOME PAYMENTS

Customer arrears at time of disconnect:\$ 75

Late payment charge:\$ 20

Customer bill in total after disconnect:\$ 95

Customer payment:\$ 55

Customer arrears after payment:\$ 40

Instead it has a customer \$40 in arrears (with no further ability to make payments).

The conclusion that imposing a late fee can be a losing proposition does not depend for its efficacy on an assumption of nonpayment or partial payment. Even in those instances where the customer makes full payment of the outstanding arrears, the utility cannot be found ipso facto to have benefitted from the late payment charge. So long as the late paying household has a limited corpus, if some part of the household's ability-to-pay is diverted to paying late payment charges, there is that much less left to pay current bills.

The impact of charging a late fee was studied in some detail for Columbia Gas Company of Pennsylvania.^{198\} The conclusion was that:

^{198\}Before the Pennsylvania Public Utilities Commission, *Pennsylvania Public Utilities Commission v. Columbia Gas Company of*

the imposition of late payment charges would only serve to push households further into debt, thus diverting scarce household resources away from current payments to these extrinsic payments. Accordingly, it would not redound to the benefit of all remaining households. One cannot simply add new charges on to a household that has an inability to pay current bills with the expectation that these new charges will be paid in full.

The Columbia Gas study looked at a sample of 3,907 households who had entered into the company's Budget Plus payment plan. Under a Budget Plus plan, the household declares its available monthly income. Columbia Gas then divides the outstanding arrears by the available income. The resulting figure is the length of the payment plan in months. Thus, if a household has an available monthly income of \$30 and an arrears of \$600, the Budget Plus plan would call for the household to retire its arrears over a 20-month payment plan (\$600 divided by \$30 per month equals 20 months). In addition, the household must pay its current bill (as spread equally over a 12 month "budget plan"). There is a minimum five dollar (\$5) payment toward arrears (i.e., the "Plus" payment), even if the household has a "negative ability to pay," i.e., its monthly expenses exceed its monthly income.

(. . . continued)

Pennsylvania, Docket No. R-891468, Direct Testimony and Exhibits of Roger D. Colton, presented on behalf of the Office of Consumer Advocate (April 1990).

To study the impact of a proposed late fee, the Budget Plus monthly payment was assumed to accurately reflect the limit of the participating customer's ability to pay. The late payment charge was set at the Columbia Gas weighted cost of capital (12 percent).^{\199\} For the 3,907 customers in the Columbia Gas sample, this late payment charge would have added up to more than \$200 per year to the cost of the arrears subject to the payment plan.

The study concluded, however, that it was not the dollar amount that was so important. Rather, the impact of the late payment charge was the strain that the added late payment charge would add to the Budget Plus plan. A late payment charge for Columbia Gas would have added the equivalent of up to more than 20 additional payments *per year* to the Budget Plus plan.^{\100\} Those equivalent additional payments would be above and beyond the level of payment which had already been determined to be the limit of the participating customer's ability to pay. According to the study:

The fallacy in any belief that a late payment charge will
accomplish any constructive task is seen with
a sub-sample of the 3,907 Budget Plus plans
studied. A late payment charge would add a

^{\199\}This proposal was also opposed on the grounds that a percentage of the bill bears no reasonable relationship to the out-of-pocket expenses associated with late payment. See, page 70, *supra*.

^{\100\}Thus, if a household was required under Budget Plus to make twelve monthly payments of \$10, to add a late payment charge would instead require that household to make the equivalent of 32 monthly payments of \$10 each year, or almost three times the amount determined to be affordable.

monthly cost of \$5 or more to 751 households
who are charged the minimum \$5 "Plus"
amount because they already have an
acknowledged *negative ability to pay*.

(emphasis added). A utility should not be permitted to engage in a collection process that is counterproductive. A process is counterproductive if it leaves the company farther from collecting the outstanding arrears after the collection process than before it.

In sum, a utility should not be permitted to collect a late charge if the underlying process of collection is unnecessary, imprudent or counter-productive. If the collection process is such that it performs no function, or actually results in leaving the utility worse off than had it not been performed, the expenses associated with the process should not be charged to ratepayers in any fashion, including through late payment charges.

3. The Disconnection of Service as a Deterrent.

Even in those instances where a utility incurs expenses in the disconnection process, when the disconnection of service has a purpose beyond the mere collection of the outstanding arrears from an individual household, the cost of the disconnection should not be borne entirely by the household having arrears. Under cost-of-service ratemaking principles, a utility should charge the

cost of an expense to those customers causing the expense. If the cause cannot be isolated to the particular household having the arrears, therefore, the cost of disconnection should not be charged solely to that household.

Some utilities engage in the disconnection of service to serve as a deterrent to other ratepayers as much as to serve as a means to collect the particular arrears in question. If customers generally believe that nonpayment will place their continuing service in jeopardy, utilities reason, they will engage in prompt payment practices. Under these circumstances, the "cause" of the utility disconnection is not the arrears of the particular household subject to collection but rather the desire of the utility to create a deterrent for all other households.

Where deterrence of nonpayment is a purpose of the disconnection of service to individual households, the cost of the disconnection should not be included in a late fee charged to the household, but rather should be included as a general administrative expense in base rates charged to all customers. The "cause" of the disconnection must be measured by the purpose which it serves. If the purpose goes beyond the mere collection of the arrears, the customers causing the need for the utility to pursue that greater purpose must bear the cost of the collection activity.

B. COMPENSATION FOR CARRYING COSTS.

Some utilities justify late payment charges as a means to gain

compensation for the carrying costs of late payments rather than simply for the out-of-pocket collection expenses.^{\101\} Carrying charges associated with late payment will show up in a utility's working capital requirement. If, in other words, the utility immediately needs the revenue that has been billed but not collected, it will need to borrow short-term debt to acquire that revenue. The carrying cost of that debt will appear as a cost-of-capital requirement for the company.^{\102\}

Three issues exist with gaining compensation for this working capital expense. First, the utility should not gain double compensation for the expense. Second, the utility should not gain compensation for a non-existent carrying charge expense. Finally, the utility should not gain over-compensation for the carrying charge expense. Each of these issues is examined below.

1. Preventing Double Compensation.

Even when a utility is conceptually justified in charging a late fee to cover the carrying costs associated with delinquent payments, regulators should ensure that the company is not *double*-compensated for those costs. Double compensation would occur if the utility were to collect the carrying costs first

^{\101\}Those utilities who charge a late fee to gain compensation for the carrying costs associated with late payment should also be required to pay interest on prepayments by customers for avoided working capital expense. Prepayments might arise, for example, by receiving LIHEAP benefits that will apply to future bills, by prepayment of winter bills through level billing plans (or "budget" billing plans) and the like. If customers must pay for being late, equity would call for them being paid when they are early.

^{\102\}In this instance, consistent with the principle of not tracing particular sources of capital to particular projects, the carrying charge should be set equal to the utility's weighted cost of capital.

through its working capital adjustment and then again through a late payment charge.

A utility's working capital requirement takes into consideration the elapsed time between when a utility incurs an expense in providing service and the time that the utility is able to recover that expense through receipt of billed revenue.^{103\} Examples of expenses which contribute to working capital requirements include payments for fuel, insurance and the like.

The key element in calculating a working capital adjustment involves the lag days between the date of the expense and the date of payment. Thus if a utility buys fuel to use on January 1st (paying for the fuel at the time of purchase), renders a bill to the customer on January 20th, and receives payment on the due date of February 1st, there is a 31 day "lag." If the customer is ten days late --not making her payment until February 10th-- there is a 41 day lag.

As can be seen, to the extent that the utility includes the lag days associated with late payment in its calculation of working capital, it has received compensation for the carrying costs associated with arrears. If the utility includes the lag days associated with delinquent payments in its working capital, therefore, it is not justified in *again* collecting the carrying charges associated with those lag days through a late payment fee.

^{103\}The lag days, of course, must be set-off by expenses that involve lead days. These expenses are collected before they must be paid. Property and sales taxes involve typical expenses creating lead days.

2. Identifying Non-existent Carrying Charge Expenses.

Just as a utility is not justified in collecting double compensation for carrying charges, neither is it justified in collecting for non-existent carrying charges. A utility's working capital requirement must be examined to determine whether the utility incurs an expense associated with carrying late payments. In the event that the utility does *not* have a working capital requirement --a not uncommon occurrence for natural gas utilities-- the utility has sufficient internal funds to avoid the need to obtain additional capital to meet short-term requirements.^{\104\}

In addition to looking at natural gas companies in particular, utilities that are "cash rich" should be carefully examined to determine whether they have ongoing working capital requirements that are exacerbated by late payments. Given today's relative freedom from making large capital investments, many utilities have substantial sums of cash on hand.^{\105\} If working capital is financed through internally generated funds rather than through an explicit addition to rate base, there is no cause for a late payment fee to compensate the utility for "carrying costs."

3. Identifying Expenses Not Associated with Carrying Charges.

Where a utility experiences a carrying charge expense, and seeks to

^{\104\}No compensation for the opportunity cost of devoting internal funds to working capital is allowed.

^{\105\}Indeed, industry analysts have found that it is this mounting cash reserve that has prompted many utilities to seek to diversify.

recover that expense through a late payment charge, care must be taken in determining the level of the charge. The purpose of the late payment charge is to compensate the utility for the carrying cost expense, but only for the carrying cost expense, of carrying the bill for some time past its "due date." No other cost component is appropriate for inclusion in a late payment charge.

Given the limited function of a late payment charge --to compensate the utility for the carrying costs of delinquent payments-- it is important to recognize that a late payment fee is **not** the equivalent of interest charged in consumer credit transactions. As a result, to borrow interest rates from the consumer credit industry will inappropriately result in late payment charges that include cost components other than the carrying costs of the debt and will likely double compensate the utility for certain expense items.

This inquiry into the cost components of various interest rates is nearly identical to judicial inquiries into what interest rates can appropriately serve as the discount factor in Chapter 11 "cramdown" cases.^{106\} One unifying principle found by the courts in those cases is that while there has been a cornucopia of approaches suggested on how to determine the appropriate discount rate, and while the argument over which interest rate is "best" has become quite involved, the workload of the interest rate is nevertheless still limited simply to compensating the lender for getting *future* payments instead of *current* payments. The purpose

^{106\}11 U.S.C. § 1129(b) (1979).

of the new interest rate in a Chapter 11 bankruptcy proceeding is to compensate the creditor for not receiving the liquidation value of his collateral at the time of the plan, while instead getting a stream of payments stretching into the future.^{\107\}

As a result of this limitation of purpose, the bankruptcy courts have held that several of the factors inherent in a consumer credit contract are inappropriate in setting the discount rate. The Tennessee court noted, for example, that it "is not aiming to produce a lender's profit but only to protect the creditor from loss caused by its being paid over a period of time."^{\108\} So, too, did the Texas court find that "contract interest rates are determined by many factors other than simply the time value of money, including overhead costs."^{\109\} The Kansas court found that a contract rate would inappropriately include depreciation and collection costs.^{\110\}

So, too, do interest rates "borrowed" from other industries include cost elements inappropriate for a utility late payment charge. While, for example, those interest rates are designed to generate a profit, the utility's profit is already included in the bill subject to collection. While an interest rate will include a component for uncollectibles, a utility's uncollectibles are already included in the bill subject to collection. While an interest rate will include a component for

^{\107\}The discount rate is that factor that when utilized to determine deferred payments, places a party in as good a position as if it had received its claim now, rather than later.

^{\108\} *In Re. Fi-Hi Pizza*, 40 Bankr. 258, 269 - 70 (Bankr. Mass. 1984).

^{\109\} *In Re. Johnson*, 8 Bankr. 503, 505 (Bankr. Texas 1981).

^{\110\} *In Re. Fisher*, 29 Bankr. 542, 545 - 46 (Bankr. Kan. 1983).

overhead, a utility's overhead is already included in the bill subject to collection. In short, just as the courts are willing to address the appropriate discount rate to be applied in Chapter 11 bankruptcy proceedings to determine whether that rate includes only the components permitted by statute, so, too, should regulators be willing to address the appropriate late payment charge to ensure that only the carrying costs associated with the delinquent payment are included.

In the case that late payment charges **do** substantially overstate the costs associated with delinquencies, they are subject to challenge based on contract principles as well as on regulatory principles. Under regulatory principles, excessive late payment charges violate the standard that rates and charges be "cost-based." Under contract principles, an excessive late payment charge may be challenged as an unlawful "penalty." For example, a bank's "bounced check" fee that far exceeded the cost of processing the returned check was held to be unlawful on this theory.^{\111\} Likewise, if the utility late payment charge bears no relation to the reasonably estimated expense to the utility arising from the delinquent payment, the charge will likely be held to be an unenforceable penalty clause.^{\112\} The fact that such a penalty might operate "in terrorem and (be) much more likely to induce the promised performance" does not save it from challenge.^{\113\}

^{\111\}*Perdue v. Crocker National Bank*, 702 P.2d 503 (Cal. 1985), appeal dismissed, 475 U.S. 1001 (1986). (bounced check fee of \$6 when actual cost \$1 unlawful).

^{\112\}See, National Consumer Law Center, *Sales of Goods and Services*, at §39.11 (2d ed. 1989).

^{\113\}5 *Corbin on Contracts* §1054 (1951).

III. THE LATE PAYMENT CHARGE AS AN INDUCEMENT FOR PROMPT PAYMENTS.

Utility late payment charges are sometimes justified not as a means to gain compensation for expenses, but rather as a means to induce prompt payments on the part of customers.^{\114\} If this rationale is proffered, it is a legitimate inquiry as to whether the level of the late payment charge bears any relation to an acceleration in payment dates.^{\115\} Moreover, it is a legitimate inquiry as to whether a late payment charge designed to induce prompt payment is rational in those instances where nonpayment occurs in households who are unable to pay either because of chronic poverty or because of a mismatch between their receipt of utility bills and public benefits checks.

A. RELATIONSHIP TO INDUCEMENT.

If a utility late payment charge *is* designed to create an inducement to pay, it should be capped at a level equal to the interest rate imposed by the Internal Revenue Service for delinquent taxes.^{\116\} This IRS rate is one of the few readily ascertainable rates that exist whose purpose is to serve this "inducement" function. As the courts have noted in calculating this IRS interest rate: the (tax collector) has determined that its rate of interest must be high enough

^{\114\}See, e.g., *MacMahon v. Independent Telephone Co.*, 109 P. 366, 367 (Wash. 1910); *Re. Utah Power and Light Company*, 19 P.U.R. (n.s.) 369, 372 (Utah PSC 1937).

^{\115\}*Re. Potomac Electric Power Company*, 3 P.U.R.4th 65, 79 (D.C. PSC 1973); accord, *Re. Connecticut Light and Power Company*, 15 P.U.R.4th 178, 191 (FPC 1976); see also, *Re. Buzzards Bay Gas Company*, 79 P.U.R. (NS) 22,26 (Mass DPU 1949).

^{\116\}26 U.S.C. §6621 (1979).

to deter tax evasion, restrict creative tax avoidance and compel timely payments.^{\117\}

The tax rate should serve as a cap because of the added collection advantage enjoyed by public utilities. Low-income customers, for example, often indicate that the fear of evictions and utility service terminations often unto themselves make the payment of rent and utility bills top priorities when allocating scarce household resources. The relevant inquiry is, therefore, into what *additional* inducement is created that does not already exist through these collection mechanisms. If the tax rate is not necessary to generate an acceleration in payments, nor would it do so, it should not be reached as a cap.

B. IMPACT ON LOW-INCOME HOUSEHOLDS WHO CANNOT PAY.

The rationale of imposing a late payment charge at all, however, as an inducement for low-income households to make prompt payments on their utility bills can be called into question. This purpose is not served when the reason for nonpayment is a chronic shortfall between household resources and household expenses.

That low-income households have insufficient funds to pay all household bills can not be seriously questioned. As discussed above,^{\118\} one 1989 study in Philadelphia, for example, found that 100 percent of households living at or below

^{\117\}*Fisher, 29 Bankr. at 545.*

^{\118\}See, note Error! Bookmark not defined., *supra*, and accompanying text.

50 percent of the Federal Poverty Level in that city had negative monthly income left after paying essential home expenses, but before paying home heating bills; 75 percent of households at 50-99 percent of the Poverty Level had negative income (with another 10 percent having less than \$24 per week left) before paying home energy bills.^{\119\} The National Consumer Law Center has consistently made similar findings.^{\120\}

A financial inducement to make prompt payments is effective when the customer's reason for nonpayment is to gain financial advantage from devoting the funds to other uses to gain the difference between the substitute return and the utility late charge. Clearly, however, low-income households do not withhold payments toward their utility bills in order to gain a higher return by devoting their resources to alternative uses. Low-income households do not pay because they cannot afford to pay. Increasing their bill will thus provide no inducement to make prompt payments.

Indeed, some utilities have found that they receive more timely payments, and more frequent payments, by reducing bills to affordable levels rather than by increasing bills as a penalty for late payments. In Rhode Island, for example, the state's Percentage of Income Payment Plan (PIPP), whereby utility bills were based on an affordable percentage of household income, resulted in an

^{\119\}Before the Philadelphia Gas Commission, *In Re. Philadelphia Gas Works, Direct Testimony and Exhibits of Eunice Grier*, presented on behalf of the Public Advocate (June 1989).

^{\120\}See, notes Error! Bookmark not defined. - Error! Bookmark not defined., *supra*, and accompanying text.

improvement in payment patterns for both the gas and the electric companies. At the end of the first program year, instead of having 55 percent of its pre-PIPP LIHEAP households three or more months behind on their unaffordable bills, Providence Gas had 95 percent of its PIPP households totally current or only one month behind. Similarly, instead of having 45 percent of its pre-PIPP LIHEAP households three or more months behind, Narragansett Electric had 95 percent of its PIPP households either totally current or only one month behind.

Washington State experienced similar results. The Clark County Public Utility District (PUD)^{\121\} found in a recent analysis of its Guarantee of Service Plan (GOSP) (which also based utility bills on an affordable percentage of income) that out of 1,966 GOSP participants, 86 customers were removed from the plan for default. An additional 161 customers were two months past due. This equated to an overall success rate of 76 percent of GOSP customers who were *completely current* in their reduced obligation. Nearly nine of ten (87 percent) were one payment or less in arrears. According to the Clark PUD, "when you consider that 67 percent of all those entering the plan had a delinquent balance, the results are impressive."^{\122\}

Seeking to create an incentive to make prompt payments by making unaffordable bills even higher is not only ineffective, but ultimately

^{\121\}The Clark County PUD primarily serves Van Couver, Washington.

^{\122\}Clark Public Utilities, *GOSP Evaluation: Nov. 1, 1988 - Nov. 1, 1989* (March 1990).

counterproductive. If nonpaying households do not pay because they cannot pay, it is no remedy to impose penalties which increase the bill even further.

SUMMARY

Late payment charges are often used to compensate a utility for delinquent payments. A utility may experience both out-of-pocket collection expenses and carrying charges when a bill is not paid by its due date. In assessing the reasonableness of late charges, a utility must distinguish between classes of late payers to ensure that compensation is provided only when expenses are truly incurred. When compensation is provided for out-of-pocket expenses, it should be calculated using a decremental cost analysis. When a late payment charge is not used as compensation for a utility's expenses, but rather as an inducement to make prompt payment, whether the level of the charge actually results in the acceleration of payments is necessary to determine. For low-income households in particular, increasing costs in response to nonpayment may retard rather than accelerate eventual payment of the arrears.

PART IV: DEFERRED PAYMENT PLANS.

The payment problems of low-income customers have been well-chronicled throughout this manual. This mismatch between household income and expenses often leads to households incurring substantial arrears. Past due bills of \$2,000 and more are not uncommon.

The general reaction to nonpayment of a bill for utility service is the disconnection of service, even though the disconnection of service has been criticized as not always being in the best interests of all remaining ratepayers. Increasingly, however, utility commissions are beginning to recognize that utilities best serve their remaining ratepayers by taking what payments they can get from low-income households, rather than seeking to obtain the performance of an impossible task.^{\123\}

The following analysis looks at deferred payment plans from this

^{\123\}The Philadelphia Gas Commission stated in November 1989 that:

"The recommended energy assurance program recognizes that:

- (a) low-income customers do not have enough money to pay their fully-embedded cost of service; and
- (b) without a program to address these issues, these customers will pay nothing or will pay only some portion of their fully-embedded bill; and
- (c) in either case, PGW loses the full contribution to its fixed cost; and
- (d) this occurs whether or not the household is ultimately permanently disconnected; and
- (e) special pricing arrangements are good for all ratepayers, since the energy assurance program encourages more low-income customers to remain gas customers and to make some payments toward their bills, which payments are better than no payments at all."

In addition, the Vermont Department of Public Service told the Vermont Public Service Board in January 1990 that:

"The Department's Basic Energy Needs Program recognizes two harsh realities for the utility industry. First, charging a rate and collecting a rate are two separate actions. Simply because a utility charges a particular rate does not mean that the utility will ever collect that money from a low-income household. Second, even when a utility does collect the total bill from a low-income household, the utility often spends considerable sums in the very act of collection. The net stream of income is thus less than the total outstanding bill. The BENP will succeed in changing those patterns."

perspective. Through such plans, households are permitted to retire their arrears over time. Frequently, these plans can result in spreading arrears over a substantial number of years. The question thus arises whether the utility should enter into such a long-term deferred payment plan for the "full" amount of the arrears or whether the utility would be more prudent in taking some lesser amount immediately.^{\124\}

A utility may best serve the interests of all its ratepayers by accepting an immediate partial payment of an arrears the payment of which would otherwise be extended over some substantial period of time. In accepting such payments, the concept of "indubitable equivalence"^{\125\} can be imported into the law of utility payment plans from bankruptcy law to the mutual benefit of both the ratepayer and the utility. A utility should accept an immediate lesser payment as satisfaction of an arrears if that payment is the functional equivalent of payment "in full" over the long-term.

^{\124\}This is the case even setting aside for the moment the question of whether the long-term plan will be successfully completed.

^{\125\}11 U.S.C. §1129(b)(2)(A)(i)(II) (1979).

The question thus presents itself: what immediate lesser payment will be the "indubitable equivalent" of full payment over the long-term. That question resolves itself into determining the appropriate discount rate.

I. THE PROBLEM WITH LOST TIME VALUE ARISING FROM THE USE OF DEFERRED PAYMENT PLANS.

One "expense" associated with deferred payment plans arises from the fact that a dollar collected today is worth more than a dollar collected tomorrow. As a result of payment plans, in other words, a utility loses the time value of the arrears subject to these plans.

The loss of time value can manifest itself in either of two ways. In the event that the utility must borrow money to fill its short-term capital needs, the loss shows up as a working capital expense. In contrast, even when the utility need *not* borrow money to provide the revenue (the payment of which is deferred through a payment plan), the loss shows up as an opportunity cost. If the money *had* been collected rather than deferred, the prudent utility manager would have invested that revenue and obtained a rate of return on it.

The proper approach to determining the extent of the "loss" to the utility can be demonstrated by a simple hypothetical. Several assumptions are necessary. First, we assume that the arrears subject to the payment plan are \$600.^{\126\} Second, we assume that these arrears will be paid to the utility at the rate of \$15

^{\126\}This is an arbitrary figure that has no significance.

per month. The length of the payment plan in this hypothetical would thus be 40 months (\$600 divided by \$15/month equals 40 months). Finally, we assume the discount rate to be 12 percent, a not uncommon cost of capital for an energy utility in 1990.¹²⁷

The value of this stream of \$15 payments over 40 months would be \$493. Through the payment plan process, therefore, the utility in this hypothetical loses the value of roughly \$107 (18 percent) of the original debt, even if the payment plan is successfully completed. As shown by Table C, the loss is greater or lesser depending on the length of the plan.

Given this loss in time value, and assuming that the payment plans would have been successfully completed, it would be prudent for the utility to accept an immediate lump sum payment of anything more than \$493 in this hypothetical. Such a payment would have a present value, over a 40 month period, of more than \$600. An immediate \$493 payment, in other

¹²⁷A discussion of what discount factor *should* be used is found at pages 104 - 114, *infra*. The use of a weighted cost of capital here is for ease of analysis. As discussed below, however, a utility's weighted cost of capital is an inappropriate discount factor for these purposes.

TABLE C
PRESENT VALUE OF \$100
GIVEN DIFFERENT PAYMENT PLAN TERMS⁽¹²⁸⁾

TERM OF MONTHS	PRESENT VALUE
12	\$93.79
24	\$88.50
36	\$83.63
48	\$79.11
60	\$74.93
72	\$71.04
84	\$67.44
96	\$64.09
108	\$60.98

⁽¹²⁸⁾ Assumes a 12 percent per annum discount factor.

words, would represent the functional equivalent of successful completion of the payment plan over 40 months.

This loss in time value, when aggregated for the total amount of dollars subject to deferred payment plans on a utility system, can be a significant expense. Columbia Gas of Pennsylvania, for example, indicated in its most recent rate case that as of June 1989, it had \$10,730,049 in outstanding arrears subject to extended payment plans. Columbia Gas reported that it had 4,318 households owing \$4.541 million, with an average plan period of 165 months; 3,563 households owing \$1.814 million with an average plan period of 73 months; and 8,604 households owing \$4.374 million with an average plan period of 68 months. Using Columbia's requested rate of return of twelve percent (11.99), the Net Present Value of the stream of payments generated by those averages is \$6.828 million, a loss in time value of \$3.901 from the \$10.730 million nominal value over the life of the plans.

In a study of the most recent payment plans entered into by Columbia Gas, the National Consumer Law Center found similar results.^{129\} There were 3,804 plans entered into in 1989 and 1990 in the sample used by NCLC. The total arrears subject to collection through the payment plan process for these households equalled \$2.344 million. The net present value of those plans, taking into account the length of the payment plans, was \$1.017 million. Moreover, the lost time value calculated for Columbia Gas was the lost time value that arose only from the date of the payment plan. It did not incorporate the lost time value from the time the bill was first rendered to the time the customer entered into the plan. The study cautioned that that time period could be substantial.

II. THE ROLE OF THE DISCOUNT RATE: WHAT IT DOES AND WHAT IT DOES NOT DO.

^{129\}Before the Pennsylvania Public Utilities Commission, *Pennsylvania Public Utilities Commission v. Columbia Gas Company of Pennsylvania*, Docket No. R-891468, Direct Testimony and Exhibits of Roger D. Colton, presented on behalf of the Office of Consumer Advocate (April 1990).

Through application of an appropriate discount rate, a public utility can determine what immediate payment will represent the functional equivalent of a stream of payments over the life of a deferred payment plan. A great deal of confusion exists over the choice of the appropriate discount rate to use in determining the "present value" of a stream of payments. A discount rate is required so as to allow the numerical computation to find out if the immediate payment equals at least the value of the stream of deferred payments. The basic question, therefore, is: of all the discount rates available, which one is the proper one?

The easiest answer is that the appropriate rate must reduce the future stream of deferred payments to the value of the proposed settlement as of the time of the plan. There is a cornucopia of possible discount rate approaches, however, and the argument over which rate is "best" can become quite involved. It is important to remember nevertheless that the workload of the discount rate is still limited simply to ensuring that the utility gets the functional equivalent in an immediate settlement to what it would have received through a stream of future payments.

Two major factors go into making a determination of what the value of a future stream of payments is. The first determination involves the loss of time value associated with receipt of future payments. The second determination involves how to assess the risk of the future stream of payments. Each of these issues is presented in greater detail below.

III. CHOOSING AN APPROPRIATE DISCOUNT RATE: THE MEANS TO CHOOSE A SPECIFIC RATE.

The determination of an appropriate discount rate can be divided into two parts: first, to determine whether the payment stream provides sufficient value over capital recoupment to offset the loss of the time value of money; and second, to determine if the stream of payments is sufficiently large to offset the risk to the repayment.^{\130\}

Several questions march forward, however, as soon as the issue is posed in these terms. For example, time preferences vary from person to person. While one creditor might feel adequately compensated for having to accept a deferred payment stream of certain specified dimensions by receiving ten percent, another might demand twelve percent.^{\131\} Even for an individual creditor, the time preference of money is subjective in the sense that it is determined by, and varies with, numerous psychological forces that do not lend themselves to legal analysis in any very satisfying way. So, too, is the time preference of a corporate creditor determined and redetermined on a day-to-day basis by a complex of variables only partially controlled in a discernible way by objective factors.

The problem is the same with the assessment of risk. Different individuals

^{\130\}It is for these reasons that the discount factor is divided into two components: a risk free component and a risk premium.

^{\131\}In theoretical terms, the reason for this revolves around the different utility, or satisfaction, which each derives from a particular interest rate.

have different levels of risk adversity.^{\132\} In addition, as with the time preference of money, not only does the risk preference differ between individuals, but for each individual the levels vary with a number of factors, most of which are psychological and most of which are not easily verifiable in the legal context. Again, too, the same general logic appears to apply to corporate behavior. Some corporations require only modest premiums to engage in risky behavior while others remain staunchly conservative.

On each level, the time preference of money and the risk adversity, it is unclear what person is to serve as the standard against which the appropriate discount rate is to be measured in deciding upon what rate is fair. Two alternatives become immediately apparent: (1) the "standard creditor" implicit in the market; and (2) the particular utility involved with any particular payment plan.

Two conflicting approaches have been developed to this process of assessing risk. On the one hand, economic doctrine counsels that the larger and more comprehensive the market, the more likely that an objective measure of risk will be determined.^{\133\} The larger market is less subject to manipulations, subjectivities, idiosyncracies, and quasi-monopoly forces often prevalent at the local level. At the other end of the continuum is an analysis concentrating on a single creditor. Known as the "coerced loan theory," this doctrine counsels that

^{\132\}For example, some individuals will play the lottery even knowing that the expected value of playing entails a net loss. Others would not bet ten dollars on the flip of a coin (where over the course of many bets, the expected value is even).

^{\133\}This doctrine is encompassed in discussions of "pure competition."

the risk premium should reflect how much a *particular* creditor would require to make a loan in that particular creditor's circumstances to a debtor with similar terms, risk and the like.

Recent formulations of what discount rate should be used reject the "coerced loan theory" and tend to concentrate on market rates for loans of comparable risk and term. The current market conceptualization seeks to find an objective evaluation of the risk inherent in any given loan. This quest assumes that "the market" will value the loan given a particular determination of risk and term.

The approaches to determining an appropriate discount rate can be generally categorized into three alternatives: (1) direct surrogates; (2) the utility's weighted cost of capital; and (3) street rates. Each will be examined in turn.

1. Direct Surrogates: The prime lending rate and one of the various treasury bill rates^{134\} comprise the most often discussed direct surrogates for a discount rate. The prime rate is the lowest rate offered by commercial banks to their best corporate customers, and is widely considered to be reasonably fluid

^{134\}Treasury securities are all graded by maturity. Interest on debt offered by the United States differs on the basis of the term of the debt. Interest rates for various maturities are available within the broad categories of "bonds" with maturities of more than ten years; "notes" with maturities of more than one but less than ten years; and "bills" with maturities of one year or less. Moreover, because they are not considered subject to default, United States government bonds or bills are a universally accepted standard of a riskless rate of interest. For a description of these securities, see generally, U.S. General Accounting Office, "U.S. Treasury Securities: The Market's Structure, Risks and Regulations," GAO/GGD-86-80BR (August 1986).

with respect to current economic forces. The treasury bill rates have much the same attributes as the prime rate. In Chapter 11 reorganization proceedings, courts adopting this standard have generally accepted either the weekly or quarterly auction rate of treasury bills as the appropriate surrogate. Treasury note, bill and bond rates taken as a group form a much more comprehensive standard than the prime rate.^{\135\}

Both the prime rate and the treasury bill rates are objectionable for discounting a utility deferred payment plan, however, for several quite good reasons. First, both the prime rate and the treasury bill rates are rates for short term borrowing. In contrast, utility deferred payment plans can last for several years. Second, while the prime rate is purported to be the lowest rate at which banks lend to their best corporate customers, in fact it is not.^{\136\} Moreover, neither the prime rate nor the treasury bill rates involve risks analogous to those associated with the typical utility deferred payment plan. The treasury standard's weakness, in particular, is that all the rates involved are for securities with essentially zero risk of default, which is a clear bar to their use unless further adjusted.

^{\135\}These rates also have the substantial advantages of being subject to the broadest and most vigorous of market forces and of being published daily in every major newspaper in the country.

^{\136\}A Greenwich Research Study showed that nearly 70 percent of large corporations are offered below-prime loans. The staff of the Committee on Banking, Finance and Urban Affairs of the House of Representatives released a report concluding that "the once clear barometer of interest rates has become a murky, ill-defined term that rarely reflects the lowest rates available to corporate customers." Cox, Bankers Desk Reference, at 16 (1982).

Because of this, the choice of treasury securities as a standard still leaves the difficult problem of deriving a measure for judging the risk component of a plan. It is difficult to arrive at a firm analytical basis for quantifying this risk component. Problems of proof with establishing a risk premium are substantial. It is difficult, if not impossible, to obtain an objective measure of such subjective creditor characteristics as risk adversity and time preference.

In sum, a major problem inherent in starting with the market determination of either the prime rate or Treasury rates, and then adding a premium to account for the risk of a default on a utility deferred payment plan, is the difficulty of determining what the premium should be, and then providing a reasoned justification for the particular value chosen.

The risk premiums which have been adopted in bankruptcy Chapter 11 reorganization proceedings have varied widely:¹³⁷ the three month treasury bills plus one-half of one percent; the 52 week treasury bill plus one percent; the treasury bill rate increased by two percent for risk and then decreased one percent for the security; the lagged prime under 26 U.S.C. sec. 6621 plus 2.5 percent; the prime plus two to three percent; the treasury note rate plus three to four percent; the prime rate plus one-tenth of the prime. While each case provides some justification for choosing either the prime rate or one of the treasury rates as the "risk free" basis, there is a problem common to all: not one provides any citable empirical justification for the choice of the particular risk increment chosen.

¹³⁷These rates are routinely adopted for Chapter 11 bankruptcy reorganization proceedings.

2. Utility's Weighted Cost of Capital: The utility's weighted cost of capital represents a second type of standard to use in making a determination of discount rates for determining the present value of a stream of payment plan payments. Use of the utility's weighted cost of capital would be easily ascertainable, having been established in its most recent rate case. The theory behind use of this figure is that it bases the discount factor on the cost to the utility of obtaining substitute funds for those whose payment is deferred through a payment plan. The underlying logic of this approach is that the cost to the utility of not getting paid immediately is the cost of acquiring substitute funds over the interim. This cost can be represented by the utility's cost of borrowing.

This logic might be appealing except for the fact that it only deals with compensating the utility for the time value of money and ignores all other relevant factors. In fact, use of a utility's weighted cost of capital has several fatal flaws. First, the touchstone of providing the present value of a claim to be paid in the future is responsiveness to current market conditions. There is no reason to suppose a priori that the utility's weighted cost of capital will in any way approximate those conditions. Indeed, given the blending of long-term and short-term debt with equity capital, as well as the blending of new and old debt issuance, the weighted cost of capital would approximate current market conditions only by sheer happenstance.

In addition to this fundamental weakness, a series of other equally valid

objections exist. First, the rate at which a utility can borrow is determined by the credit characteristics of the loan and the utility. There is, for example, no reason that the risk involved with the utility, itself, will be the same as the risk involved with the payment plan. Indeed, there is every reason to believe that the risk involved with the payment plan will be much higher. Not only is the payment plan entered into with a household having confirmed payment problems, the payment plan is unsecured. Moreover, there is no reason to suppose that the term of repayment under a deferred payment agreement will be the same as, or even close to, the term of any utility company debt.

Despite its surface appeal, use of the utility's weighted cost of capital would be an inappropriate discount rate. The cost of capital bears no relation to providing compensation for the loss of time value plus providing a risk premium.

3. The "Street Rate": A third type of standard to use involves an inquiry into the rates of local lenders making a loan of the same type, duration and risk. This standard would be based on a series of local or regional rates collected from a cross-section of lenders. The difficulties of the regional market rate are that the rates will vary from lender to lender, which is to say they are lender specific and not market rates. The rates are usually only haphazardly, if at all, connected to a rational system for categorizing risk and term. There is no system in the determination of what constitutes the "relevant" area, so the definition of "regional market" or "local market" remains arbitrary. And perhaps most importantly, since the task at hand is to determine the appropriate market interest rate for discounting

purposes, and not in order to place a loan, factors affecting the local or small-regional banking industry, but which are not reflected as strongly (or possibly not at all) in a broader market, should not influence the discount rate determination process. Moreover, even the regional rate charged by consumer credit lenders may well include factors that would be inappropriate for inclusion in a discount rate for a utility deferred payment plan.^{\138\}

Recommendation: A determination of whether a public utility should accept an immediate partial payment as a settlement of a deferred payment plan is to address the question of whether the proposed settlement equals, in present value terms, the value of the stream of payment plan payments. What is required, therefore, is the choice of an appropriate discount factor to test the deferred payment stream. This is an analytical problem. The discount factor to be used to make this test is a factor produced in a market subject to the most general and vigorous sifting and sorting of market forces. Only in this way will the discount factor with the fewest imperfections be obtained. To complicate the choice, however, there are many discount factors prevailing simultaneously in the market, all of which are differentiated by risk level and term. For the purposes of evaluating proposed settlements of payment plans, therefore, the choice of discount rates should be based on a matching of the risk level and term of the payment plan with the corresponding discount rate in the market.

^{\138\}See, e.g., notes 88 - Error! Bookmark not defined., *supra*, and accompanying text.

The market-determined discount factor can be analytically broken down into two components: a component representing the time value of money, and a component representing the risk of default. Market forces, in determining and redetermining the magnitude of the discount rate on a daily basis, produce a value which is the sum of these two separate components. It is worth emphasizing that the market rate arrives at a single appropriate discount rate for each time-preference/risk combination, based on the general category of risk and the term of the loan.

The most appropriate discount factor to use would seem to involve a U.S. Treasury rate for securities of similar term to the payment plan, as adjusted for risk.^{139\} The difficulty in the use of this factor is in establishing the risk premium.

SUMMARY

Deferred payment plans have long been recognized as a means through which public utilities can seek to collect arrears from low-income households. Through such plans, rather than requiring low-income households to make immediate payment of an impossibly large amount of money, smaller increments are paid on a regular monthly basis over time.

Public utility commissions, however, are beginning to recognize that in instances where low-income households fell into arrears because they could not

^{139\}This recognizes, again, the proof problems associated with determining the risk premium to be added to the "risk free" rate that the Treasury securities represent.

pay their current bill in the past, it is unreasonable to expect those households to make even modest arrears payments in addition to current bills in the future. In those instances, utilities may best serve all of their ratepayers by taking what immediate payment they can get from low-income households, rather than seeking to obtain the performance of an impossible task.

In seeking to implement this policy, the utility determination of whether it should enter into a long-term deferred payment plan for the "full" amount of the arrears, or whether it would be more prudent in taking some lesser amount immediately is an economic decision. A utility may accept an immediate settlement of an arrears and still serve the best interests of all its ratepayers through the provision of least-cost service if that settlement represents the "indubitable equivalent" of the stream of deferred payments.

The determination of whether to accept a lesser payment resolves itself into determining the appropriate discount rate. That discount rate should account for the lost time value of the stream of deferred payments (i.e., the risk free component) as well as for the risk that the stream of deferred payments would not be made.

Well-established mechanisms exist for making this determination. The option that is most appropriate for the utility payment plan process is a U.S. Treasury rate for securities of similar term to the payment plan, as adjusted for risk.