27 June 2003

Ontario Energy Board
ATT: Paul B. Pudge, Board Secretary
P.O. Box 2319
2300 Yonge Street, 26th Floor
Toronto, Ontario
M4P 1E4

FILE RP-2002-0146
Consumer Security Deposit Policies:
Proposed Change to Distribution System Code

Dear Mr Pudge:

As an interested consumer, I wish to file the attached submission with regard to proposed changes to Consumer Security Deposit Policies.

I believe that Smart Metering technology can provide an alternative to the Account Security Deposit, and have attached the rationale for this. I have also included a very brief overview of the technology, which has been deployed in the order of hundreds of thousands of units in North America.

Please do not hesitate to contact me if you have any questions regarding this submission.

Yours truly,

Linda Poirier
Oshawa, Ontario

RE: Account Security Deposit Review

Background

I read with interest the article in the Saturday, June 14, 2003 edition of the Toronto Star stating that the OEB is undergoing a review of customer security deposits. Subsequent to this I sent a note to the OEB contact, Chris Cincar, and was invited to meet with him on Tuesday, June 17, 2003 at the OEB offices. We discussed my thoughts on the issue and he invited me to submit my ideas in writing to the Board Secretary.

As a former employee of Ontario Hydro (Billing Clerk 1987-1990; Energy Management Rep 1990-1992; Customer Account Supervisor 1992–1995; Sr. Advisor Policy 1997-1999), I understand the issues and sensitivities around the collection of account securities and overdue hydro accounts.

Due to the complexity of the issue, my comments are not restricted purely to the collection of account security deposit from the customer. I have also explored how customers might avoid the requirement for an account security by having access to timely, complete information that will help them to manage and pay their account in a more pro-active manner. My comments are focused on residential customers, whose accounts make up the vast majority of the volume of hydro account transactions (although on a revenue basis, they probably represent just about half of total electricity revenues).

Since my experience was with Hydro One, this is the LDC I refer to throughout the document in describing situations and citing examples. However these comments will apply to many if not most LDC's in Ontario since I understand that that most bill customers on cycles ranging typically from one to three months, and that the vast majority are not using modern smart metering technology as a means of providing customers with the tools to manage their electricity bills.

I applaud the pro-active stance that the OEB has taken to help protect electricity consumers, and trust you will consider technology review as part of the solution. It's time utilities adopted more modern technologies that will help their customers better manage their utility bills.

Why an Account Security Deposit?

Electricity bills in Ontario are typically sent to the customer well after the electricity has been consumed. Therefore, in order to minimize an LDC 's exposure to bad debts, customers who fit the following criteria are frequently asked to pay an account security deposit:

- ✓ No previous credit history (good or bad)
- ✓ Poor credit history
- ✓ Previous history of late payments or disconnection of service
- ✓ Customer is a tenant

o **Previous Credit History**

A customer with no credit history (typically one who is young and just starting out), or with a poor payment history is often asked by the LDC to provide an account security deposit. This category of customer is often on a low or fixed income and struggling with cash flow. From this customer's

perspective the practice of requiring one or more month's estimated consumption as an account security deposit is tantamount to holding them hostage for the privilege of using electricity, and it leaves them feeling helpless and lacking control of the situation. When a new customer compares this practice to that of other service providers (telephone, credit card) they often deem the LDC's practices to be unfair and discriminatory.

- **History of Late Payments or Disconnection**

A history of late payments, disconnection, or a poor credit rating can also put a customer in a situation where they are required to pay an Account Security Deposit. I have described scenarios in this document that demonstrate how some customers find themselves in this situation, and why they feel unfairly treated when this happens.

- **Estimated Bills**

Faced with the situation of a long billing period, and understanding that they may have difficulty budgeting for this, customers often ask for an alternative to having the meter read only once every two or three months. The alternative currently offered by Hydro One and most other Ontario LDC's is to provide estimated bills monthly, based on historical consumption. In fact, Ontario Hydro purchased an expensive new billing system in the late 1990's which was to provide a better algorithm for estimating bills. But despite the use of billing systems with improved algorithms, LDC customers who use electric heat and/or air conditioning still find that variances between one summer/winter and the next can wreak havoc with their estimated v.s. actual consumption and they can be left to deal with a large debit or credit at the end of the period.

Despite their best efforts to perfect the billing system algorithm, Hydro One continues to receive many complaints based on estimated billing. In fact, in 1991 fully half of Hydro One's call centre inquiries were due to billing inquiries. Customers see estimated bills as a band-aid solution at best, and it is easy to see their point. Imagine if the phone company asked for monthly payments of long distance bills, based on estimated usage, then provided actual usage history and settlement on the third month! I believe that other Ontario LDC's do face the same customer issue, as most settle on a two or three month meter reading period.

In my experience many customers would ask that Hydro One read their meter more frequently, to allow them a true settling up of their account, and to deal with balances, whether they be debits or credits, while still at a reasonable level. This however was and is still not an option that is available to residential customers.

So despite their best intentions to pay, a number of customers fall into arrears when a large reconciliation bill is rendered, leaving them with a poor payment history. If a customer gets to the point where they are disconnected for non-payment, the requirement to pay an account security deposit prior to reconnecting the service is an additional burden added to the requirement for payment of the initial arrears. Most people in this situation are left feeling victimized and as a result, they view the LDC as a strong-armed monopoly.

The Case for Smart Metering

The use of technology to preclude the need for an account security deposit does not seem to have been explored widely by LDC's in Ontario. Certainly it is mentioned in the draft Discussion Paper but not presented as a serious alternative for the Ontario marketplace. This in unfortunate

as various technologies, currently in use in North America and indeed here in Ontario, would allow customers to feel more in control of their consumption (see Appendix 2).

A technological solution could be offered to all customers as an option on move-in, or to customers who are experiencing difficulty in paying their bills, as an alternative to a mandated account security deposit.

Pre-paid metering is one such technology, used currently by Woodstock Hydro here in Ontario (see Appendix 3). Pre-paid metering has also been in wide use in the U.K for a number of decades. Experience in these jurisdictions has shown that many low-income customers, given the choice between paying an account security deposit or selecting a pre-paid meter, would choose the latter.

In fact, many cellular telephone service providers use similar technologies, offering pre-paid cellular telephones, which seem to be popular with that segment of their clientele who prefer the pay-as-you-go method as a way of budgeting their cellular phone use. This also allows the utility to provide cellular phone service to those customers who, because of their payment histories, may not normally be given access to this technology. With metering technology that is currently tested and available in today's marketplace, are electricity customers in Ontario not entitled to the same types of options regarding their bills?

In addition to pre-paid metering, automated meter reading and interval metering also exist to help customer monitor and budget their energy use with more frequent and timely billing.

Benefits to the Customer and the LDC

Some LDC's may argue that modern metering technology is more expensive than meters that are commonly in use in Ontario today. In fact, all new technology comes at a cost. Most LDC's would agree that the simple bills that were generated by the billing systems of the 1940's and 1950's would not be acceptable for use today. Yet the same LDC's expect their customers to accept the same metering technology that was in use in that era, along with all of its limitations.

Furthermore I have no doubt that a thorough analysis and properly staged implementation would bear out savings to the LDC, and therefore to the customer, as a result of reduced collection costs, improved cash flow and fewer customer questions / complaints. In fact, based on the volume of calls associated with estimated bills, if those particular calls could be completely eliminated from Hydro One's Call centre millions of dollars would be saved. Customer satisfaction scores would also inevitably rise. Indeed, consideration should be given to providing an incentive to customers who opt for pre-paid metering, if LDC's were willing to share the benefits of improved cash flows, mitigation of collection costs and the costs associated with escalated complaints.

Summary

1. Traditional billing cycles can be problematic to residential customers who are on low and fixed incomes, or who are experiencing difficulties with cash flow

2. For many customers, the requirement to pay a 2-3 month account security deposit is seen as punishing

3. Customer testimonials (and experience) indicate that many customers would benefit from tools that would help them to better manage their consumption, therefore breaking the "Poor Payment History" cycle

4. Many, if not most, Measurement Canada meter dispute tests are as a result of a customer not "believing" the accumulated consumption over a period of two or three months (or more)
    - ✓ These tests are costly to the LDC due to the requirement for two field visits; one to bring the meter back to the shop to ship to Measurement Canada; and another to re-install the meter after testing

5. LDC's can reduce costs by deploying more modern metering technology
    - ✓ High bill complaints and collection calls account for a high volume of customer billing agent activity, therefore a large proportion of an LDC's billing department costs. (In the case of Hydro One, one of their two call centres is dedicated solely to the collection of overdue accounts)
    - ✓ High bill complaints and collection / disconnection calls are also reflected in field operations costs
    - ✓ Tools that enable customers to better manage their accounts could have a significant positive impact on these costs, and on customer satisfaction scores
    - ✓ Reduction in costs of handling high bill complaints should be factored into any assessment of the cost of new metering technology
    - ✓ Collection cost savings benefits can be fully realized by LDC's under the current PBR rules

6. A significant cash flow burden is taken off the LDC when a customer prepays
    - ✓ Prepayment eliminates a 60 or 90 day billing cycle, plus 15 days for net, plus 7 for late payment notice, plus 7 days for notice of disconnect
    - ✓ Cash flow liability with pre-paid metering is reduced to 7 days for call or service rep field trip, plus 7 to disconnect date

7. Naturally, there would have to be consequences to the customer if the prepayment were allowed to lapse
    - ✓ This is a policy matter that would need to be resolved by the Study Team
    - ✓ It is worth noting that an automatic disconnect feature is available on most automated meters; however the culture in North America would seem to preclude using this feature

APPENDIX 1

High Level Technology Overview

North American Technologies

Pre-Managed Accounts
OZZ Smart Meter

- ✓ This meter allows LDCs to "run a better billing system" – providing customers with more timely information and billing periods
- ✓ custom designed pre-paid system via a software interface with a "smart meter"
- ✓ "low" level balance threshold can be predetermined by the customer (i.e. $10 balance triggers autodial / email notification to customer); low threshold set-point can be customized on a by-customer basis
- ✓ Applies rate on a real-time basis to customer consumption, pre-paid doesn't mean the same thing as pre-billed
- ✓ No swipe card required, payment can be made at the bank, LDC office or online
- ✓ Daily internet check available to customers, virtual bill with current balance is always available online
- ✓ Key benefit: can be seamlessly switched from pre-paid to interval or regular meter when customers move in / out

Pre-Paid Meters
PowerStat, Statlinc

- ✓ Woodstock Hydro has been using pre-paid metering technology
- ✓ approx 34% of Woodstock Hydro customers use the PowerStat system (similar design to Statlinc, another manufacturer)
- ✓ Customers load up a "Smart Card" at local variety store or LDC
- ✓ This meter doesn't tie in to LDC billing or software systems, therefore the rate charged to customers is static. There's no opportunity to update rates in an open market environment. (therefore calculating NSLS could be problematic – not sure if they rely on manual reads, after the fact)
- ✓ This may be why they're looking at upgrading, to incorporate this functionality in preparation for the lifting of the rate cap

Technologies In Other Jurisidictions

Pre-Paid Meters
Invensys, Ampy

- ✓ One U.K supplier (Invensys) has developed technology whereby a telephone system ties in to a server and a meter, allowing the customer to obtain information regarding their current balance and consumption history, and to swipe prepayments using a credit or debit card in their own home
- ✓ Another U.K. supplier (Ampy) uses a Customer Information Unit (small electronic box) to convey consumption and payment information. The customer purchases credits on a "Smart Card" which is loaded at a variety store or local LDC office and inserted into the CIU. (I believe this technology is currently being tested in North America.)

APPENDIX 2

Article

Metering International Magazine archive

1999 Issue 2

Prepayment around the world

Prepayment meters have both supporters and detractors around the world - and around the world the number of installations varies quite considerably. In the UK, for example, there are millions; in the USA, only a few thousand. In this article we asked Phillip Kettless of PRI Ltd in the UK to trace the early development of prepayment meters. Stephen Hadden of Plexus Research in the USA looked at the changing attitudes towards prepayment in North America, and Graham Hodge of Orion New Zealand gave an overview of prepayment there. Finally Ricardo Brugger of ARO SA describes the actual installation of prepayment meters in Argentina. We are grateful to them all for their input.

METERS IN THE EARLY DAYS

Prepayment metering has been in use in the United Kingdom for well over 70 years, and with over 3.5 million electricity consumers on prepayment metering alone, the country is seen as the world focus for prepayment development. This is further borne out by the types of token-based prepayment systems that have been introduced and developed over the last few years for the UK, which are now being marketed world-wide (magnetic cards, key-based, smart cards and so on).

It is interesting, however, to look back at the roots of prepayment systems, both from an engineering and a social point of view. Mention prepayment metering to most utility staff and it will immediately conjure up images of consumers with bad debts. But if we examine literature from the early 1900s, we find statements like:

"The use of prepayment meters also simplifies accounts considerably, more particularly in those cases where the tenants are constantly changing; for possibly two or three accounts might have to be sent out per quarter, to say nothing about the difficulty on occasions of finding the 'leaving' consumer. The scope of the prepayment meter is, however, not confined to the poor man's dwelling. Its use in flats is gradually becoming more extended, and in furnished apartments, where the consumers are chiefly nomadic, it relieves the proprietor of all responsibility as regards the consumption, over which he has practically no control." - J L Ferns, 1938.

Prepayment was also often associated with assisted wiring or hire purchase schemes, whereby consumers paid a weekly fixed amount towards the cost of having electricity installed in their premises, as well as for consumption.

Electromechanical prepayment meters in general consisted of two parts – the integrating (kWh) meter was usually a standard meter made by the manufacturer to operate on the type of circuit concerned, whilst the prepayment mechanism was subject to considerable variation.

FIXED CHARGE COLLECTOR - HAND-RESET TYPE

This was the simplest form of prepayment metering, consisting of the meter and a switch. At each visit the meter reader removed the coins and tripped the meter's switch. The consumer re-closed the switch by inserting the requisite number of coins.

FIXED CHARGE COLLECTOR - TIME SWITCH TYPE

In this type of meter the tripping of the switch was performed by an electrically driven clock mechanism. The consumer benefited because it allowed more frequent operations than the hand-operated type, and thus needed fewer coins each time to close the switch.

FLAT RATE TARIFF METER

In one form or another this type of meter comprised the majority of the electricity prepayment population, and it remained in service right up until its replacement by its electronic token counterpart in the 1980s. Even today they are used by landlords as secondary metering.

Turning the coin knob in this type of meter after the insertion of a coin in the slot advanced a mechanical credit register the appropriate amount, and also closed the switch if it was not already closed. The coin was also registered on a counter, which indicated the total number of coins inserted since the meter's installation. As the meter registered energy consumption a linked gearing arrangement caused the credit register to progress towards zero. When zero was reached a tripping device operated and caused the switch to break the supply.

A differential device prevented interference between the coin mechanism and the metering register. The coin register drove the credit counter upwards when coins were inserted, but with no effect on the meter register, while the meter register drove the credit counter downwards with no effect on the coin mechanism. The force required to open and close the switch was provided by a strong spring, which was charged by the consumer turning the coin knob and discharged by a trip mechanism on the credit register when it reached zero.

Meter manufacturers adopted one of two ways of allowing for unit price changes. In one design the gearing between the coin knob and the credit counter could be altered; in the other it was the gearing between the meter register and the credit counter. Either way allowed the number of units per coin to be adjusted to suit the tariff.

TWO-PART TARIFF - FIXED RATE TYPE

The next major development in pre-payment metering, this meter also incorporated a continuously running, constant speed motor. The motor was attached to the credit register via a differential gearing arrangement with a meter register. The mechanism used to reduce credit was the sum of the speeds of both the motor and the meter register through the differential gearing.

The motor itself comprised the fixed charge collector. Running continuously through the differential gearing, it reduced the available credit in the meter even when energy was not being consumed. Because the motor ran at a constant speed, credit in the meter was reduced at a fixed rate per hour in addition to the number of units consumed, with a range of gears allowing for different fixed prices to be set.

Now it became necessary for prepayment meters to have credit registers which could record negative credit, for even if the meter's load switch had opened the fixed charge motor would continue to run,

driving the credit register beyond its zero point. Consumers had to insert sufficient coins to clear any accrued arrears before the switch would close.

TWO-PART TARIFF - VARIABLE RATE TYPE

This meter replaced the fixed charge motor with a second gearing system connected to the coin mechanism. Insertion of coins diverted a proportion of the money to the credit register and the rest to a fixed charge register, reducing the pre-set sum of money owed. When the fixed charge register reached zero the associated gearing was disengaged from the coin mechanism, so that all future coins inserted were used only for consumption.

The disadvantage with this type of meter was that it made electricity seem very expensive during the period that the fixed charge was being repaid.

DOUBLE TARIFF, CURRENT CHANGEOVER TYPE

This was an innovative meter produced by several manufacturers at the request of electricity suppliers who wanted to implement a sliding scale tariff. Here the load current passed through a relay in addition to the load switch and current coil. The relay was designed to change the gearing between the meter register and the credit register, depending upon its position. The solenoid remained in the off position when load currents were low (e.g. lighting only) and the customer paid a rate of about 4d per unit. When the load current increased to a certain level the solenoid operated, causing the gearing between the meter register and the credit register to change, reducing the consumer's charge to 1d per unit.

This allowed consumers to use heavy loads, such as irons, radiators and water heaters, at a reasonable cost, yet enabled the suppliers to obtain a fair price per unit when only lighting was being used. In those times generation costs were exceedingly cheap, and high loads in domestic premises did not normally exceed 400 watts. Of course, it would have benefited consumers to waste energy merely to stay on the lower tariff, but when this type of meter was in use most consumers lacked the knowledge to do this.

DOUBLE TARIFF, TIME CHANGE-OVER TYPE

Similar in operation to the current changeover meter, this meter employed a clock mechanism to change the gearing between the meter register and the credit register at certain fixed times of the day or night. Suppliers could thus offer their consumers low rates per unit at night and other off-peak periods. Consumers thus benefited from lower unit prices for their consumption, whilst suppliers benefited from improved load factors.

It is worth mentioning in conclusion the electrolytic prepayment meter, because of its innovative design for its time. It consisted of a glass cell or jar containing a quantity of copper nitrate solution and a fixed plate of copper acting as a cathode. The anode was provided by a strip of copper wound round a bobbin, which was fed a short length at a time into the electrolyte by the insertion of coins. The whole of the consumer's load (up to 4 amperes) passed through the cathode, anode and electrolyte, resulting in the anode being dissolved and the copper being deposited on the cathode. Eventually the anode would dissolve sufficiently to break the circuit at the surface of the liquid and was only remade by the consumer inserting more coins, causing more copper strip to be immersed into the solution.

This meter suffered from a number of disadvantages. If overloaded, the copper deposited on the cathode had a tendency to become uneven and 'trees' often formed which eventually resulted in the electrolyte being short-circuited. The copper strip had to be replaced when used up and every two years or so the cathode had to be replaced and the electrolyte filtered and topped up.

It is interesting to see how prepayment has developed over the last 70 years from these types of meter to the token-based systems we take for granted now. I wonder what will happen in the next 70 years …

THE USA EXPERIENCE

There are approximately 3000 electricity utilities in the United States. Prepayment electricity service has been offered in recent years by a small number of municipal and co-operative utilities. These utilities are controlled directly by consumers through local voting processes. They normally serve small or rural communities. Because the energy consumers control the companies through voting, minimal regulation is required.

The majority of US electricity customers, about 70%, are served by a different kind of electric company – the investor-owned utilities. These are typically much larger than municipal or co-operative utilities, and their customers tend to live in more urban settings. Investor-owned electric companies are monopolies, governed by public regulatory agencies, and the regulatory process protects consumer interests.

Prepayment metering obviously causes the consumer to pay for electricity before it is consumed. This means that the utility has the use of the consumer's money in advance of consumption, not 30 to 60 days later. The utility is also relieved of the billing and remittance processing, collection effort (when necessary) and the meter reading costs that are customary with traditional metering. Taken together, these savings may be enough to justify the higher cost of the meter, or may even justify offering prepaid service to consumers at a lower cost than traditional pay-after-use practice.

PREPAYMENT AND US REGULATION

Automatic service interruption has always been an integral part of prepay electric service. Until recently this was a major obstacle to acceptance by utility regulators in the US. During the formative years of the electric industry in the US, 'big industry' was seen as exploiting individual citizens.

As a result, public policy established regulators as protectors of the individual customers of investor-owned utilities. Electric service came to be regarded as a right more than a privilege.

Regulatory rules evolved to protect customers of investor-owned utilities from service interruption. Before terminating service to a customer whose payment is seriously past due, the utility must pursue an array of measures to secure payment. Varying from state to state, these measures can include

- Arrange a deferred or low interest payment schedule
- Co-operate with public financial assistance agencies that will pay the bill for the customer
- Provide service through the winter months, even with no firm commitment that any payment will eventually be received
- Continue electric service throughout a lengthy sequence of legal appeals.

Prepayment electric service with automatic disconnection when the prepayment runs out is incompatible with these protective measures, and so has not been seriously considered by regulators or the investor-owned utilities serving the large majority of the US population.

REGULATORY CHANGES

Upcoming restructuring of the US utility industries generally aims to allow every energy consumer to choose his or her energy supplier from competing suppliers, and to make a private contract for the

energy. This is in contrast to present regulation, which limits energy customers to a single supplier and a few predefined energy purchase structures.

As energy suppliers seek ways to give customers attractive choices, prepay services may become popular in some segments of the customer population.

Only a few thousand customers have been served by prepay metering in the US, according to Dennis Landsberg of Landsberg Engineering, whose consulting company has investigated the technical issues, regulatory implications and viability of prepayment metering. However, the method is popular with those customers, who like being able to pay for power when it suits them, as opposed to when the bill comes. They are also able to see the amount of power they are using, and adjust their habits to save if necessary.

One of the major obstacles to prepay service in the US has been the cost of the customer-site equipment. The installed cost of the meter plus customer display has been more than 20 times the cost of a conventional watt-hour meter. However, recent economic analyses by Plexus and Landsberg show that utilities may be able to serve some customers with prepay service at considerable savings compared to conventional, pay-after-use service.

Prepayment is not for everyone in North America – but for many consumers and suppliers it may become a preferred way of doing business.

PREPAYMENT IN NEW ZEALAND

In New Zealand there are some 1.4 million residential customers in total, and there has been very little prepayment. The first major focus began in 1992, when a large utility was able to introduce prepayment to around 10% of its 120 000 residential customers. This was done by marketing it as a value-adding service, rather than forcing customers to use it.

It transpired that these customers were 'weekly' customers who found it difficult to cope with monthly or bi-monthly utility billing arrangements, instead of being 'bad payers'. More important, the service could be rented to customers, forming a self-sustaining business which was the key to its success.

Fewer than 50 000 prepayment meters have been installed, and there are no regulatory issues in New Zealand regarding prepayment. The government is taking a hands-off approach, and those introducing the systems have been doing so responsibly. The key is this: if the systems are imposed (hence attracting possible regulatory attention) then they are not economic to offer as a service – hence the problem is self-solving! The government is unlikely to become involved directly, but will watch proceedings carefully.

ARGENTINEAN CASE STUDY

In 1989 Argentina began an intensive privatisation programme. Before then transportation, energy and communication companies were in the hand of national or provincial governments and, of course, highly inefficient. Only the small and remote cities and towns had a private distribution of electricity, as they were forced to create co-operatives in order to be self sufficient.

The generation, transportation and distribution of electricity is almost completely in private hands. Co-operatives are thus forced to improve their efficiency if they wish to survive.

Almost 90% of the people of Argentina have access to electricity. In order to introduce prepayment systems, therefore, it was necessary to develop different software invoicing programmes, reports and special applications as part of a meter replacement or meter retrofit strategy. It was also necessary to

demonstrate to distributors that replacing conventional meters with prepayment meters – ten times more expensive – was technically and financially beneficial.

One co-operative that has adopted the scheme wholeheartedly is the Co-operative Electrica Limitada Carmen de Areco (CELCA). It has over 5 000 users in the city of Carmen de Areco, 140 km west of Buenos Aires. Prepayment meters were introduced about two years ago, mainly to combat poor payment, which averaged 26% of the total monthly turnover.

User response was positive from the start. Users appreciated the ability to control consumption by setting the amount and time of purchase and deciding when and how to consume power. They also liked being able to buy power as many times as they wanted, 24 hours a day. The traditional invoice, with its expiry date as well as uncertainties regarding meter reading and actual consumption, was eliminated.

Tokens can be obtained from CELCA's offices or a point of sale in a convenience store, open 24 hours a day all year round. About 80% of electricity sales take place at these convenience stores.

The meters are installed in the same place as the conventional meter had been. The internal distribution circuits of the user therefore remain unmodified, which means that CELCA will not have additional legal responsibilities at the customer's premises.

Prepayment has been implemented as an alternative, and users can choose whether or not to adopt it. In practice, however, applications are surpassing CELCA's installation capacity, and there are six-month waiting lists. Non-payment has already fallen from 26% to 16%, and continues to fall as more and more meters are installed.

APPENDIX 3

From Woodstock Hydro Website

Prepaid Power

PrePaid Rates for 2003: 2003 Rates

As a customer, how does it benefit me?

- Prepayment allows you to better budget and manage your electricity use. Paying for electricity after use, the traditional way, can be compared to going to a grocery store that has no prices posted, taking any food you wish home, eating it, and then getting the bill for the food several weeks later.
- Prepayment allows you to monitor how much electricity an appliance is using. You will be able to see how much it is costing you to cool your home, or to use a particular appliance. If you are using more energy than you budgeted for, you can adjust your usage to stay within your budget.
- There is no need to pay a security deposit.
- You can purchase utilities in amounts you can afford, and at times which are convenient. There are no surprises with unexpectedly high utility bills! In fact, you will never get a bill!

Is Prepayment expensive?

No! The residential customer usually rents the unit for a small monthly fee. This is deducted from your account on a daily basis, and is almost unnoticed. In fact, many of our prepaid power customers save that amount every month through careful monitoring of their consumption. Studies conducted by electrical utilities in areas around the world where prepaid power is an option, indicate savings in energy consumption of 10% - 20%. Empowering you the energy user to control your energy use will become more and more important as energy prices increase.

What about electricity bills?

Prepayment eliminates electricity bills. You decide how much money to spend on utilities at any one time, and when to buy them. This allows you to buy what you can afford at the time.

If I don't get a bill, how do I buy electricity and water?

You purchase utilities by taking the smart card which is part of your prepaid power system to one of the convenient outlets listed below. They will credit your card with the amount of utility use that you want to purchase at the time. When you insert the card into the display unit at your home the system credits you with the amount of your purchase and allows you to use services to that value.

1. **Woodstock Hydro,** 16 Graham Street, open 8:30 am to 4:30 pm, Monday to Friday.
2. **7-Eleven Convenience Store,** 3 Huron Street, corner of Dundas and Huron Streets, open 24 hours a day, seven days a week.
3. **Becker's Convenience Store,** 951 Devonshire Avenue, corner of Devonshire and Clarke Street North, open 24 hours a day, seven days a week.
4. **Mac's Convenience Store,** 361 Norwich Avenue, corner of Norwich and Parkinson open 24 hours a day, seven days a week.

How do I know how much electricity I am using?
There is a button on the front of the display box, and by pressing it, you can get information on your energy usage.

- How much power remains
- Present rate of use (in dollars or kWh)
- Amount of power in dollars used yesterday
- Amount of power in dollars used in the last month
- Date and amount of the last transaction
- Current date and time
- Estimated number of days until card replenishment at current use levels
- Much more

The prepaid power system in use by Woodstock Hydro Services Inc. and its current customers is being changed to a more sophisticated system. As this new system becomes available information on this page will be updated.