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Submission on the Consultation Draft Prepayment Metering Code

Polymeters Response International (PRI) welcomes the opportunity to comment upon ESCOSA's Consultation Draft on regulatory changes to allow for the operation of electricity prepayment meters and their use in South Australia.

Prepayment or pay-as-you-go is a natural progression in an evolving deregulated market and brings the purchase of electricity in line with the provision of other services and products used in every day life.

Implemented correctly a prepayment system can be a valuable tool to both retailers and their customers and can result in significant savings for both parties.

This was a crucial driver to PRI when it developed its Liberty prepayment technology as well as a desire to make the system as flexible as possible to all users. The amount of interest shown worldwide in this system is a testament to the careful thought and design that has gone into its creation. One UK utility company (Northern Ireland Electricity) has already purchased over one hundred and fifty thousand units to totally replace its existing prepayment system. Amongst their drivers where the need to reduce operational costs and pass the savings and other benefits on to their customers.

While no two markets are the same PRI know that there is a lot of interest in prepayment throughout Australia. We hope that our experience can assist in its implementation in South Australia to ensure its success and provide an alternative cost effective method of purchasing electricity.

We note that your paper has been written with 'smart card' card technology in mind (Clause 2.8.1 requiring the return of disconnect history on the occasion of each vend) no doubt because it provides two way communications between retailers and their customers. While this is certainly a benefit its provision does not solely lie with 'smart token' technology and the perceived benefits it does provide are overshadowed by the prescriptive nature that physical tokens require for their vending. In addition the issues around lost, stolen or faulty tokens also need to be considered as experience in the UK has shown that these can add considerably to the running costs of such systems. Prepayment reviews must consider all costs (operational and maintenance) over the installed life of both the meters and their support equipment.

Our response is based on our considerable experience with both physical token vending and Liberty's virtual token system which we know can provide additional benefits over other prepayment systems.

Michael Guy

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Response to *AREAS OF FOCUS*

2.4 Information to be provided to the customer.

In regard to providing customers with pertinent, relevant and timely information on the state of their account and their consumption we are totally in agreement particularly when regular bills including historical consumption information are not provided.

We believe this information should be displayed by the prepayment meter where it is continually provided to the customer for scrutiny and to assist in budgeting of electricity spend.

Most prepayment meters today will display the status of the meters account and the cost of each of the applicable rates along with the kilowatt-hours consumed on each rate and in total.

The information to be provided under 2.4.2 goes some way towards providing the type of information customers presently receive on a bill for a credit metered installation but falls a long way short of taking advantage of the payment and cost of energy information provided by prepayment meters.

With a prepayment meter the customers mind set is changed from one of paying a large quarterly bill for previously consumed kWhrs that they may or may not be able to readily associate with the value of the bill.

In the case of a prepayment meter the customer purchases an amount of energy to be consumed as a monetary value and hence this is the way that it needs to be presented on the meter and considered by the customer.

To assist the customer in understanding and managing their prepayment account the following information should be displayed.

A: Number of credit days left.

This is essential as it ensures the customer knows how many days of electricity they have until emergency credit is reached

B: Previous day, week, month and last 24 months cost of electricity.

This provides the customer with historical consumption information in the same way that historical information on bills for a credit meter does, but in this case the information is presented in dollars and cents which the customer can more readily associate with.

C: Current load cost

This is used as a budgeting tool, customers can turn on and off appliance to see the cost of using the appliances. This is similar to watching a disc meter spin faster as the load is increased but in this case the customer see's the actual cost.

D: Total energy consumption.

For settlement purposes

E: Current kWh demand.

For demand management although current load cost is more readily understood by the customer.

More detailed information can be provided be we believe that the Items A: to E: meet the objectives of ESCOSA in providing account details to the customer whilst taking

advantage of the demand and budgeting information that pre payment meters can provide.

It has been demonstrated and documented by Northern Ireland Electricity that the provision of this type of information has enabled 150,000 consumers to achieve an average 10 % reduction in electricity consumption. The customers comprise 90,000 existing prepayment customers who moved from an existing card based system to a keypad system and 60,000 credit customers who also moved onto the keypad based system.

Limitations of debt recovery

We understand that the proposed code has a consumer protection role for the fuel poor and hardship cases and we support this level of protection.

It should be noted however that based on our experience present technology prepayment metering offers benefits and features attractive to more affluent customer segments. These include remote display units for budgeting and the ability to bundle the prepayment offer to include other accounts like dual fuel (gas + electricity) or for such things pay off plans for energy consuming devices and house insulation which are part of existing retail offers.

2.7 Requirements for prepayment meters

Meter Display

Properly implemented the financial information available from prepayment meters can provide a powerful budgeting tool empowering the consumer to make real and informed choices in electricity consumption and demand side response. The key to this is the provision and access to appropriate data in a form that is readily understood which is why we recommend that the focus of displayed values is in monetary units. This can be further enhanced in the retail offer by providing the customer with a remote display unit inside the home for ease of access to account/budgeting/demand information.

Recommended displays

- (i) The financial balance of the prepayment meter
- (ii) Whether the prepayment meter is operating in normal credit /emergency credit / load limit or basic accumulation mode.
- (iii) Consumption information in kWhr and previous day, week, month and last 24 months cost of electricity.

Disconnection times

PRI agree that self-disconnection should not take place at weekends or Public Holidays. This is already supported in the Liberty meter which in addition can be set not to disconnect during the hours of darkness.

In Northern Ireland for example, Liberty meters will only disconnect customers if their accounts run into debt between the hours of 8.00am to 4.00pm Monday to Friday with no disconnection occurring after 4.00pm on Friday till 8.00am the following Monday. Even this however was found to be insufficient when a segment of customers were identified that were disconnecting because they were dependent on benefits and the benefit office did not open till 9.00am. For these customers the

meters functionality was changed so that disconnection only occurred between 11.00am and 4.00pm.

Emergency Credit

We note that the Commission has set a minimum limit for emergency credit and believe that a maximum limit should also be applied in the code.

Disconnecting after the meter has run up a significant deficit such as \$25 in our view is not a good idea. Firstly it promotes the concept of customers living in debt which is contrary to a pay-as-you-go system. Secondly after disconnecting customers must pay more than the money owed to put the meters account back into positive credit before they can restore their supply, something that might not be possible for some customers who might have opted for prepayment because of their financial situation.

In our opinion a nominal amount of say \$5 to \$10 would be far better bearing in mind that with proposed code, customers will only disconnect after their accounts have gone \$10 in arrears and then only during a weekday and during the hours of daylight. In addition the meters should have persistently warned them well in advance that they were approaching Low and Zero Credit. A \$10 deficit is far easier to repay to reconnect than a \$25 one.

We fully understand the Commissions reasoning behind setting a minimum figure but would point out that this has been somewhat coloured by considering only 'physical' smart tokens which require access to a physical point of sale terminal. Liberty's 'virtual' numeric token (a 20-digit number) can be vended from the same physical outlets but in addition can also be vended by means of a debit or credit card over the internet, from call centres and even via an automated telephone system similar to those used for telephone banking. Thus there is no need for customers to visit a point of sale after disconnection as credit can easily be vended via a number of sources directly to their home.

2.8 Provision for dealing with difficulties and hardship

Not all prepayment systems operate with "smart cards" and to impose the requirement in 2.8.1 that is dependent on the use of this type of system at the exclusion of others (e.g. keypad systems) seems unreasonable. It dismisses the benefits that are inherent in those systems.

The benefits of Keypad technology greatly out way the limited information that is returned by smartcard systems, much of which can be provided by other mechanisms.

The inherent benefits of Keypad metering result in a reduction of the cost to serve the customer and in the case of Northern Ireland Electricity have resulted in the removal of the metering charges standing charges.

This is achieved through:

- No tokens – reduces consumable costs
- No tokens – No addition cost to customer due to lost or defective tokens
- Reduced site visits – Due to inability to accept tokens.

- Low cost vending infrastructure – Vending can be done over the phone, internet or over the counter.

We agree that using the number, duration and frequency of disconnections as criteria to determine genuine hardship may be valid. But it does not preclude gathering this information by other means.

We urge the Commission to remove the requirement to provide the disconnection information at the next occasion on which the small customer makes a payment as this will preclude some technologies and suppliers and may leave only one vendor compliant to the code. As such we present a number of alternate to measure to protect consumers who may be identified as fuel poor or in a period of hardship

If meters are required to be read every 3 months by the National Electricity Code then information on disconnections can be collected at that time (as well as total, time of use, and half hour consumption data used for retail market settlement purposes).

If meters are not required to be read on a regular basis then disconnect data could be collected as part of the process of dealing with customers who have identified themselves as having payment problems. This would comprise of a site visit and a meter read of disconnect history to determine if the customer qualifies for the proposed free transfer to a credit meter or not. Genuine hardship with payment problems is thereby dealt with. We would like to point out that the PRI prepayment meter can be reconfigured to a credit meter in situ using a vend code supplied by the retailer to the customer. There is no need to physically replace the prepayment meter and eliminating a potential source of additional cost. The customer also retains the benefit of being able to access all the relevant consumption information that was available when the meter was operating in prepayment mode.

We would like to suggest that the criteria that is used to identify genuine prepayment hardship (i.e. xx disconnects in a given period of time for longer than xx minutes on each occasion) be defined in the code and not left to the discretion of the retailer.

Other mechanisms can be employed to ensure that customers are not treated unfairly during periods of hardship. One example is load limiting as an alternative to self disconnection.

Load limiting is an important customer protection feature that should operate either in conjunction with or instead of self-disconnection. A key feature in the design of Liberty was to maximise the benefits of having meters installed in customer's homes with integral switch's as these could be used to do more than just disconnect customers who have run into debt.

In the UK, prepayment customers are allowed to run into deficit before disconnection by £5 or £10 depending upon which retailer they take their supply from. This deficit is known as 'Emergency Credit' and is a legacy from the early days of physical token based systems when it was only possible to vend to meters during business hours. Liberty was designed to accommodate this legacy feature but with the additional capability if required to limit customers load. The benefit of doing this was to extend the amount of time that a customer could remain on Emergency Credit by restricting the amount of load that could be supplied and hence the cost.

There is no reason why self-disconnection could not be replaced by this feature with the amount of load that customers can take reducing as their debt grows till eventually they are disconnected. Conversely this feature can also be used as it is in Liberty as overload protection to stop customers connecting excessive loads. In both load limiting and overload modes of operation Liberty warns customers by an audible

and visual alarm when their loads are within ten percent of the load limit so that they can take steps to reduce their load to prevent disconnection.

Our belief is that both demand and load management are crucial tools that if not used now will certainly prove beneficial to retailers and customers in the future.

2.9.1 Recharge Facilities

For a prepayment system to be truly effective and customer friendly and remove any possibility of self disconnection due to inability to reach a recharge facility due to remoteness in the case of rural customers or lack of transport, 24/7 vending must be provided. We suggest that “or” be removed from clause 2.9.1 (a)

In conclusion

Once again we agree with the commission that the code must protect the fuel poor and those experiencing hardship. We believe that the measures employed should be regulatory and not driven by system functional requirements that limit customer product selection. Furthermore new technology prepayment systems have a wide appeal to many customer segments and are not typically used for credit management but rather budgeting and demand response.

The design and deployment of “Liberty” a new technology prepayment system in Northern Ireland Electricity demonstrates much of what can be achieved for small customers and has gained support from the Northern Ireland Regulator.

We would be pleased to put ESCOSA in contact with Northern Ireland Electricity so that they can evaluate for themselves the benefits of new technology prepayment systems for small customers.

Equally we would be pleased to present Northern Ireland Electricity’s findings to ESCOSA’s Consumer Advisory Committee.