



Monash Sustainability Institute

21st May 2011

Commissioner
Essential Services Commission
Level 2, 35 Spring St
Melbourne 3000

Dear Sir/Madam

In response to the announcement made by the Essential Services Commissions for public comment on the Issues Paper as part of the Regulatory Review on Smart meters in Victoria, we would like to bring your attention to some omissions from the terms of reference you have provided, and also comment on several of the issues raised.

Firstly, we are somewhat surprised that the terms of reference outlined in the Chairperson overview and in the subsequent Introduction and Guidelines, no mention is made to the societal benefits in terms of energy conservation and reduced emissions that should result from the appropriate regulation and use of smart metering technology. This is in contrast to the terms of reference of the Prime Minister's Task Group on Energy Efficiency, the National Strategy on Energy Efficiency, and the National Energy Efficiency Initiatives that have explicit references to energy conservation. Without recognition of this issue in the terms of reference, the use of meters will be driven purely by minimization of energy infrastructure costs, and not for purposes of energy conservation through behaviour change, or lower emissions intensity per unit of generated energy.

Secondly, we would like to bring attention to the issue of third parties participating in the access of smart metering data on behalf of the consumer, typically for monitoring and evaluation purposes. There are several good examples;

- Community groups that wish to measure the effectiveness of energy efficiency measures implemented to reduce energy consumption¹,
- Government agencies wishing to get emissions profiles by demographic or geography²;
- Research groups running trials to measure the effectiveness of awareness, educational, behaviour change or incentive programs³,
- Third party service providers offering services for building sustainability performance, for example under the NABERS rating system, or those soon to be required under the forthcoming federal residential mandatory disclosure legislation.

We see it as pivotal that the regulatory environment not only allows timely and useful access to data to consumers, but also to third parties upon consent from participating

¹ Moreland Energy Foundation data collection requirements to DEWHA under the Solar Cities Program

² Department of Sustainability and Environment, Victoria, and its internal reporting requirements for aggregate energy use across geographic locations

³ Monash Sustainability Institute research programs on footprint reduction incentive schemes

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consumers. Such data must also be accessible as a matter of standard practice, and not as an exception, as these exercises typically involve hundreds if not thousands of participants, using a variety of different retailers and distributors. Practically, an implementation would see third parties access the data from the distributors in a manner not dissimilar to the retailers. Legally, that would constitute a new Use of System Agreement between distributors and third parties requesting such information, which should be subject to regulatory control to ensure standardization across the industry, and lower barriers to entry for community and research organisations.

Please find attached our full response to specific issues within the Issues Paper that are concerned with the open, timely access to metering information. These views are endorsed by our research partners; Moreland Energy Foundation Limited, and GreenSync Pty Ltd.

Kind regards,

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2.1 Guiding Principles

Are there other guiding principles to which the Commission should give consideration in this review?

We draw your attention to the background paper that refers to the Ontario rollout of smart meters. Their stated purpose was, *“To create a conservation culture in Ontario and become a leader in energy efficiency...”*. They explicitly state further down that, *“Shifting electricity use will mean the higher cost electricity generators will be needed less. Some of those higher cost generators also create more air pollution, so relying on them less can also help benefit the environment”*. This is clearly not the case in Victoria, as base load is generated from brown coal, meaning that TOU charging has the effect of increasing the emissions intensity per KWh.

We therefore believe that since there are extensive parallels drawn between the Ontario model and what is proposed for Victoria, there should be specific reference in the Guiding Principles to energy conservation. Without it, we believe that the subsequent issues pertaining to access to information are skewed towards provision of information for billing and transparency purposes, and not overall energy conservation delivered through shifts in behaviour. It is also worth reiterating that energy distributors and retailers are not incentivised to encourage energy conservation; on the contrary, TOU charging could lead to an *increase* in consumer energy usage for the same monthly energy cost. This is testament to the importance for the regulatory frameworks to make explicit reference to conservation of overall energy consumption.

3.2.2 Managing daily consumption and costs

Will the regulation of the provision of billing level data continue to meet the needs of customers to allow them to reconstruct their historical bills in a smart metering environment for ad-hoc or occasional purposes?

We see that the regulations surrounding historical access to billing data are outdated and are in need of significant revision. Our reasons are as follows;

- This facility is being used today by consumers and acting third parties to access historical billing records for the purposes of tracking long term trends in energy usage. Examples are for use by the NABERS building ratings, which require a 12-month billing history for accreditation. The process is slow, often taking significantly longer than the 10 days best endeavor requirement in the current regulations. It also is designed as an exception rather than the norm, is a cost burden on the retailer and therefore typically under-resourced and poorly serviced.
- Requirements are currently being tabled for energy efficiency measures of buildings, in situations where users may switch energy retailers, or where a single building has multiple tenants. To meet these needs, there should be consideration for end users to be able to sign their consumption information to a third party as part of a leasing agreement. In this situation, a third party will require a standardized, automated method for obtaining historical data.

It is our view that access to historical energy usage information should be made readily available to end users as a standard part of the new smart metering ecosystem, in much the same way as



historical information is available on bank accounts. It should be available on-demand from retailers via electronic means, or at a maximum within 24 hours.

Additionally, provision should be made for historical information from end users to be accessible to a contracted third party. It is anticipated that such a third party will require timely and automated access to such historical records. This is discussed further below.

The Commission considers that there is a need for regulation to require customer access to metering data that will be available on a daily basis through secure communication methods capable of protecting customer privacy.

Comments are sought on:

- whether distributors as well as retailers should be obliged to provide metering data sets to customers
- how distributors or retailers can provide interval data from smart meters securely to customers
- how would the cost of such a service be assessed?

What other information and information sharing issues should be considered by the Commission in reviewing the regulations?

We welcome the commission's view for the proposed supply of near-real time information to consumer. Our specific comments are as follows;

- Real time data, with less than a 24-hour delay will offer more capability for interactions with consumers to engage in demand response or peak response pricing. If meter information is passed on to retailers or third parties with a 24 hour delay, it would mean that different capabilities could be provided by distributors, retailers and other third parties. In the Guiding Principles, reference is made to the *"regulatory amendments will not limit or constrain the innovation that is available from smart meters and will continue to facilitate competition in the Victorian energy retail market"*. It would seem that open, timely access to information is imperative in order to hold true to this commitment. Therefore, the issue is less about **who** provides the information, but rather that the information is made available to any or all service providers at the consent of the user, at a systems level, and as close to real-time as is technically feasible.
- Our view is that internet based services, both web portals protected by username and password with the appropriate encryption standards, as well as programmatic web services, are globally recognized for performing this type of task efficiently and securely. If we protect our bank account transactions in this way, surely we can protect our energy data that poses a much lower security risk to all concerned. There is no scientific or technical argument to suggest that the distribution and display of energy data in this manner will lead to significant privacy concerns.
- We see that there is a fair and reasonable cost with the provision of raw, near-real time data to be collected and distributed to retailers and third parties. This is the wholesale cost of data collection, as is typically charged by Meter Data Agents today. It is our view that this cost be standardized and regulated to ensure fair cost recovery to distributors, and conversely, equal and streamlined access to retailers and third parties with the right to access the data on the consumer's behalf.



- We also see there is a fair and reasonable cost with the provision of aggregated, pre-processed data to consumers that can provide significant value add on top of the raw data. We believe however, that this is too cumbersome to regulate, and that service levels can differ greatly at this level to come under any standardised pricing mechanism. That said, to ensure consumers have access to their metering information, a minimum service level that provides consumers with baseline metering information at or near the wholesale cost, should be enforced by regulation.

With respect to the other information sharing issues, we would like to propose that the Essential Services Commission seek to create a standardized legal framework that would encapsulate the contractual basis for a third party to obtain historical and recent usage data on behalf of consenting end users. The basis of this agreement would contain the following;

- Similar passages and amendments proposed by the review to the Use of System Agreements, Sections 8.1 through 8.6 to reflect the transference of smart metering information
- Standard mechanisms for identifying the end-user, and the authorization for access to the interval data on their behalf
- Standard service levels for provision of such information
- Standard wholesale costs for provision of such information, where such wholesale costs fall are regulated, and appear in the Use of System Agreements.

There would be many benefits that would result from the introduction of a standardized contract for access to information;

- Lower the significant legal and financial barriers for participation by research and community groups, which typically operate on minimal budgets,
- Standardise the formats, communication platforms and the automated process by which data is exchanged,
- Improve the standards under which data privacy is maintained, through standard processes for end user authorization for third parties to act on their behalf,
- Encourage innovation and competitive product offerings in the energy utility market, and support the development of sustainability tools and technologies