

Mr. Eamonn Corrigan
DIRECTOR
Australian Energy Market Commission
Level 5
201 Elizabeth Street
Sydney NSW 2000

10th October, 2012

Dear Mr. Corrigan

RE: Secure Australasia's response to AEMC's Draft Report – Power of Choice – giving consumers options in the way they use electricity.

We would like to thank you for the opportunity to provide a response to the AEMC's Power of Choice Draft report as released on the 6th September 2012, and hereby provide comment specifically within the areas of our expertise, namely, metering specification and effective deployment models that act as an enabler to DSP adoption and support.

Secure Australasia through its parent company Secure Meters Limited are a global leader in the development and manufacture of Smart Meters and associated Energy Monitoring and Automation product. Working across the major regions of Asia, Europe and Australia Secure has more than 30 years experience in this domain starting with the first AMI smart meter designed in the 1970's. More recently Secure is a lead supplier of AMI meters to the Victorian AMI program having delivered over 880,000 AMI meters to 4 of the 5 distribution businesses.

Secure fully supports the clear definition of a minimum functional specification to ensure commonality and compatibility of all system components as this is essential to enable consumer confidence that any device they choose to purchase will interoperate with any system installed. It is fundamental that with a move towards more consumer interaction, system components such as in-home displays, DRED and DSP devices will become increasingly prevalent and interoperability must be ensured regardless of how or where a consumer purchases such devices.

However, when defining a minimum specification, a balance must be achieved between definition of requirements verses definition of method. On one extreme, specifying how a requirement is met will fundamentally prevent innovation whereas specification of the requirement's intent or goal allows innovation on how the goal is met. Although a specification must avoid being prescriptive, thereby suppressing innovation, it must conversely be comprehensive enough to ensure all requirements are unambiguously captured and all interoperable interfaces are tightly defined. If we take the HAN requirements for example, regardless of whether a feature is considered as part of the minimum specification or an enhancement, where it relates to the interoperation of another device it must be thoroughly defined. Inclusion of a requirement for HAN interface is not sufficient unless the communication platform and protocol are defined as it is widely accepted that in-home displays will likely be offered to consumers by many parties and various avenues. Unless the interface is defined absolutely, e.g. ZigBee with SEP 1.0 for example, consumers could

be offered devices with any number of incompatible HAN interfaces such as ZigBee 2.0, DLC, Zwave, or any other system with little comprehension or understanding of its significance.

Another challenge in defining a specification, is determining what the minimum functionality level should be, fundamentally this is driven by a balance of the cost of feature verses its value and to whom the value is realised. In discussion regarding this balance, the report has used a rationale that exclusion or minimisation of features will enable metering providers to access the cheapest meters from global manufacturers; this is incorrect.

Whilst it is true that potentially "cheaper" products exist in international markets, it should be recognised that the cost differential is largely due to more relaxed metering standards which allow for less technically robust products to be used. Like other vendors, Secure manufactures and supplies meters in over 40 countries, economies of scale for component purchasing are inherent through meter design using many common components and moulds etc. However, a globally accepted meter set does not exist and all international markets have individual and very specific local requirements, consequently, each market has its own range of distinctive products.

All the existing meter vendors operating in Australia are global metering providers manufacturing and supplying products around the world, however, all offer Australian specific meter models to meet local regulations.

From January 1st 2013, under the National Measurement Act 1960, no meter can be installed in Australia unless it has gained Pattern Approval from the National Measurement Institute (NMI). To date, although not a legal requirement, Pattern Approval has long been a contractual requirement of meters sold in Australia in recognition of its specific technical requirements above and beyond other international standards. The environment that meters operate under in Australia is recognised as different to that which international standards are designed to address, for example temperature range and impulse withstand. As a consequence of this, Australian Standards and NMI, in consultation with market stakeholders, have for many years maintained a specific set of standards and pattern approval requirements to ensure Australian specific issues are appropriately addressed, such as a demonstrated, significantly larger number of meter failures due to lightning.

There are no barriers for any other vendor to enter this market beyond these regulatory requirements and other global vendors have simply not entered the market as they have not had the desire or not determined a sufficient business case to do so.

Another facilitator of price reduction is large volume contracts, distinctly different from increased volumes due to more orders. As an internationally accepted meter does not exist, manufacturing facilities cannot be configured or scaled for large scale continuous manufacture of a single common meter which would provide potential for cost optimisation. As demonstrated in the Victorian roll-out, even with a common specification, the products supplied to each distribution company are discretely different, for example, different configurations, different labeling and even different hardware. Unless every item is identical in every manner, increasing manufacturing volumes actually reduces operational and logistical efficiencies due to the specific and more complicated manufacturing schedules required. Component level benefits do exist as previously mentioned but this is already a reality, further volume discount benefits can only be achieved through large scale, pre-defined roll-outs which enable large scale purchase contracts to be agreed thereby enabling precise forward planning of component purchasing, planning of large manufacturing batch schedules and more efficient bulk freight transportation.

When it comes to establishing a regulatory framework to promote DSP via either contestable market forces or monopoly rollout there has been substantial work undertaken by both the Victorian DPI and the MCE. On this matter in all cases the conclusions reached were that the full commercial and societal benefits can only be achieved cost effectively through a Distribution Business led approach.

As previously stated, whilst there is an expectation that a cut-down minimum specification would allow access to a raft of global AMI product, this is in fact not correct. Rather, true economies of scale are achieved through large scale rollout of common product. This is true not only of the metering product itself but also for all of the associated products and services including installation and indeed options for communication technologies which are severely limited in the case of a contestable approach. Although

there is strong momentum building behind point-to-point technologies Secure is concerned this is a point in time assessment. Whilst there has been good success, for example, deploying GPRS product in NZ this may not necessarily translate to other point-to-point technologies appropriate for Australia. Certainly GPRS pricing is decreasing rapidly but does not prove a viable technology in Australia due to a fast moving telecommunications lifecycle — a risk ever present with the use of public, commercial networks. Technologies supported via high density, mass volume rollout such as mesh radio can prove extremely cost effective and this needs to be considered alongside current day mesh pricing.

Though not without its issues, the Victorian AMI experience, demonstrates the advantageous of a monopoly rollout. Lack of initial consumer engagement aside the Victorian program is now moving into a consumer delivery phase that will see, by the end of 2013, a complete standards based platform available for the support of DSP programs. It is widely believed, and the same has been echoed at other AEMC public forums, that smart metering is fundamental to demand side management. Without the common foundation, such as deployed in Victoria, the adoption of DSP will struggle.

Indeed an accelerated and full monopoly deployment allows for greater and more universal community engagement and the delivery of benefits to <u>all</u> consumers. These include ability for one to visualize their own consumption and demand trends, and to work towards shifting these patterns for both environmental and cost efficiency purposes.

In summary Secure firmly believes and contend that the power of choice will ultimately be delivered on the foundation of a large scale rollout of AMI metering and:

- The minimum specification for smart meters should be heavily based on the NSMP's national smart metering specification and associated performance standards and should as a minimum include interval data, remote communications, HAN interface and the disconnect and load control contactors. Without these fundamental building blocks the full benefits of an AMI system and DPS could not be realized.
- 2) The deployment should be undertaken on a monopoly rollout basis. As previously determined by both the Victorian DPI and the MCE, the most cost effective deployment can only be achieved through a monopoly rollout basis. This enables the full benefit of large scale volume discounts to be achieved.
- Consequently, the ability for Governments to mandate an AMI roll out should not be removed from the NEL;

Finally Secure would again to like thank the AEMC for the opportunity to comment on the Power of Choice Draft Proposal and are happy to provide any further information as required.

Yours sincerely

Peter Taylor

GM - AMI solutions

Secure Australasia Pty. Ltd.