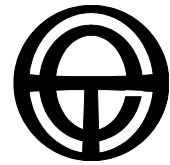


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9 May 2007

Sarea Coates
Manager
Demand-side Response Policy
Department of Industry, Tourism and Resources
Email sarea.coates@industry.gov.au

Dear Ms Coates,

Re: Terms of reference for CBA of smart meter rollout

Thank you for the invitation to attend the meeting of the Smart Meter Stakeholder Working Group in Melbourne on 10 May. However, due to constrained resources we are unable to send a representative to the meeting. We have developed a written response instead to the Discussion Paper on the terms of reference, and hope that you will be able to take it into consideration during the meeting.

In general, the paper represents a good coverage of the issues posed by a national roll-out of smart meters, and TEC supports the overall framework for the conduct of consultancies and public consultation. There are, however, some details that could be improved mainly in regard to the overall context.

We are pleased that greenhouse benefits have been acknowledged, but note their awkward fit under the "Economy and Market" column. An extra column for "other classes" (which could include other socio-economic benefits) might deal with the issue more clearly. This awkwardness represents the general failure of the NEM Objective to include environmental and social objectives.

Definition

It would be helpful for all stakeholders and the consultants if there was a definition of "smart meter", based on the base assumptions already arrived at in the Discussion Paper. Our concern is that the definition should include the need for remote communications, which is not clarified within the Discussion Paper. Many of the costs and benefits rely on the assumption that remote communications are involved. This feature may be self-evident to some participants, but it is essential for all parties to be on common ground.

Although the details of functionality are yet to be ironed out in any public consultation a working definition will be required. Information for consumers is already unclear about many billing practices let alone details of how their meter works. The class of customer has also not been clarified, that is, whether the CBA will refer only to residential consumers or to commercial and industrial customers as well. This is another feature which will influence the costs and benefits. Again, it is implied that it refers to residential consumers only, but it is not clear.

Consultation dates

We note that the final public consultation on Phase 2 is from 17 December to 25 January, a period when a large proportion of the community is on holiday. It would be more appropriate to extend the deadline into early February.

Trials

The SMSWG meeting of 8 March strongly recommended the use of trials for fine-tuning the details of any smart meter roll-out. There is no mention made of this anywhere in the Discussion Paper. Trials are particularly important to identify the appropriate hardware, software and tariff designs.

Overall reduction of consumption

The discussion of demand reduction is all in terms of peak reduction. However, a smart metering infrastructure has the potential to reduce baseload electricity consumption by 5%, not only related to critical peaks. This in turn will increase benefits for reduction of greenhouse gas emissions and deferral of generation and network investment.

We also note that a further feature of smart meters not mentioned is the potential for development of a market for demand management. This can facilitate the expansion of a DM aggregation market, as well as the potential for the development of short-term and long-term prices for DM.

Tariffs

Flexible tariff structures are essential to maximise benefits of many kinds, but this is not addressed in the Discussion Paper. Benefits will inevitably vary, depending on tariff structures particularly for consumers and also in terms of the degree of greenhouse benefit.

Different tariff structures will affect the detail and quantification of the cost benefit analysis in relation to the scenarios. If pricing structures remain as for the base case – with jurisdictional differences – then the smart meter benefits

will be reduced. Therefore the scenarios must also include a range of tariff structures. This applies at both Phase 1 and Phase 2 levels.

Objectives for assessment

We have attached a revised version of Attachment C, with amendments highlighted. The revisions refer mostly to the details discussed above.

If you have any further queries, please contact Glyn Mather on 02 9261 3437 or email glyn.mather@tec.org.au.

Thank you for your attention.

Yours faithfully,

Attachment C: functionality versus associated costs and benefits

Functionality	Networks	Retailers	Consumers	Economy and Market
Half hourly consumption measurement and recording	Network management and investment deferral - via new network tariff structures and greater knowledge of demand profiles; system planning (such as estimation of losses)	Knowledge of demand profile, new retail tariff structures, hedging, billing systems, removal of energy purchase cost averaging of load profiles	Information such as energy use and potential events, choice of tariffs, electricity bill reductions through ability to manage demand including load shifting and peak reduction	Market operation systems, price signals for energy investors, greenhouse, efficient and clearer pricing, generation investment, DM aggregation market, facility for short and long-term DM market
Communication Interface and Time of Response	Meter reading, system monitoring, fault discovery	Billing systems, billing errors and estimation, varied billing cycles, customer service, interface with network systems, cash flow, meter reading, debt mgmt	Access to consumption information, varied billing cycle, new tariff types, customer service, billing reliability/accuracy	Market efficiencies, service and reliability levels, potential for integration of other services (gas, water), change to staff profile and training
Remote Device Control – including DLC and in-house displays	Network management and investment deferral – via DLC	Hedging costs	Convenience, discounts or DLC payments	Market price, greenhouse
Import/Export Metering	DG connection, network management	Tariffs for DG exported to grid, hedging, billing system	DG connection, bills, tariffs for DG, Value of DG (especially PV)	Greenhouse
Remote Connect/Disconnect	Site visits, business processes	Customer service, business processes, supply to unoccupied premises, prepay, faster switching	Convenience, prepayment contracts, potential inaccuracy, potential for social disbenefit from lack of face-to-face service	Price effects of greater competition through faster switching, market efficiency, greenhouse, service levels
Outage Detection	System monitoring, ability to meet service standards, fewer callouts		Convenience, supply interruption	System reliability, market efficiency, service levels
Meter Tamper Detection	Maintenance and repair work, system losses	Theft detection, billing accuracy		System losses
Remote time synchronisation	Maintenance, site visits, accuracy of automated load control	Billing systems, billing errors and estimation, interface with network systems	Reliability of system	Market operation systems, system reliability
Quality of supply measurement and recording including voltage, frequency, outages and	System monitoring and planning, ability to meet service standards		Convenience, protection of appliances	Security of supply, system reliability, system efficiencies

Functionality	Networks	Retailers	Consumers	Economy and Market
other events				
Separate standard base plate	Meter upgrades (technology risk)	Meter upgrades		
Remote software upgrades	Meter upgrades	Meter upgrades	More efficient operation depending on accuracy	
Power factor measurement	Network investment, capacity tariffs		Capacity tariffs	Greenhouse benefits
In-home displays	Network management through effect on DSR	Consumption impact, hedging, prepay, customer relationship	Real-time information, customer service, informed control over consumption & greenhouse	Greenhouse, generation investment
Supply capacity control	Faster recovery from blackouts	New tariff types	New tariff types	Faster recovery from blackouts
Earth degradation detection			Electrical safety in home	
Reverse polarity detection			Electrical safety in home	
Neutral degradation detection			Electrical safety in home	

Jeff Angel
Executive Director