



24 June 2011

By email: amireview@dtf.vic.gov.au

Resources and Environment
Department of Treasury and Finance
1 MacArthur Street
Melbourne Vic 3000

Dear Sir/Madam

Submission to Department of Treasury and Finance Review of the advanced metering infrastructure program - Issues paper for public consultation May 2011

The Consumer Action Law Centre (**Consumer Action**) welcomes the opportunity to comment on the Department of Treasury and Finance's (the **Department**) *Review of the advanced metering infrastructure program May 2011* (the **Review**) Issues Paper for public consultation (the **Issues Paper**).

We also welcome the new Government's attempt to understand and address some of the underlying consumer concerns with the mandated rollout of Advanced Metering Infrastructure (AMI) or smart meters. The rollout has resulted in fear and confusion for a number of Victorian consumers and the subsequent, ongoing, lengthy and expensive, program review processes has not yet assisted in resolving consumer issues.

We believe the AMI rollout has struggled to identify, or at the very least, articulate its objectives beyond benefits to industry, including a policy vision of what it sees as the future of the energy sector from both a supply side and a demand side. While we acknowledge that AMI may have benefits for consumers, the rollout to date has failed to identify what role consumers have in the Victorian energy market, or what consumer interests need to be protected.

As representatives of consumers who have been actively engaged in the AMI process for the past four years, we feel that simple recognition that the rollout represents a significant transition in the way consumers interact with energy would have assisted the Government anticipate issues before they became problems. In particular, the lack of ownership of the rollout by Government, and thus accountability, has caused significant problems. Rather than leading the important reform, the Government largely outsourced the rollout to consultants and industry which allowed it to proceed as simple a technical upgrade. This effectively resulted in a policy vacuum.

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It is not too late for the current Government to set the process back on track. To do this, it will simply need to put the interests of consumers first. Importantly, we do not see why consumers should bear the entire upfront cost of the rollout, particularly when there are many unfounded assumptions being made about the extent of the benefits being passed through to consumers. It is our view that business should burden some of the direct costs of the rollout which may be recovered later through cost savings.

We have prepared our response to the Issues Paper below which we hope will contribute to a more successful rollout that clearly prioritises the interests of consumers.

About Consumer Action

Consumer Action is an independent, not-for-profit, campaign-focused casework and policy organisation. Consumer Action provides free legal advice and representation to vulnerable and disadvantaged consumers across Victoria, and is the largest specialist consumer legal practice in Australia.

Consumer Action is also a nationally-recognised and influential policy and research body, pursuing a law reform agenda across a range of important consumer issues at a governmental level, in the media, and in the community directly. Consumer Action has been actively involved in energy advocacy work in Victoria and nationally since the 1990s. Over this time we have provided key consumer input into important energy regulatory processes for consumers, including the current Victorian smart meter rollout and initiatives relating to improved energy price and product information disclosure following the deregulation of Victorian retail energy prices.

Since September 2009 we have also operated a new service, *MoneyHelp*, a not-for-profit financial counselling service funded by the Victorian Government to provide free, confidential and independent financial advice to Victorians with changed financial circumstances due to job loss or reduction in working hours, or experiencing mortgage or rental stress as a result of the current economic climate.

Policy principles to guide the AMI rollout

Consumer Action has been engaged in the AMI rollout for over four years, and in the National Smart Meter Program for the same period, providing input into working groups, directly engaging with government departments and ministers, writing submissions, engaging with the media, and liaising directly with consumers (particularly more recently as the rollout progresses, through our legal advice service).

On many occasions, we have highlighted the need for government to establish meaningful principles to guide the rollout of AMI, which outline the policy for consumer engagement in the program, including a broader consumer information and education campaign.

Policy principles should encourage the Government, regulators and all market participants to prioritise universal protections for all consumers. To ensure the success of the rollout, at minimum, the principles should include the following¹:

- All consumers (including low income and vulnerable consumers) have a right access electricity due to its nature as an essential service
- All consumers must be able to access a supply to meet their full household needs. Technology should not allow for essential services to be rationed, or penalise households experiencing financial difficulties.
- All information in relation tariffs and smart meter enabled products and services should be accessible and easily understandable for all consumers.
- Governments must ensure that robust measures addressing privacy, data security and data access and use are in place to guarantee consumer information is protected.

We believe the future success of the rollout lies with clear policy principles that prioritise consumers.

Recommendation 1:

Establish and implement policy principles which prioritise consumers, and which guide the remainder of the rollout of AMI. Develop these principles in meaningful consultation with consumer representatives.

Costs and benefits of the Program

We have significant concerns with some assumptions identified in previous cost benefit analyses, or more appropriately, how these have been interpreted or utilised in relation to policy. We highlight that these concerns were mirrored by the Auditor-General in his report, which states that 'optimistic assumptions have been used in Victorian AMI cost-benefit studies'.²

Unfounded assumptions are also relied upon in the most recent cost benefit analysis (Oakley Greenwood 2010) and these are discussed further below.

Significantly, we are concerned that in the Oakley Greenwood findings, a maximum of 60 per cent of potential benefits can be realised from the operation of AMI technology (as per the mandate) and 18 per cent of potential benefit realisation relies upon discretionary retailer or

¹ These basic principles, while still in draft form, have been developed in collaboration with Victorian consumer organisations including; Consumer Action Law Centre, Consumer Utilities Advocacy Centre, Victorian Council of Social Service, Kildonan Uniting Care, Brotherhood of St Laurence, Council on the Ageing

² Victorian Auditor General's Report, Towards a 'smart grid' - the rollout of Advanced Metering Infrastructure, November 2009. Pg 21

customer action.³⁴ Especially for the benefits that rely on consumer behaviour change, these are in no way guaranteed.

Category No	Benefit category of likelihood	No of benefits	Aggregate benefit value	% of total benefit value
1	Benefits resulting from operation of AMI technology (as specified for the Victorian AMI Rollout) ⁹	11	1,531	59.4%
2	Benefits resulting from operation of additional AMI technology (as identified in the 2009 Benefits Report)	15	505	19.6%
3	Benefits requiring legislative, regulatory or market rules changes	4	66	2.6%
4	Benefits requiring discretionary retailer or customer action	9	475	18.4%
Total		39 ¹⁰	2,577	100.0%

Network benefits

We have no doubt that there are benefits to network businesses, particularly savings from avoided manual meter readings and an improved ability to manage the network.

In relation to network benefits it is essential to ensure that at all opportunities those benefits are passed through to consumers, for example, as technology becomes more affordable, or where savings can be made through deferred meter replacement due to software upgrades. To achieve this, at minimum, the meters must be technology neutral.

As discussed later in this document, it is essential that benefits are passed back in a timely manner, as such we make suggestions for annual paybacks.

We also note the environmental cost of the meter technology (and the reduced lifespan of these) and believe that these are currently being considered as external costs. It is imperative that in the current climate of increased awareness of environmental concerns, that these environmental costs are internalised within project costs and form part of the cost benefit analysis.

Recommendation 2:

Policy needs to be flexible to ensure cost savings to consumers continue to be realised as cheaper technology becomes available.

Recommendation 3:

The HAN must have open standards and protocols and be technology neutral.

Recommendation 4:

³ Oakley Greenwood, Review of AMI Benefits, July 2010. Pg 10

⁴ Oakley Greenwood, Review of AMI Benefits, July 2010. Pg 10

The environmental cost of the meter technology need to be included in the overall AMI rollout.

Consumer benefits

In relation to the consumer demand response and the Home Area Network (**HAN**) benefits as identified by Oakley Greenwood, it is evident that a number of these potential benefits are linked to, and actually rely on, the HAN, and further that these rely heavily on the businesses having processes and procedures established around the HAN, including business-to-business arrangements. Such arrangements, to our knowledge, have not been fully established and thus limit consumer benefits that arise from the HAN.

Benefits also rely on consumers having devices that will enable them to access the information from their meters, such as in home displays (**IHD**), and more recently, websites (e.g. Google meter) and dongles, not to mention behavioural change. We feel that limited consideration has been given to ensuring consumers have access to IHDs and other tools as this is outside the scope of the AMI rollout.

In particular, assumptions rely upon consumers shifting consumption to off peak or shoulder periods. At minimum, this relies on real time consumption and tariff information to enable consumers to make these decisions, and then the actual ability for those consumers to make the shift - none of which is guaranteed..

These purported benefits therefore rely heavily on factors that are outside of the scope of the program, and subsequently outside of the regulatory cost recovery process. This means that additional funds need to be invested, directly or indirectly, by consumers, to receive any benefits.

Recommendation 5:

The benefits for consumer demand response and HAN benefits in the Oakley Greenwood must be correctly identified as requiring additional investment by consumers and discounted based on the likelihood that benefit realisation is not guaranteed.

Consumer elasticity / Time of use pricing

We believe that many low income and vulnerable consumers will be extremely limited in their ability to benefit from time of use (**TOU**) pricing. There is also a risk that many of these consumers will experience increased financial difficulty as a result of new tariff arrangements.

We wait with anticipation for the results of the Deloitte Customer Impact Study, which we understand is investigating the impact of TOU prices on various customer classes across Victoria. We therefore withhold our right to make further comment on broader impacts of TOU.

In the interim however, we note that Consumer Action was involved in the cost benefit analysis conducted by NERA in 2008,⁵ which found that there would be limited benefits arising from consumption behaviour change as result from TOU tariffs. NERA found that it would be difficult for some consumers to benefit from smart meters. In particular, the study demonstrated that should TOU tariffs be introduced, consumers limited ability to shift behaviour due to life and time constraints will severely impact the proposition that TOU tariffs will be effective in changing energy consumption behaviour.

For example, in relation to demand management, NERA states that “there is considerable uncertainty about how much demand would actually be affected by time of use and/or critical peak pricing”.⁶ Low take-up rates would result in increased bills or no positive change (reduction) for many consumers due to their flat or low elasticity profiles which limit their ability to shift their load. This is particularly the case for consumers who are necessarily home during peak times and must use heating and cooling appliances at those times - older consumers, disabled consumers and other vulnerable groups may receive increased bills under TOU pricing.

In addition, in relation to consumers who may be able to shift their consumption, we are concerned that fatigue during prolonged periods of extreme weather will reduce the impact of TOU and subsequently demand management.

We are particularly concerned by NERA's observation that in jurisdictions with retail competition for small residential customers, changes in network tariffs may or may not be passed through to customers.⁷ This is of increasing concern as this will potentially dilute the tariff signals to consumers. It is important that, should TOU pricing be introduced, there is a policy framework to provide consumer protections, particularly to ensure electricity remains accessible and affordable to low income and vulnerable consumers. As supported by NERA,⁸ consumers should have the voluntary option for TOU pricing and should not be required to use it should it not benefit them.

We strongly support the introduction of pricing principles which ensure that the first level of energy use, considered as ‘essential’, is retained on a low, fixed and affordable tariff while tariffs aimed at changing behaviour are targeted at ‘discretionary’ usage.⁹ This will provide additional environmental and social benefits as peaky usage and subsequent demand can be targeted.

Our concerns about TOU pricing are further exacerbated by Victoria's price deregulated market and particularly the failure of retailers to publish all their market offers. The lack of transparency of market offers provides barriers to effective consumer understanding and

⁵ NERA Consulting Cost Benefit Analysis of Smart Metering and Direct Load Control Work Stream 4: Consumer Impacts, Phase 2 Report for the Ministerial Council on Energy Smart Meter Working Group p. 113.

⁶ NERA Consulting Cost Benefit Analysis of Smart Metering and Direct Load Control Work Stream 4: Consumer Impacts, Phase 2 Report for the Ministerial Council on Energy Smart Meter Working Group p. 113, pg 113

⁷ *ibid* pg 114/115

⁸ *ibid* pg 115

⁹ For further information about such an approach, see Gavin Dufty, *Electricity Pricing – Delivering Social Justice and Environmental Equity*, in CUAC Expert Forum on Energy Pricing. 2007

market participation. We refer to the report by St Vincent De Paul¹⁰ in relation to available standing offer and market offer tariffs in Victoria and also the report by the Consumer Utilities Advocacy Centre in relation to energy switching sites.¹¹ These reports highlight the complexity of the Victorian market, specifically in identifying the best deal. TOU pricing will only make this harder.

It is essential therefore that other initiatives are introduced, whether they are Victoria-led or national, for consumers to benefit from the AMI rollout. We particularly believe that improvements in energy efficiency will occur over time as appliances are replaced with more efficient varieties and broad consumer education campaigns around energy efficiency are implemented. Initiatives could include clearer energy efficiency labelling of consumer appliances at the point of sale accompanied by tighter Minimum Energy Performance Standards to ensure that all electrical products meet minimum Australian standards of energy efficiency. This will enable consumers to actively participate in effective minimisation of their energy use with or without HAN.

Recommendation 6:

Consumers should be able to opt into TOU pricing arrangements and should not be required to use it should it not benefit them.

Recommendation 7:

The Government develop pricing principles which ensure that the first level of energy use, considered as 'essential', is retained on a low, fixed tariff while tariffs aimed at changing behaviour are targeted at 'discretionary' usage.

Recommendation 8:

The Government should develop alternative energy efficiency programs and strategies, to ensure consumers can engage in energy efficiency, and price saving activities.

Emerging risks

An ongoing risk identified early in the rollout is the lack of clear guiding policy around what consumers should experience from the rollout and the new technology, which has resulted in the following ongoing concerns and risks:

- **Privacy** - both in Australia but also internationally, consumers are raising concerns over privacy of information, ranging from unauthorised accessing of data from the HAN, businesses and their employees knowing when someone is home based on consumption data and people on the street knowing when consumers are home due to the lights flashing on meters, and we also have particular concerns regarding intermediaries.

¹⁰ St Vincent de Paul, Victorian Energy Prices, [An update-report on the Victorian Tariff-Tracking Project](#), July 2010 – January 2011

¹¹ Consumer Utilities Advocacy Centre, [Report on Energy Switching Websites](#), May 2011

- **Health Risks** - concerns are growing over the potential Radio Frequency and Electro Magnetic Field (RF/EMF) levels of smart meters - while we understand the distribution businesses have done some analysis of acceptable and safe levels of RF and EMF emitted by the meters, it is essential that a consistent and accurate message is made publicly and widely available as part of the broader consumer communications campaign to allay consumers of these fears. Consumers need independent assurance that the meters are safe.
- **Bill shock** - it is becoming apparent that the assets of distribution businesses, (i.e. the meters that have been in place for the past 50 - 100 years) were unreliable (when recording consumption information, resulting in billing inaccuracies representing higher or lower consumption than actual consumption).

This is becoming a problem for those consumers who have previously been undercharged, but are now facing more reliable readings from the newly installed smart meters. The difference for some consumers is considerable, and can tip some consumers into a cycle of payment difficulty.

We note that in the case of undercharging, consumers under the Energy Retail Code can not be charged for anything more than 12 months of prior usage, and in the case of billing errors, 9 months of usage. However we suggest that in these cases, there is clear policy around ensuring that consumers who raise the issue, based on bill shock, are not unfairly penalised for the poor performance of the distribution business' assets - which is outside of a consumer's control. For example, we suggest that any additional meter test charges are waived (these equate to approximately \$350 per test), and that payment plans are readily available.

- **Meter installation** - We are increasingly aware of a number of consumers refusing access to their meter for a meter exchange, including at the encouragement of the Government. We note that this is subsequently resulting in those consumers continuing to pay for a meter they don't have. More importantly, however, we are concerned that distribution businesses have made the decision to leave their old meter in-situ and to return at a later point in the rollout, prior to the end of the mandate, to replace it. This will result in additional costs necessarily being recovered by businesses to return to replace the meter, outside of the rollout where savings have been made by the mass co-ordinated program. As a result, additional costs may be submitted to the AER in future price determinations. This needs to be identified and limited.

Further, we have concerns that consumers will at some point need to have their meter exchanged and that if a consumer continues to prevent access to the distribution business' asset, the law has not been tested in this respect and the consequences are unknown for consumers.

Clear guidelines, outlining consumer rights and responsibilities, specifically including information that explains the consequences of denying a meter replacement, must be developed and distributed to consumers.

The regulatory framework - cost recovery

Distribution businesses are not appropriately incentivised to tightly manage project risks and minimise costs under the current Order in Council.

Cost recovery in the Order in Council¹² directs the AER to approve costs that are "prudent" and in "scope"¹³. The scope is defined in Schedule 2 of the Order in Council, and can in fact be interpreted very broadly. This limits the AER's ability to reject claims of what should be included for cost recovery. Further, in the context of the Order in Council as it stands, it enables any expenditure under 120% of budget to receive automatic cost recovery in the initial AMI Budget Period and 110% in subsequent budget periods¹⁴. Quite frankly, the Order in Council represents a blank cheque for distributors - to recover for any costs that they define as in scope - and all of these costs are passed through to consumers.

The Order in Council applies instead of the cost recovery framework for distribution businesses under the National Electricity Rules (NER). We believe that this approach has resulted in higher costs for consumers. We refer the government to the recent review conducted by the Australian Energy Market Commission (AEMC) into the cost recovery process for smart meters, which found that the existing rules "would adequately accommodate the recovery of the efficient costs of mandated smart metering infrastructure."¹⁵ Clearly the NER is a more appropriate mechanism for cost recovery of smart meters.

We urge the government to at minimum adjust the Order in Council, to reflect the provisions under the NER, or more specifically to convert it to a forecast orientated approach. In doing so, more powers should be available to the AER which should ensure that the costs being claimed by the businesses in relation to smart meters are in fact prudent, but also efficient.

We note concerns that even the current drafting of the NER however biases returns to businesses over consumers¹⁶.

Further, businesses must be required to pass cost savings from the benefits they are receiving from the rollout back to consumers in an efficient and timely manner. To ensure these cost savings are realised, we submit that the Order in Council (or the NER) be amended to facilitate a system of annual payback by distribution businesses (outside of the current 5 year cost allocation period) to enable consumers to more immediately receive the benefits of the rollout.

Heads of Power

¹² Electricity Industry Act 2000, Advanced Metering Infrastructure Order in Council 2008

¹³ *ibid* Section 52 C

¹⁴ *ibid* Section 51 2 (iii)

¹⁵ Australian Energy Market Commission, Final Report, Request for Advice on Cost Recovery for Mandated Smart Metering Infrastructure, Summary i

¹⁶ Reeves, A, 'Finding the balance—the rules, prices and network investment, Energy Users Association of Australia, Energy price and market update seminar, Australian Energy Regulator 20 June 2011

We note the amendments made to section 46D of the of the Electricity Industry Act which provides the heads of power for the Government to make Orders in Council. In particular, the amendments allow for the Government to require AMI tariffs to be published in a way for consumers to compare offers and for licensees to assist customers to determine whether they will benefit from an AMI tariff. We believe that any new order should make use of these heads of power.

Recommendation 9:

The Victorian government adjust the adjust the Order in Council that allows for cost recovery of AMI infrastructure, to reflect the provisions under the NER.

Recommendation 10:

The government amend the Order in Council to facilitate a system of annual payback by distribution businesses to enable consumers to more immediately receive the benefits of the rollout.

Recommendation 11:

The government invoke its powers under the Electricity Industry Act to ensure that customers can compare offers using an AMI tariff and require licensees to assist customers to determine whether they will benefit from an AMI tariff.

Consumer protections / realisation of benefits

Essential to the success of this program, is the protection of consumer interests through the development of a comprehensive consumer protection framework that is effectively enforced. Without these, consumers will struggle to fully realise benefits and the rollout could lead to affordability problems due to higher underlying costs and increased bill volatility.

Consumer Action, alongside others¹⁷ have developed a number of draft principles in addition to those earlier in this document, that we think are essential starting points to the future of the AMI rollout. These are provided in Appendix 1.

Consumer communication campaign

A consumer communication campaign must be rolled out in an independent manner to assure consumers that they have the opportunity to remain on their current tariff and with their current retailer or to switch should the offer meet their needs. The campaign needs also to address consumer understanding of smart meters, HAN, IHD and their load profile so consumers can assess the cost and behavioural practicalities of switching.

We believe that there have been little or no efforts to communicate benefits to consumers beyond information being made available on websites, or through letters in the lead up to their meter installation. It is essential that a clear and well budgeted consumer education program/campaign is developed with the mandate that messages to consumers are clear and honest.

¹⁷ These basic principles, while still in draft form, have been developed in collaboration with Victorian consumer organisations including; Consumer Action Law Centre, Consumer Utilities Advocacy Centre, Victorian Council of Social Service, Kildonan Uniting Care, Brotherhood of St Laurence, Council on the Ageing

A communications campaign needs to be widespread and government-led; this should include media, but must also address the needs of vulnerable consumers and those consumers with poor energy literacy. For these purposes the government must engage and fund consumer and social representative organisations to provide this level of engagement.

Recommendation 12:

A comprehensive consumer protection framework that prioritises the interests of consumers, is maintained and effectively enforced.

Recommendation 13:

A clear and well budgeted consumer education program/campaign is developed with the mandate that messages to consumers are clear and honest.

Consumer Advocacy Panel grant recipient - disclaimer

This project - No. 408 - NEM Network coordinator and consumer advocate, is funded by the Consumer Advocacy Panel (www.advocacypanel.com.au) as part of its grants process for consumer advocacy projects and research projects for the benefit of consumers of electricity and natural gas.

The views expressed in this document do not necessarily reflect the views of the Consumer Advocacy Panel or the Australian Energy Market Commission.

Should you have any questions about this submission, please contact me on 03 9670 5088.

Yours sincerely

CONSUMER ACTION LAW CENTRE



Janine Rayner
Senior Policy Officer

Appendix 1 Draft consumer policy principles¹⁸

- Regulators must ensure businesses gain explicit informed consent in a time variant pricing environment.
- Consumers should be able to access their consumption information free of charge, easily and securely; at an appropriate level of granularity; and in a format suitable to the needs of different energy users.
- Consumers must be provided with information which facilitates an *understanding* of their individual consumption patterns, and the options available to them, prior to making a decision to enter in to a time of use tariff contract.
- The explicit informed consent of a consumer is required at the time of entering a new contract in relation to energy supply.
- Consumers must be provided with assistance to ensure they have the capability to utilise the functionalities of smart meters. In particular, support such as financial assistance and education should be given to vulnerable and disadvantaged consumers.
- Subject universal principles, consumers should be able to choose how their consumption data is used and by whom.
- In the transition to the National Energy Retail Law, Victorian legislation must prioritise consumers in the development and maintenance of consumer protections in relation to smart meters.
- The National Energy Retail Law and Rules must include provisions that ensure consumer interests are prioritised in relation to smart meter functionality.
- Social protections (eg concession arrangements, social security, income support, consumer protections) must adequately address changes to energy use, costs and services due to the introduction of time variant tariffs and smart meter enabled products and services.
- Regulators must ensure that retailer products and services (i.e. market offers) maximise benefits for consumers, minimising split incentives of energy sales vs. energy efficiency.
- Retailers must ensure that consumers are not unduly penalised for any re-assignment of tariffs
- Use of load control via the HAN is subject to certainty of network integrity (security and reliability) and consumer protection.
- The government is responsible for clearly developing responsibility and accountability guidelines for efficient market operation that maximises benefits to consumers as a result of the mandated smart meter rollout.
- Costs associated with the mandated smart meter rollout/project must be transparently displayed on a customer's electricity bill.
- Future additions of water and gas metering to the existing electricity smart meters, must undergo extensive cost benefit analysis clearly identifying benefits and costs to consumers and must not compromise/undermine the integrity of the electricity smart meter system .

¹⁸ These basic principles, while still in draft form, have been developed in collaboration with Victorian consumer organisations including; Consumer Action Law Centre, Consumer Utilities Advocacy Centre, Victorian Council of Social Service, Kildonan Uniting Care, Brotherhood of St Laurence, Council on the Ageing

- Where companies generate additional revenue through other/non-mandated rollouts (eg gas or water meters), the regulator must ensure benefits are shared with consumers appropriately.
- Before new functionalities are operationalised, appropriate consumer protections must be developed and in place, eg direct load control.
- Basic standing offers must be universal, comparable and easy to understand.
- The HAN must have open standards and protocols and be technology neutral.
- Retailers must recognise and register all HAN devices, unless an exemption is granted from the regulator.
- Any messaging via the HAN must be opt in only, with the exception of those messages from emergency services (in relation to an emergency event), and disconnection warning messages (note that this is not in lieu of other regulatory requirements in relation to disconnection warnings).
- Where a consumer has previously opted in, no barriers should exist for timely resolution of instances where they have subsequently chosen to opt out.
- Any HAN products or services must address the *Consumer HAN Policy Principles*¹⁹ document as tabled to the NSSC as developed and endorsed by consumer organisations, including Consumer Action.

¹⁹ Consumer Principles for Home Area Networks and Direct Load Control, v 1.0, <http://share.aemo.com.au/smartmetering/Document%20library/Work%20Stream%20documentation/BPPWG/Metering%2030%20-%2023-25%20May%2011/BPPWG%20workshop%2030%20-%20Consumer%20principles%20for%20HAN.pdf>