



10 October 2008

Maree McGregor  
Electricity Commission  
PO Box 10041  
WELLINGTON

Dear Maree

### **Consultation on Part D**

Arc Innovations Limited ("Arc") is pleased to make submissions on the Electricity Commission's Part D Review Discussion Paper issued on 6 August 2008 ("Paper").

Arc's detailed response to the issues raised in the Paper is **attached** to this letter. In that response we make the following key submissions:

1. We have requested a Rule change to prevent Retailers swapping out advanced meters when a consumer elects to switch retailers, without attempting to agree a switching agreement with the incumbent metering provider. Arc believes that switching out of new technology with technology with the same functionality would cause significant market inefficiencies and be uneconomic and unsustainable for the entire industry. It would also detrimentally impact end consumers as the cost of such inefficiencies would ultimately be passed on to them.
2. We have supported third party access to metering data only where a contractual arrangement is not viable/appropriate (e.g. when a consumer requires information) or is under negotiation. It is important to recognise that advanced meter providers have invested significantly in technology development to enable sophisticated collection, use and manipulation of data. In order to promote continued investment and product innovation in this area (which should lead to innovative and value added services to end consumers) participants should be free to allocate value by contractual arrangements.
3. We have recommended that the Rules are revisited to move away from using physical asset "demarcation points" to distinguish participants' responsibilities. We believe the proposed approach to address the issue through definition changes is not sufficiently flexible given that electronic data may arise, exist and be accessed in many different and constantly evolving system configurations. We have suggested that responsibilities are better distinguished with reference to the particular activities of the participants and their use of metering data.

Thank you for the opportunity to make a submission on this Paper. Please do not hesitate to contact us should you have any questions around our comments.

Kind regards

**Simon Clarke**  
General Counsel

## Appendix 2: Form of Submission

Name of submitter: Arc Innovations Limited

	Question	Comment
Question 1	The Commission seeks comments on the guiding principles for the part D review project. Please give reasons for your view.	No comment
Question 2	The Commission seeks comments on the proposed definitions for metering and metering infrastructure. Please give reasons for your views.	<p><b>Metering installation:</b> We do not agree with this definition. Please refer to our response to Question 13.</p> <p><b>Metering:</b> We believe that any definition of “metering” must be technology neutral in order to cover any future developments.</p> <p>We believe that further consideration should be given to the definition of “Control” included within the proposed definition of “metering”. The scope of the current summary statement is not clear.</p> <p><b>Metering Infrastructure:</b> Arc supports the proposed definition.</p>
Question 3	The Commission seeks comments on the responsibilities for provision of metering installations and responsibility for compliance with codes of practice. Please give reasons for your views.	<p>Arc supports a flexible model which places responsibility on the most appropriate participant based on economic efficiency.</p> <p>We do not believe a restructuring of the market (for example giving lines companies responsibility for providing meter installations) would be appropriate because this would cause an undesirable level of disruption to the market.</p>

	Question	Comment
		<p>In our view participants have already moved to agree their own contractual arrangements. Accordingly, there is no need for a Rule change or model arrangement (which although useful is unlikely to be put in place in a sufficiently timely manner given the fast moving market).</p> <p>With reference to paragraph 3.5.8, we consider that arrangements regarding metering infrastructure compliance should remain flexible and should be as negotiated between the meter equipment owner and the retailer.</p> <p>Please see also our comments to Q14 which advocate a Rule change to regulate the practice whereby retailers swap out advanced meters when a consumer elects to switch retailers, in order to address the significant economic inefficiencies created by this practice and the inevitable cost to end consumers.</p>
Question 4	<p>Is there a need to have a more transparent market system so that reconciliation participants trading an installation can gain information on certification and meter attributes to the meter register level? If so, should these records be maintained by metering equipment owners? Please give reasons for your views.</p>	<p>We agree that more detailed information on meter attributes should be available to participants. We suggest that the registry is expanded to include all information provided between retailers in respect of meters during consumer switches, such as certification, serial no., tariff etc. We consider it most efficient for this information to be held in a publicly available repository so that participants can conduct searches without seeking information from other participants (retailers or meter owners).</p> <p>In our view it is appropriate for the retailer (as the participant with obligations to other retailers and consumers) to have responsibility for updating and maintaining the registry. In addition, as noted below, there may be multiple party ownership of metering equipment, and therefore the retailer is in the best position to provide information regarding each metering installation across multiple parties. The retailer is also ultimately responsible to the end consumer. Provision of information by the meter equipment owner(s) to the retailer should be addressed by the relevant contract.</p>

	Question	Comment
Question 5	There are already a large number of meter equipment owners that may not realise that they have obligations under the Rules, e.g. customers who own their own CTs etc. Do you see split (multiple parties) meter equipment ownership at a metering installation as an issue? The Commission seeks comments on the structure of meter equipment ownership, please give reasons for your views.	<p>We agree that split meter equipment ownership at a metering installation is an issue and can result in confusion regarding obligations under the Rules.</p> <p>We consider that maintaining a public register with detailed information, including ownership of all the component parts of a metering installation, would go some way to ensuring owners appreciate their obligations under the Rules.</p>
Question 6	The Commission seeks comments on the demarcation between the metering installation and the reconciliation participant's "back office". Please give reasons for your views.	<p>In our view, the demarcation points referenced by the Rules are based on old technology and are not appropriate for AMI and/or electronic data.</p> <p>From a drafting perspective it becomes problematic to prescribe demarcation points for AMI when the electronic data may arise, exist and be accessed in many different (and constantly evolving) system configurations. For example, as the Commission has noted, the demarcation point reference for parts J and D presents difficulties because with AMI, visibility of "the point at which the meter read exists" can be several different locations<sup>1</sup>.</p> <p>Accordingly, we recommend a new approach that moves away from a reliance on demarcation points and instead prescribes responsibilities for participants based on the participant controlling the data, accessing the data, and the use to which the data will be put.</p> <p>We strongly oppose any Rule change that will prescribe the system configuration required for AMI as this is unlikely to be sufficiently technology neutral to future proof the Rules and may undermine technology innovation.</p> <p>We note that we found the diagram on page 23 confusing and unhelpful given the way in which meter data is actually stored and accessed.</p>

<sup>1</sup> Para 3.6 of this document and Part A, Appendix B of the AMI Discussion Paper.

	Question	Comment
Question 7	Is there a need to develop a new code of practice to cover the security standards required for metering installations and for metering infrastructure? Please give reasons for your views.	We believe that there is no need to develop such security standards. The market is self regulating in this regard. It is in the interests of all AMI providers to ensure their solutions are robust from a security perspective. In addition, technology changes very quickly in this area and we do not think it is feasible for codes to keep pace with best practise.
Question 8	The Commission seeks comments on access to metering systems. Please give reasons for your views.	<p>Arc supports the Commission's goals of achieving open and non discriminatory third party access to metering services, however this must be achieved while preserving conditions for innovation amongst meter owners and retailers. New product development will result in better and more diverse AMI products which are able to offer consumers a greater range of services (eg home area network (home alarm management, white ware diagnosis etc..) and more control over electricity costs (eg: day and night tariffs).</p> <p>Meter owners have invested significantly in smart, future proofed technology which is capable of storing, using and manipulating raw meter data in many different ways. Accordingly, in order to continue to promote investment and innovation in the AMI space, AMI meter owners must have the right to contractually agree the arrangements around services to be provided with respect to access to meter data on a commercial basis. There is a risk that removing meter owner's rights to control access to metering systems will cause AMI functionality to be "dumbed down" as meter owners will not be incentivised to invest in future proof technology to provide additional future services that are currently not contemplated.</p> <p>We believe that there is a competitive market for provision of metering systems in New Zealand and as such a model contract is not necessary. In addition, based on the MUOSA experience, we think it unlikely that a model contract could be put in place in a sufficiently timely manner given the fast moving market.</p>

	Question	Comment
		<p>We do not oppose Rules that give access to metering systems to parties who:</p> <ul style="list-style-type: none"> <li>• may not have a contractual relationship with the metering owner <b>provided</b> such access does not give commercial benefit to the accessing party. For example, granting access to data necessary to resolve a dispute between participants or to consumers would be appropriate.</li> <li>• require that data to comply with the Rules <b>provided</b> the use to which that data is put is limited to achieving compliance. For example, in circumstances where a retailer and meter equipment owner have not agreed a switching agreement, the meter equipment owner should be required to provide certain raw meter data to that retailer to enable the retailer to invoice its consumers. However, no other rights in relation to that data should be granted to the retailer, except as agreed under the switching agreement.</li> </ul> <p>In our view the Australian NEC terms set out in Appendix 3 are too broad as these provide access to participants who may not have a contractual relationship with the meter owner but who will derive commercial benefit from access to the metering data.</p>
Question 9	The Commission seeks comments on the certification of load control devices. Please give reasons for your views.	<p>AMI enables load control beyond the current technologies such as ripple relay control. AMI brings a new level of load control functionality via home networks or other open standards technology. Focus on load control devices is not necessary in this context. We do not agree with the statements made in paragraph 3.8.4.</p> <p>We support the concept of load control devices (such as home network compatible devices) being manufactured to open standards. These devices can be considered as consumer electronics and should not be subject to additional testing and certification.</p>

	Question	Comment
Question 10	<p>The Commission seeks comments on ownership of data from metering installations. Please give reasons for your views.</p>	<p>As a general comment we note that it is not possible for electronic data to be “owned” in the legal sense of the word. Only the media on which the data is stored or physically represented can be owned. Therefore, it is more appropriate to discuss electronic meter data with reference to who <i>controls</i> that data and the <i>rights</i> participants have to access and use that data.</p> <p>As we have noted above, meter owners have invested significantly to provide technology capable of storing and manipulating raw meter data. In order to continue to promote innovation, product development and investment in this area, meter owners must be able provide access to meter data to third parties on a commercial basis. Accordingly, we strongly oppose any Rule change that will require meter owners to provide meter data to participants with whom they do not have a contractual arrangement.</p> <p>In addition, we wish to point out that AMI provides the ability to collect gas, water and other utility data as well as data from home area network services such as whiteware diagnosis and home alarm system management. These additional services provide benefits to end consumers by reducing household costs. Accordingly, any Rule changes should be limited to electricity meter read data so as not to constrain the ability of AMI meter providers to collect and distribute other types of data.</p> <p>To summarise:</p> <ul style="list-style-type: none"> <li>• it is not appropriate to prescribe who ‘owns’ electronic raw meter data.</li> <li>• there may be some limited circumstances where it is appropriate to give certain participants <i>rights</i> to access or be provided with certain data (for example information necessary to resolve disputes).</li> <li>• AMI meter owners who <i>control</i> the data should be free to obtain commercial benefit and returns on their investment in AMI technology through arms length contractual arrangements.</li> <li>• AMI supports the collection of many types of data, of which only electricity meter read data should be subject to the Rules.</li> </ul>

	Question	Comment
Question 11	The Commission seeks comments on updating the Codes of Practice. Please give reasons for your views.	We support the ongoing maintenance of current Codes of Practice. As a general comment, codes should be more outcome focussed and less prescriptive, in order to address the particular issue and minimise redundancy as a result of technology developments.
Question 12	The Commission seeks comments on audit of meter equipment owners to ensure that rule obligations are being met.	<p>We consider that auditing metering equipment owners has some merit. However, we note that as such audits do not currently take place, the costs of compliance have not been provided for in the relevant participants' business models. Accordingly, meter owners would need to consider (depending on quantum) whether such additional costs should be passed on to its customers. Given that such costs may eventually be passed on to the consumer, we suggest that a further cost/benefit analysis is carried out prior to introducing audit requirements.</p> <p>If auditing requirements are developed these should take account of the function various meter types perform (e.g. network injection point) and the impact they may have on the reconciliation function. Arc does not believe a single auditing requirement for all meter types is appropriate.</p>
Question 13	The Commission seeks comments on the outstanding rule change amendments from the AMI policy. Please give reasons for your views.	<p><b>Appendix B, Question One:</b> Arc does <b>not</b> support the proposed definition for "metering installation". As discussed above, the emphasis on demarcation points is no longer appropriate or necessary in the context of AMI.</p> <p>We believe the current definition is sufficient to cover advanced and vanilla meters and that inclusion of the communications network is not necessary for every use of the term "metering installation" in the Rules.</p>

	Question	Comment
Question 14	<p>Are there any other issues related to metering that you would like to raise? If yes, please provide examples and possible solutions.</p>	<p>We seek a change to the Rules that will prevent retailers swapping out AMI metering equipment for an alternative with the same functionality purely because a consumer has elected to change retailers. This practise causes significant market inefficiencies, overcapitalisation and in our view is an economically unsustainable model for the entire industry, including consumers.</p> <p>Given the benefits that AMI can provide to all participants and consumers, it makes poor economic sense for retailers and the industry generally to replace advanced meters with lesser capable vanilla meters, yet we have observed this behaviour.</p> <p>It is also inefficient for retailers to replace one model of advanced meter with another model of advanced meter (with the same functionality) when a consumer elects to change retailers, without attempting to negotiate a switching agreement terms with the incumbent meter owner.</p> <p>We do not believe that the solution to this issue is to give responsibility for meter installations to lines companies (as in other jurisdictions) as this would cause significant disruption to the market and current arrangements.</p> <p>However, we do believe that intervention by the Commission is desirable in order to ensure consumers and lines companies have access to technology that offers the benefits of AMI by allowing meter equipment swap outs only when to do so makes economic sense for the market as a whole (for example when a metering solution provider fails to properly perform its obligations).</p>