



7 November 2017

Submissions  
Electricity Authority  
By email: [submissions@ea.govt.nz](mailto:submissions@ea.govt.nz)

### **Data and data exchanges for market transactions**

Meridian agrees with the Authority that data and data exchanges are essential to the physical operation of the electricity system and operation of the markets. The industry is changing and will continue to do so in the future. While we cannot anticipate the future, it does seem likely that there will be an increase in data volumes as well as more parties wanting to interface with that data.

Meridian is generally comfortable with the data systems currently used and considers them to be capable of adapting to future needs. However, we look forward to reading submissions from other participants and assessing any specific issues identified. The more significant challenge that lies ahead is for the industry to strike a balance between:

- customer privacy and data security; and
- access to information to enable new business models and competition in all parts of the industry.

We hope that the Authority will engage more with this fundamental issue in the upcoming consultations on a default distribution agreement and multiple trading relationships.

Appendix A provides Meridian's comments on the specific consultation questions. Please contact me if you have any questions regarding this submission.

Yours sincerely

Sam Fleming  
Regulatory Analyst

DDI 04 803 2581  
Mobile 021 732 398  
Email [sam.fleming@meridianenergy.co.nz](mailto:sam.fleming@meridianenergy.co.nz)

## A. Responses to consultation questions

	Question	Response																														
1	What inaccuracies in data and data exchanges have you experienced, for what reasons, and with what impact?	The table below identifies some of the more common inaccuracies encountered by Meridian.																														
		<table border="1"> <thead> <tr> <th>Data Inaccuracy</th> <th>Source</th> <th>Reason</th> <th>Impact of inaccuracy</th> <th>Potential solution</th> </tr> </thead> <tbody> <tr> <td>Register content code/Period of availability</td> <td>MEP to Registry</td> <td>Unknown, likely human error</td> <td>Manual investigation. Possible correction to quoted customer pricing</td> <td>Improve Registry validation to minimise invalid combinations or invalid period of availability for a network area</td> </tr> <tr> <td>Compensation factor</td> <td>MEP to Registry</td> <td>Unknown, likely human error</td> <td>Market settlement and customer billing incorrect Potential financial loss</td> <td>Stronger compliance/audit focus on accuracy of information directly related to customer billing</td> </tr> <tr> <td>Switch event meter read</td> <td>Losing Trader to Gaining Trader</td> <td>Estimates used instead of actual read</td> <td>Customer billing incorrect (maybe too high or low) Manual read change process required</td> <td>Require actual reads at switching for AMI meters (that are able to be read remotely)</td> </tr> <tr> <td>AMI flag</td> <td>MEP to Registry</td> <td>Differing interpretation of when AMI flag is to be used</td> <td>Actual reads not able to be obtained and additional investigative work required to resolve</td> <td>Clarify Code requirements for this Registry field</td> </tr> <tr> <td>Metering event dates</td> <td>MEP to Registry</td> <td>The Registry doesn't allow metering events entered on the same day from different MEPs and does not allow for a backdated MEP switch after a Trader switch</td> <td>Manual investigation MEP non-compliance</td> <td>Allow metering events on same day from losing and gaining MEP and allow for the MEP switching process to be initiated by a previous Trader</td> </tr> </tbody> </table>	Data Inaccuracy	Source	Reason	Impact of inaccuracy	Potential solution	Register content code/Period of availability	MEP to Registry	Unknown, likely human error	Manual investigation. Possible correction to quoted customer pricing	Improve Registry validation to minimise invalid combinations or invalid period of availability for a network area	Compensation factor	MEP to Registry	Unknown, likely human error	Market settlement and customer billing incorrect Potential financial loss	Stronger compliance/audit focus on accuracy of information directly related to customer billing	Switch event meter read	Losing Trader to Gaining Trader	Estimates used instead of actual read	Customer billing incorrect (maybe too high or low) Manual read change process required	Require actual reads at switching for AMI meters (that are able to be read remotely)	AMI flag	MEP to Registry	Differing interpretation of when AMI flag is to be used	Actual reads not able to be obtained and additional investigative work required to resolve	Clarify Code requirements for this Registry field	Metering event dates	MEP to Registry	The Registry doesn't allow metering events entered on the same day from different MEPs and does not allow for a backdated MEP switch after a Trader switch	Manual investigation MEP non-compliance	Allow metering events on same day from losing and gaining MEP and allow for the MEP switching process to be initiated by a previous Trader
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2.	What are the types of benefits and the costs of being able to reduce settlement periods between industry participants?	<p>In 2013 Meridian submitted on the consultation paper <i>Settlement and Prudential Security Review</i>. At that time Meridian submitted in support of a move to weekly settlement.</p> <p>Meridian remains of the view that there may be benefits to weekly settlement and that the Authority could usefully reassess, in a 2017 context, the costs and benefits of moving to weekly settlement. We would need to see the details of any proposal in order to determine whether a net benefit is likely for Meridian and the</p>																														

		<p>industry as a whole.</p> <p>The one-off and increased ongoing costs for retailers are not insignificant. Additional FTEs would be required and result in increased ongoing costs compared to the current monthly settlement process. However, the costs may be outweighed by the benefits of reduced prudential costs and reduced uncertainty in respect of recovering for defaults.</p> <p>While there would be definite prudential benefits, Meridian considers that the Authority has overestimated the extent of any competition and efficiency benefits that might result from shorter settlement timeframes. In particular, shorter settlement periods are not required to enable participants to bill consumers more regularly using actual consumption data; this sort of innovation can occur independent of reduced market settlement periods and in fact already is occurring.</p>
3.	What are the types of benefits and costs of more standardisation in data and data exchanges?	<p>In general, Meridian supports greater standardisation of data formats and exchanges.</p> <p>In Meridian’s submission on the <i>Operational review of Electricity Information Exchange Protocols</i>, we noted our support for a single approach to unit quantity and attributes used in the calculation of the network charge under EIEP1. In the long-term, Meridian would like to see a move towards a single standardised reporting methodology for EIEP1. Meridian also strongly supported the proposal to mandate EIEP5A and to the extent possible encourages greater standardisation of notification processes for unplanned outages and alignment of EIEP5A and 5B.</p> <p>Similar efficiencies through standardisation can likely be realised elsewhere in the data system.</p>
4.	What are the types of costs and the benefits of using more accurate available data for settling transactions?	<p>This section of the consultation paper seems primarily focused on the use of half hourly (HHR) data for reconciliation and settlement. The consultation paper states that:</p> <p><i>“Detailed consumption data is available which would allow more accurate invoicing of participants using actual consumption data and reconciling electricity balances using real-figures.</i></p>

		<p><i>Instead, some participants aggregate the HHR data which is provided for settlement purposes. This means that participants are being invoiced on estimated figures which must be washed up at a later date.”</i></p> <p>The Authority is essentially characterising retailers as having perfect HHR consumption data but no incentive to use it. This is not necessarily the case. Not all retailers are necessarily receiving verified, billable HHR data from their MEPs. Unverified HHR data still contains gaps and inaccuracies. This means that not all retailers are able to use HHR data for settlement and billing across their entire customer base. Further, where significant gaps remain, it is potentially inefficient to have parallel systems for settlement and billing with some based on HHR data and some not.</p> <p>Furthermore, just because HHR data is not used for billing does not mean (as the Authority suggests) that estimates and inefficient wash-ups are always required. We understand that some retailers bill customers with smart meters based on verified, actual, monthly consumption data (not estimates).</p> <p>Meridian customers with smart meters can enjoy the benefits of their smart meter by accessing their HHR consumption data via the MyMeridian application and website:  <a href="https://www.mymeridian.co.nz/login/">https://www.mymeridian.co.nz/login/</a>.</p>
5.	What changes may be required to allow more buyers and sellers of products and services can access the industry's data systems in the future?	We have not identified any barriers in the current data system and consider there to be sufficient capacity to accommodate increased participation. New entrants may be better placed to identify any barriers in the data system. However, judging by the entry and innovation in the industry, it seems that any barriers to date have not been insurmountable.
6.	What are the risks to security of data exchange and consumer privacy from more participants exchanging more data?	<p>Meridian takes the privacy and security of customer data very seriously. The seriousness of our obligations in respect of customer data does not change based on the number of customers or volumes of data.</p> <p>We consider our current systems to be secure and capable of accommodating increased</p>

		<p>participation and data exchanges.</p> <p>Participants face significant reputational and commercial repercussions if they fail to uphold their privacy and security obligations.</p> <p>As the number of participants increases, security and privacy risks may also increase. It is important that participants have the legislative knowledge, privacy procedures, and information technology security in place to adequately mitigate privacy and security risks.</p>
7.	<p>What is your view of the Authority's overall impact assessments of the potential problems facing the electricity industry today and in the future (Table 3)? Use the Impact Assessment template in Table 10 (Appendix A) to note any changes.</p>	<p>In general, Meridian is of the view that the impacts of the "possible matters" have been significantly over-estimated. For example, we are of the view that transactions are, in fact, settled using the most accurate data. Using unverified HHR data for settlement purposes would be neither more reliable nor more efficient.</p> <p>The language used in the impact assessment is vague with the Authority identifying a range of "possible matters" but then appearing to attribute real impacts to the "possible matters".</p> <p>A traffic light impact system does little to identify or quantify real impacts. For example, at what point is an impact considered to be high? It appears to be an estimate of impacts based on broad judgements and speculation. It would be more useful and would facilitate more meaningful engagement with the Authority if the Authority was more explicit about how possible matters were assessed.</p> <p>We assume that a fuller and more transparent impact assessment would be undertaken if there are any individual, concrete issues to be further explored following this consultation.</p>
8.	<p>What other potential problems do you think impact data and data exchanges for market transactions? Use the Impact Assessment template in Table 10 (Appendix A).</p>	<p>We have not identified any other potential problems that impact data and data exchanges for market transactions.</p>