

Customer Access to Data

Submission to the Productivity Commission
December 2016



Energy
Consumers
Australia



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Introduction

Energy Consumers Australia would like to thank the Productivity Commission for the opportunity to appear on 28 November 2016 at the Sydney public hearing on the Commission's *Data Availability and Use Draft Report* (the Draft Report). At the hearing the Chair invited us to make a submission specifically focused on whether the Commission's recommendations would adequately capture the data required by consumers.

This submission responds to that invitation and augments the information available in Box 4.7 of the Draft Report and the proposals in section 9.2.

The Electricity Market and Consumers

Energy Consumers Australia was established by COAG Energy Council to ensure an evidence base in regard to consumer issues and interests is before Ministers and Officials in decision making on energy sector matters. Our constitution states our objective as the following.

To promote the long term interests of consumers of energy with respect to the price, quality, safety, reliability and security of supply of energy services by providing and enabling strong, coordinated, collegiate evidence based consumer advocacy on National Energy Market matters of strategic importance or material consequence for Energy Consumers, in particular Residential Customer and Small Business Customers.

To further that objective, we have carefully considered what is required to promote the long term interests of consumers. We conclude that it is economic efficiency and that, where viable, effectively competitive markets deliver efficient outcomes.

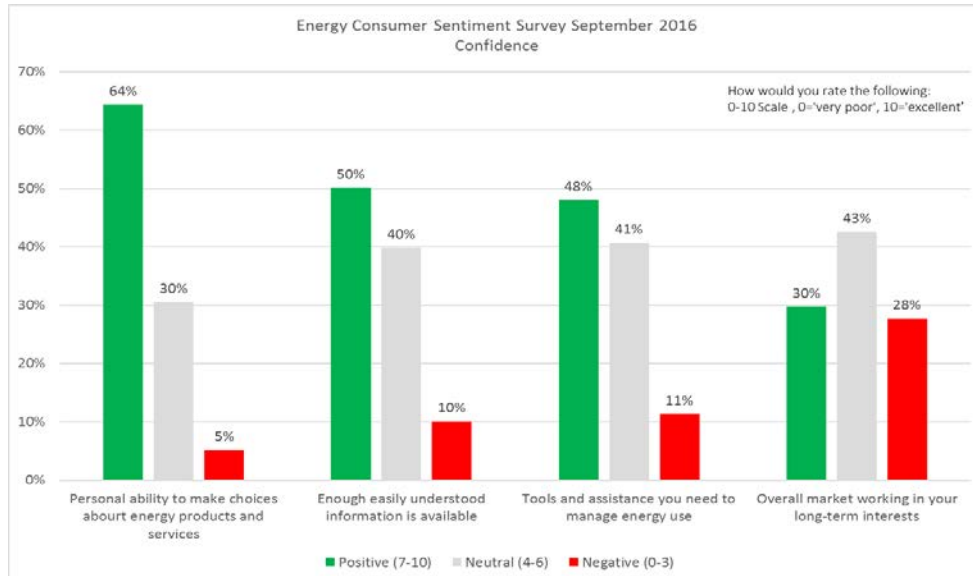
We are now spending more time considering in detail whether the retail market is effectively competitive. The evidence available suggests it isn't as effective as it could be and the difficulty of making price comparison is a factor in that outcome.

Twice a year we conduct an Energy Consumer Sentiment Survey. Figure 1 below provides responses to four questions on how well consumers rate a number of dimensions of their confidence in aspects of the market.

While consumers are mostly confident in their own ability to make choices (64% positive response), they are less confident that they have the information and tools available to them to manage energy use (48% positive response). Overall only a third (40%) give a positive response to the proposition that the market is working in their long-term interests.

Providing consumers with more useable information was the motivation behind what Thaler and Sunstein in *Nudge! Back in 2008* labelled RECAP - Record, Evaluate, and Compare Alternative Prices. David Halpern, head of the UK Behavioural Insights Team, outlines in his book *Inside the Nudge Unit* that "midata" was an evolution of this concept.

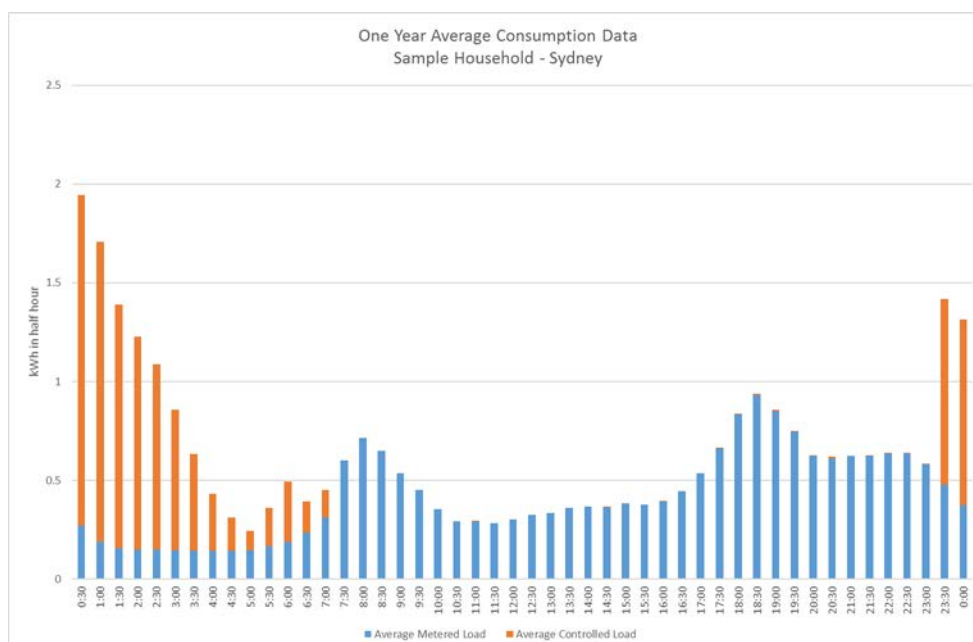
Figure 1: Consumer confidence in energy markets



In energy markets this can be particularly useful if the consumer has a “smart” meter that records consumption every half-hour and there are retail prices based on either time of use or, under more recent proposals, peak usage levels. To date this is primarily only an issue in electricity, not gas.

Figure 2 is an example of the average daily profile for one Sydney household over a whole year. The data is not, however, only useful for choosing between suppliers. Electricity consumers have the choice to self-generate using solar photovoltaic panels.

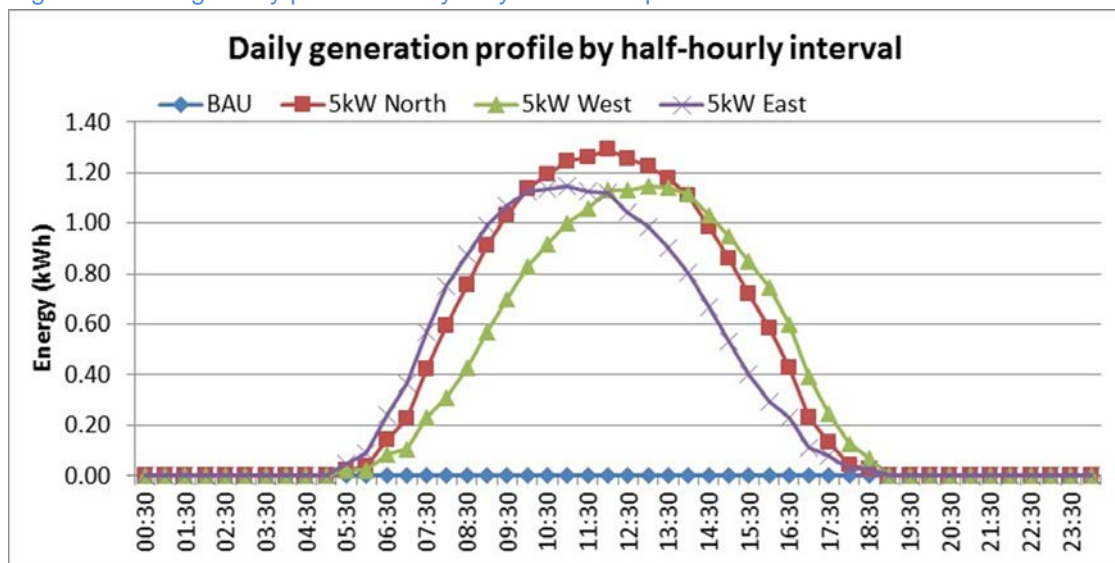
Figure 2: An example of the average daily profile of one Sydney household



The consumer installing the panels has a choice about the size of system they install and the orientation of the panels. Figure 3 below shows how the amount of power generated from a 5kW system would vary over the day depending on whether it was North West or East facing.

Unless there is a premium feed-in-tariff being paid the consumer is better off by orienting their panels to maximize generation during periods of consumption. More complicated analysis is possible if there is an option to also install batteries.

Figure 3: Average daily profile of a Sydney 5kW solar panel



Current Arrangements

As Box 4.7 of the Draft Report outlines both electricity retailers and distribution networks have an obligation under the rules made by the Australian Energy Markets Commission (AEMC) to provide consumers with access to the last two years of their meter data. The rules require that the data be available in a format determined by the Australian Energy Market Operator. This format is known as NEM12 or NEM 13. The provider also has to provide certain summary statistics and graphs.

Different providers have implemented different processes to make the data available. Some providers have made the data available through a “portal” but even in these cases the response need not be immediate. Others require an e-mail to be submitted. In one case the response to the e-mail is for the provision of a link to download the specifically requested data, but the link expires after thirty days.

The rules also require that the data be provided to third parties authorised by the consumer. Unlike the processes for customer transfer there is no description in the rules of what form the explicit informed consent from a consumer to the third party or the data provider should look like.

As a consequence, the most common requirement made by providers is for a physical document signed by the consumer to be given to the provider, whereas transfer of a service occurs on the statement by the gaining provider that they have the consumer's consent, and that this can be in the form of response to a web form or by recording of a telephone call.

The standard for the data file produces data in a Comma Separated Values format. This format is easily opened using Microsoft Excel or other spreadsheet or text analysis programs.

Figure 4 below shows the first few rows of data for the customer data used to generate Figure 2.

Figure 4: Start of the Data File Used for Figure 2

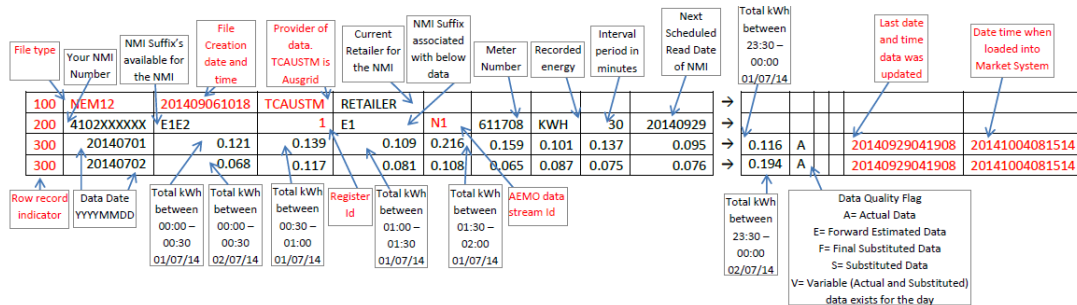
The table displays the beginning of a data file. The first few rows contain header information and customer identifiers. The columns include:

- Customer ID (e.g., 200, 2000001)
- File type (e.g., NEM12)
- Your NMI Number (e.g., 4102XXXXXX)
- NMI Suffix available for the NMI (e.g., E1E2)
- Creation date and time (e.g., 201409061018)
- Provider of data (e.g., TCAUSTM)
- Current Retailer for the NMI (e.g., RETAILER)
- NMI Suffix associated with below data (e.g., N1)
- Meter Number (e.g., 611708)
- Recorded energy (e.g., 0.101, 0.137, 0.095)
- Interval period in minutes (e.g., 30)
- Next Scheduled Read Date of NMI (e.g., 20140929)
- 48 columns of half-hour energy consumption data (e.g., 0.116, 0.194, 0.116, 0.194, etc.)

After the columns providing date and other data there are 48 columns providing half hour energy consumption. A full year then requires 365 such rows. In this case the customer has both ordinary metered electricity and a 'controlled load' off-peak hot water which is separately metered and so there are an additional 365 rows for that data.

The consumer is conveniently provided with a guide on how to interpret the data, shown in Figure 5.

Figure 5: Explanation of the NEM12 format



Clearly the data is more useful to third parties or third party applications than it is to consumers. For example, and in keeping with the original RECAP idea, the ability to submit the data directly to a price comparison website is valuable.

Because of the universal rollout of interval meters in Victoria, the state government run comparison site, Victorian Energy Compare (<https://compare.switchon.vic.gov.au/>) enables customers to submit their usage data to develop a price comparison. Customers in the distribution areas of Powercor and City Power can actually authorise the site to access their data directly from the provider.

Discussions are ongoing with networks to develop a standard third party access protocol and delivery mechanism.

Future home energy management systems that rely upon real time data will not be designed around accessing consumption data from service providers. Their real time consumption data will be directly available to them. However, they will want to receive real time data from providers to enable decision making about the optimal use of their resources.

Productivity Commission Proposals

The Commission has proposed (Recommendation 9.11) for the introduction of a new *Data Sharing and Release Act* that would include “strengthened provisions on access to data by individuals, including rights to access and edit data about them, a right to have data copied and transferred, and a right to request that collection cease.”

The Commission has also proposed that this Act should include a definition of “consumer data” (Recommendation 9.1) The Commission has further proposed, given the potential broad applicability, that the definition should be included in the *Acts Interpretation Act*.

Recommendation 9.2 lays out the Commission’s recommendations on what the right of access to data should look like. Recommendation 9.3 includes a role for the Australian Competition and Consumer Commission (ACCC) regarding the process of providing access including the appropriateness of any fees.

As already described a limited right of access already applies to electricity meter data. Energy Consumers Australia is concerned that any new right should not be able to create a conflict with the existing arrangements. However, we also note that the experience in electricity markets identifies elements that are important in such a regime.

The easiest way to describe our conclusion is that it is insufficient to create a right of access to data in machine readable form to the individual or a nominated third party. The right of data access needs to be to data in machine readable form in an agreed industry standard in near real time and that the provision of the data to nominated third parties should be able to occur through explicit informed consent provided to that third party.

To give effect to this outcome Energy Consumers Australia suggests the following changes to the Commission’s recommendations.

1. The definition of “consumer data” should occur once only in legislation. The appropriate place for that definition is the *Acts Interpretation Act* to provide for its wider use in other legislation.
2. The right of access to consumer data should be created in the *Competition and Consumer Act* together with other consumer rights. As the draft report says “competition and consumer policy lies at the heart of the proposed changes.”
3. The generic right in the Act should be limited to the current proposal, the right to have access to data in machine readable form available to both the individual or nominated third parties.

4. The ACCC should have the power to register an industry code for the provision of consumer data for a defined industry, provided that the code creates a standard for information provision, the transfer of data in near real time, the ability for a third party to access the consumer's data under provisions that the third party has received and recorded the explicit informed consent of the consumer and compliance and complaints handling regimes. Once registered the code would be binding on the industry to augment the right.
5. Where the ACCC determines that there would be a material benefit to consumers in a market from the existence of a code the ACCC would have the power to request the industry to develop a code. If the code is not provided within a time frame specified by the ACCC (subject to a legislated minimum) then the ACCC can make a code itself. To acknowledge the existence of a number of industry specific regulators such as the Australian Communications and Media Authority (ACMA), Australian Securities and Investments Commission (ASIC) and the AEMC/Australian Energy Regulator (AER) the ACCC should be able to delegate the power to request and evaluate a code, subject to the other agency accepting the delegation.
6. Given that the cost for service providers in providing data is in the initial establishment of procedures and that the ongoing marginal cost of automated provision is almost zero, then there should be no charge for requesting data under a code.

This process of the ACCC being able to request a code has been modelled on the processes that apply in the communications industry for code development at the request of the ACMA.

Conclusion

Energy Consumers Australia's experience of the development to date of access by consumers to their meter data highlights the value of standardised, near real time access that it is easy for the consumer to authorise a third party to access and use on their behalf.

This experience has informed our submission on the Commission's recommendations in consumer access to their data.




There is only one final point we wish to raise about access to data generally. Many Government agencies publish reports with graphs without any supporting data table, and when they do present data tables they do not provide them in an electronic form. The Productivity Commission should recommend that the Government institute a regime that all data presented in Government reports – be it presented graphically or in a table – should also be presented in an accompanying Excel workbook. By way of specific example, this would apply to the regular reporting by the AER on the performance of electricity and gas markets.



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