

Reinventing the Wheel

Submission by Dr Martin Gill

Currently major work is being undertaken to implement the Consumer Data Right (CDR) intended to give consumers access to their energy data. While it is hoped the CDR will lower consumer energy costs this seems unlikely. The strongest argument is existing rules already give consumers access to their energy data, which has not lowered energy costs. The proposal suggests extensive, and therefore expensive, new systems which only reinvent existing data access arrangements. The cost of the new systems increase consumer energy costs. This submission proposes minor modifications intended to improve consumer data access, but utilising the existing systems. The proposal avoids reinventing the existing wheel by maintaining a focus on the key outcome of lowering consumer energy costs.

Everyone benefits – except consumers

The Consumer Data Right (CDR) discussion paper proposes major changes intended to give consumers access to their energy data. In fact consumers already have access to their energy data. Minor changes to the existing data access framework could deliver the CDR at far lower cost. “Why have these simple changes not been proposed?” Because of self-interest.

Retailers have shown themselves to be highly effective lobbyists. They successfully lobbied the AEMC to give retailers the mandate to provide customer smart meters. Then rather than support consumer access to smart meter data they are lobbying to absolve themselves of current responsibilities. If successful the cost of consumer data access is borne by other market participants, all of whom are allowed to recover those costs from consumers in a non-competitive environment.

[Retailers, who provide customer smart meters, should be responsible for consumer access to the data](#)

Handing responsibility for consumer data access to distributors fails to heed earlier lessons. The Victorian smart meter rollout showed the IT systems needed to handle the large amount of smart meter data are expensive. Indeed IT system costs were a significant contributor to cost overruns in the Victorian smart meter rollout. The AEMC claimed they used lessons from the Victorian rollout to justify giving future smart meter rollouts to retailers. The assumption was retailers had greater experience and financial incentives to deliver IT systems at a lower price.

In this light the proposal the CDR require distributors develop new systems to support the retailer provided smart meters is an admission the AEMC should never have given retailers the mandate in the first place! Under this proposal retailers avoid the cost to develop required IT systems and distributors are handed the mandate to “Gold Plate” their IT systems. Importantly as a regulated monopoly distributors are then allowed to recover all the costs to implement and operate their IT systems from consumers. Why has this argument not been presented? Because distributors want to receive the funding to Gold Plate their IT systems.

Similarly the proposal the Australian Energy Market Operator (AEMO) be required to provide a centralised data repository are also flawed. Access to the existing centralised data repository is tightly controlled, so either third parties wishing to access the repository will have to be accredited or AEMO will have to create a duplicate central data repository with lower security requirements. The first solution acts as a huge disincentive for third parties potentially wanting to access the data (imposing currently high accreditation and compliance costs) and the second does not benefit from the existing AEMO central repository. Either way consumers end up paying for AEMO to develop the required IT systems.

Finally there are the expert consultants providing the advice. It is not in their interests to suggest no major changes. Doing so means they cannot bid to prepare detailed specifications, prepare and assess request for information documentation, provide assistance during the request for quote process and then develop the arguments justifying the inevitable cost blow-outs accompanying all major IT systems upgrades.

Summary of submission

Australian energy consumers already have access to their energy data. The access is detailed in the National Energy Retailer Rules (NERR). This raises the obvious question “Why is a major piece of work currently underway to give consumers access to their energy data if they already have this right?” The actual problem is most consumers are unaware they can access their energy data. This suggests priority be given to consumer education programs intended to inform consumers they can, and how to, access their data.

“Improving” consumer access to their energy data achieves nothing

The reason consumers are unaware they can access their energy data is because once they have obtained their data there are no tools allowing them to **use** the data. For example the Government provided energy comparison tool cannot be used to turn the (useless) energy data into useful information. This strongly suggests the funds intended to be spent duplicating existing consumer access to their energy data would be much better spent developing tools able to turn the currently useless energy data into information useful to consumers.

There remain problems. The Victorian Government chose not to sign the NERR. Far from leaving Victorian consumers worse off they are the only Australian consumers offered simple access to their electricity data. Further the Victorian Government has provided an impartial tool allowing Victorian consumers to quickly, easily and accurately use their energy data to find the cheapest electricity tariff. It has taken several years for the Victorian Government to deliver this positive outcome for Victorian consumers.

So “Are Victorian consumers benefitting from the considerable investment in consumer data access and tools to use the data?” The answer is disappointingly - No. The Thwaites review shows on average Victorian consumers continue to pay 21% more for their electricity than if they switched to the cheapest available tariff. So despite Victorian consumers having improved access to their electricity data **and** a powerful tool able to turn this data into the cheapest tariff, the evidence suggests it still does not lower consumer energy costs.

There is already a thriving industry claiming they can lower consumer energy costs. It must be emphasised the existing rules already allow these third party’s to access consumer energy data. It is revealing none choose to do so. This suggests implementing a totally new framework giving “improved” data access will also fail to allow consumers to lower their energy costs.

The consultation paper attempts to estimate costs to implement and maintain the systems required to support the “improved” data access. It is important to remember these costs are eventually passed on to consumers. This suggests a critical design goal should be to minimise implementation costs. This submission suggests minor improvements to existing data access arrangements, including access to the Australian Energy Regulator’s database of tariffs. These minor improvements are intended to simplify and improve tariff comparison services, leading directly to lower consumer energy costs (only an accidental **outcome** of the proposed complex CDR).

Continuing the theme of minimising costs the submission also highlights several areas in which the design of new access arrangements could be made overly complex. These areas should be avoided since they will ultimately increase implementation costs with no justifiable contribution towards lowering consumer energy costs.

As an example of a cheaper solution this submission suggests retailers should accompany consumer energy bills with the associated energy data. All the systems required already exist (as defined in the NERR) so the suggestion can be achieved at a fraction of the cost of the proposed data access framework. More importantly retailers fought long and hard to be given the mandate to provide consumer smart meters. They should therefore continue to provide access to smart meter data and not be allowed to hand this responsibility to others.

The funds allocated to developing the data access framework could then be re-assigned to the development of impartial tariff comparison tools and consumer education programs. Both of these are far more likely to lead to lower consumer energy costs than implementing a new CDR most consumers are unlikely to ever use.

Defining an outcome for the Energy Consumer Data Right (CDR)

The Consumer Data Right (CDR) intends to improve consumer access to their Banking, Energy and Telecommunications data. It is *hoped* this data access will enable new industries showing consumers how to lower their Banking, Energy and Telecommunications costs. The important point is the CDR hopes to lower consumer costs by providing nothing more than data access. It hopes others will develop the tools needed to actually lower costs.

This submission maintains a focus on the stated outcome in the energy sector, specifically changes allowing consumers to lower their energy costs. It considers how minor improvements to the existing energy data access arrangements would achieve this outcome.

The submission also includes a detailed comparison of data access arrangements required for the Banking and Energy sectors. It concludes the significant differences between the Energy and Banking sectors do not seem to have been appreciated. It suggests attempting to utilise a framework developed for the Banking sector to guide Energy data access arrangements will hinder, rather than enable the delivery of consumer benefits.

Using the NERR to lower energy costs

EASY\$ - Energy Assessments Save You Dollars (\$)

This submission uses a hypothetical tool EASY\$ to highlight how minor revisions to existing energy access arrangements could deliver significantly better outcomes for Australian energy consumers.

The following considers how consumers can currently use their energy data to find a better energy deal.

Today

Consumer rings their retailer and requests their billing data. Several days later an electronic file is emailed to them. They upload the file to EASY\$. After entering their EME Plan ID¹ they are presented with a list of cheaper tariffs. They call the selected retailer and arrange to transfer.

Future?

Consumer signs up with EASY\$ assigning them the right to access their energy data. Every four months EASY\$ uses the consumer's energy data to compare tariffs. When it finds a cheaper tariff it automatically switches the consumer to the cheapest energy tariff.

Both are available today! Discussions about a new data access framework is a classic example of consultants totally redesigning a wheel in order to justify their exorbitant fees. Far better consumer outcomes could be obtained by asking consumers why they are not using the existing services.

Using SwitchOn to lower energy costs (for those lucky enough to live in Victoria)

Today

Clicking a button on retailer and distributor websites (requires registration) instantly downloads energy data. Accessing the SwitchOn tool the energy data is used to accurately compare available tariffs. If the consumer can find a cheaper tariff they can choose to call the retailer to arrange a transfer.

Note the above is a successful implementation of the Green Button initiative. The Victorian Government is currently negotiating with the industry to further improve consumer outcomes.

¹ EME Plan ID is the unique reference number assigned to all tariffs by the Australian Energy Regulator. Changes detailed in Version 5 of the Retail Pricing Information Guidelines require retailers to provide the EME Plan ID in all correspondence with customers.

Single Click Upload (proposed)

A single button click uploads the consumer's energy data to SwitchOn (avoiding the need to save and then upload the energy data file).

This version still fails to address a key point of confusion for consumers. SwitchOn continues to present a long list of meaningless numbers. Simplifying the results of the tariff comparison, for example by only listing cheaper tariffs, guides consumers towards the outcome of lowering their energy costs.

Timely delivery of data

A significant difference between data access arrangements offered to Victorian consumers and other Australian energy consumers is how quickly the energy data is made available. This speed of delivery is identified as a major impediment to consumers being able to lower their energy costs.

For example during the 2018 Consumer Congress one speaker stated in less than an hour she had used the Victorian SwitchOn tariff comparison tool to reduce her energy costs by “thousands of dollars a year”. The one hour included calling the cheaper retailer to arrange the switch! The experience shows the current Victorian arrangements can deliver positive outcomes for consumers. It also highlights the importance of the tariff comparison tool, which does not form part of proposed improvements to consumer energy data access.

The Victorian Government experience suggests the tariff comparison service should be as simple as possible. The CDR is therefore proposing a solution several years behind what has been available to Victorian consumers. By the time the CDR gives consumers access to their energy data it will be even further behind the Victorian Government's solution.

Discussing improvements to support lowering consumer energy costs (including the EASY\$ service)

A number of relatively simple improvements to existing market rules can be identified to support better outcomes for consumers.

Timely access to energy data

In Dr Gill's submission to the ACCC Retail Price enquiry suggested a very simple method to provide consumers timely access to their energy data. He suggested consumers can request retailers accompany the electricity bill with an electronic copy of their energy data (by email). This simple solution provides timely access to energy data without the cost to develop complex data access arrangements.

The background to the suggestion was rapidly rising electricity prices have meant the arrival of the quarterly electricity bill is a depressing time for most Australian consumers. In this context the arrival of the electricity bill should be viewed as an opportunity to encourage consumers to look for a better energy deal. The unavoidable bill shock provides sufficient motivation for customers consider how to lower their electricity costs.

The proposed solution is available at minimal development cost since it uses the existing systems retailers already have in place (as required for their regulatory compliance with provisions detailed in the NERR). When the retailer prepares the consumer bill, they save the energy data and email the file to the customer. Under the new Retail Pricing Information Guidelines this retailer correspondence must contain the EME Plan ID ensuring the consumer has all the information they require to meaningfully compare tariffs.

Need to develop the tools

The CDR **assumes** if consumers have their energy data then third parties will develop tools showing consumers how to lower energy costs. There is no evidence to support this. Australian consumers already have access to their energy data (either via the NERR or for those in Victoria by superior arrangements). Despite this third party tools have not been developed.

The Victorian Government’s SwitchOn tariff comparison tool provides an excellent example of what is required. Currently funding has been made available to improve the woefully inadequate Energy Made Easy tariff comparison tool. The Australian Energy Regulator should model the new Energy Made Easy tariff comparison tool on SwitchOn.

Consumer sentiment surveys consistently show Australian consumers have lost faith in the energy sector. While third parties **may** develop tools the lack of faith in the industry suggests consumers may not be prepared to utilise them. This highlights the importance of offering **independent** tools, including SwitchOn and an improved Energy Made Easy.

Need for consumer education

A recent survey found only 13% of consumers were aware of the Government impartial tariff comparison tool. Of these consumers many admitted they did not feel confident to use the service. This needs to be addressed before developing expensive data access arrangements.

If consumers can be encouraged to use the existing data access arrangements then it will be possible to determine the extent to which data access can benefit consumers. Reminder the Thwaites finding that even with data access and powerful comparison tools Victorian consumer still pay too much for their electricity. This information can then ensure the Government funding is allocated to programs delivering **the consumer outcome of lower energy costs**.

Need to limit fees to access consumer energy data

Consumers can already give third parties (e.g. EASY\$) the right to access their energy data. One possible reason third parties are not asking consumers to give them access is the NERR allows retailers to charge the third party for this access. These fees are unregulated. Retailers can set the fees to ensure the third party services are uneconomic.

When consumers ask for their energy data the NERR requires retailers provide it free of charge. It is unclear why this does not apply when consumers request a third party access exactly the same data on their behalf.

Returning to the earlier suggestion consumers be able to ask their retailer to email their energy data while preparing the electricity bill. Clearly if a consumer gives the email address of a third party then the third party will automatically receive their energy data and the EME Plan ID. Hence the suggested future EASY\$ automated tariff comparison service could be enabled without the need to develop any expensive access arrangements.

This also avoids accreditation requirements for consumers to authorise third parties to obtain the data. At any time the consumer can call their retail and change the email address receiving the energy data file.

Need for a list of available tariffs

The most important tool allowing consumers to lower their energy costs in the contestable energy market is the ability to compare tariffs. Accurately comparing tariffs is surprisingly involved. This situation is becoming more complex as retailers are encouraged to use the AEMC mandated smart meter rollout to implement “innovative” tariffs and AEMC rule changes require the introduction of cost reflective network tariffs.

While the CDR **HOPES** to encourage third party service providers to offer tariff comparison services this requires they have access to a comprehensive list of available tariffs. There is currently only one comprehensive database storing

all available tariffs. This is held by the Australian Energy Regulator (AER). Whenever a retailer offers a consumer a tariff they must provide the AER with the tariff details. The AER then assigns each tariff a unique EME Plan ID.

So the AER's database of tariffs is a vital component of tariff comparison services, however **the AER does not allow any third party access the database of available tariffs**. Without access to this database tariff comparison service must manually search retailer websites and advertisements to find published tariffs. This is time consuming, ineffective and ultimately increases the cost of the tariff comparison services.

While the CDR fails to discuss this significant oversight the Productivity Commission separately recommended consumers be given access to Government controlled databases of benefit to consumers. The AER database of tariffs appears to fit this description. If the CDR is to deliver a desirable outcome then it must include third party access to the AER's database of tariffs.

As a minimum requirement the AER should allow third parties to retrieve specific tariff details by entering the customer's current EME Plan ID (this is discussed in the following section "What the CDR is overlooking")

Addressing hidden commission fees

Currently third party tariff comparison services obtain the list of tariffs from preferred energy retailers. These retailers provide the third party with tariff details and the commission they will pay for each customer transferred onto the tariff. There are two problems: Only preferred tariffs are listed (often the cheapest tariffs are not listed) and the hidden commission fee. Neither are a desirable outcome for consumers.

The hidden commission fee is not advertised. Evidence recently presented at the Banking Royal Commission highlights how hidden commissions paid to third parties providing financial advice have driven aberrant behaviour. Why some naively assume similar behaviour is not occurring in the energy industry cannot be explained.

The Energy CDR hopes to encourage more companies to offer these services. Unless the issue of hidden fees is addressed these service providers will continue to provide biased guidance. The financial sector now requires full disclosure. Similar rules should apply to all energy services.

What the Consumer Data Right (CDR) is overlooking

Obtaining the consumer's current tariff

Consumers use tariff comparison sites to find cheaper tariffs – the information they are looking for is:

Changing to retailer XXXX could reduce your annual energy costs by \$974

To determine if a cheaper tariff is available consumers compare the cost of their current tariff to available alternatives. It is suggested the main reason consumers find existing Government provided tariff comparison tools too difficult to use is they fail to provide the above simple advice. Solving this problem requires access to the customer's current tariff.

Without details of the customer's current tariff the tariff comparison tool can only present a long list of estimated costs on known tariffs. The computer programmers who implemented the tools assume consumers will happily search through the long list of meaningless numbers to find their current tariff. In fact the majority of consumers just find the long list numbers confusing. When they are unable to determine how much they could save they end up making no decision.

The failure of tariff comparison tools to understand this simple consumer requirement is seen as a major impediment to effective tariff comparison services.

As if this is not confusing enough the long list of meaningless numbers may not even include the customers' current tariff! Retailers declare some tariffs as special or restricted. Special restricted tariffs are not shown on tariff comparison sites.

Rather than try to solve the problem some tariff comparison sites ask consumers to provide a previous electricity bill. This is also problematic. Energy deregulation allows retailers to increase electricity costs multiple times a year. Attempting to use previous electricity bills is equivalent to using historical events to predict future outcomes. It rarely results in the best result.

So the CDR needs to develop a common file format describing tariff details. Clearly one source of this common file format is already being used by Energy Made Easy (and another by SwitchOn).

The CDR then needs to provide consumers with simple access to request the file describing their current tariff. This information is held by the retailer.

Retailers will soon be required to include the EME Plan ID on all their correspondence with consumers. This suggests a simple solution is already on the horizon. It requires the AER support a means of using the EME Plan ID to obtain a computer readable file containing specific tariff details. This is likely to encounter further retailer opposition, in particular if the EME Plan ID refers to a restricted/special tariff.

Over complicating the access framework “Attempting to use the Banking Sector Framework”

The proposal to align the CDR for Banking and Energy is considered concerning. The two sectors are totally different in almost every regard.

Significant differences

The significant differences between the Banking and Energy sectors are summarised in the following table.

	Banking	Energy
Clarity of outcome delivered by data access	Difficult Varies consumer to consumer	Easy Lower energy costs
Ease of switching to a cheaper provider	Painfully difficult	Simple
Consumer Relationship	One to Many	One to One
Range of Products	Many and varied	One identical product from all retailers
Confidentiality of Full Data Disclosure	Extremely High	Low
Ability to accurately describe current contract	No single source	EME Plan ID supports accurate single source

The following sections discuss each of these significant differences

Clarity of outcome delivered by data access

In the energy sector it is easy to define a desirable outcome, specifically the CDR **hopes** providing consumers with access to their energy data will allow them to reduce annual energy costs.

There is a trap if the same statement is applied to banking. “Access to banking data will allow consumers to reduce their banking costs”. This misses the long term nature of most financial transactions. For example is the desirable outcome consumers pay less per month (so they remain in debt for longer) or over the lifetime of the loan consumers pay less interest (so monthly payments are higher)?

Obtaining a desirable outcome from access to banking data is considerably more difficult than access to energy data.

Ease of Switching to a cheaper provider

A phone call to an energy retailer is all that is required to change.

Changing financial service provider is a long and tedious procedure as anyone who has had their credit card reissued after fraudulent use can confirm. Multiple forms, visits to the bank to collect cards and enter new PIN codes. Don't overlook the need to notify employers of changed accounts. Notify all direct debit companies of the changes (including energy companies).

Consumers are far more likely to switch energy provider ahead of changing financial institution.

Consumer Relationship

Energy consumers typically have a relationship with ONE energy retailer. Some may have one for electricity and one for gas but discounts for bundling and single bills are increasing the number of consumers choosing a single retailer. Obtaining energy data can be as simple as contacting one energy retailer.

The majority of consumers have multiple different financial products. Mortgage(s), savings accounts, leases, credit card accounts, etc. with a large number of consumers having multiple providers. Obtaining the banking data required to undertake analysis requires contacting each service provider. Third parties must then be able to combine multiple data sources to obtain a more complete assessment of the complex financial arrangements.

Ensuring third party service providers can access banking data is considerably more complex than accessing energy data.

Range of Products

All retailers sell exactly the same energy. All electricity is supplied by the same poles and wires and all gas by the same gas pipes regardless of the selected retailer. This is the primary reason it is so easy to define the desirable outcome as lowering the cost to access the energy.

In the banking sector there is a vast range of different products. There are multiple ways consumers can borrow money, a mortgage, credit card, overdraft, personal loan, etc. Each has very different terms and conditions and is offered by a wide range of different providers. This makes

The range of banking products that must be carefully defined in the obtained data is considerably more involved than describing energy products.

Confidentiality of Full Data Disclosure

Consumer energy data does not represent a huge privacy threat. Indeed Dr Gill has shared his energy data with other researchers. He does this confident he is not giving away personal or confidential information.

Consumer banking data is considered highly confidential. It suggests access to the data should be tightly controlled.

Attempting to utilise the Banking framework would unnecessarily restrict access to Energy data and conversely using the Energy data framework would not satisfy confidentiality requirements to access banking data. The two frameworks are totally different.

Ability to accurately describe current contract

The Australian Energy Regulator requires retailers to provide details of all electricity tariffs. They then assign each tariff a unique EME Plan ID.

Consumers can choose from a bewildering range of different financial products. Each financial product typically offers a range of different options. Finally while banks may publish terms (e.g. rates) bank managers are typically allowed to adjust these terms for by negotiation with individuals. There is no common data format to describe the final agreement reached between the bank and the customer.

Developing a common data format to allow bank to share details of every financial contract a consumer may hold will be extremely time consuming. In stark contrast the energy industry already has access to a common data format proven to be able to describe all available contracts.

Other identified differences

There are other differences between consumer access to their Banking and Energy data.

	Banking	Energy
Product provider	The financial institution with whom the consumer has signed the agreement	Retailers only bill consumers. Energy is actually supplied by a regulated monopoly
Typical Contract Length	Long: Typically 5 to 30 years	Short: None to 1 or 2 years
Frequency of Comparison	Every Couple of Years	Several times a year
Consumer knowledge of the market	Consumers have always had choice of financial service providers.	Contestable energy markets are relatively new. Consumers are unfamiliar with the options
Accuracy of advice when using Amalgamated Data	Accurate comparison remains possible	Unable to compare some offers
Industry experience with sharing consumer data	None	High (they have been handling this data using NEM12 format for two decades)
Attractiveness to Hackers	High	Low
Accreditation requirements for third parties receiving data	Moderate to High	Low
Providers right to share customer data	Controlled	Nothing prevents retailers selling data to 3 rd parties

Product Provider

Energy retailers do not supply energy, they just bill customers for their energy use. The energy is actually supplied by regulated monopolies. Energy advice can easily recommend the any bill provider, confident they all use the same service provider to deliver required energy.

Banks provide the financial services they sell. When comparing financial costs the bank must carefully consider if it is able to supply the various financial products the consumer currently uses and/or propose alternatives. This is a far more complex situation than energy.

Energy products are simple compared to banking products. The access framework should also be simple.

Typical Contract Length

Most energy retailers offer energy plans with no contract term. This allows consumer the freedom to choose another plan (that they don't is a separate issue). For those contracts which specify contract terms the length is generally one year, occasionally two.

Most bank customers form long term relationships with the bank. For example the typical mortgage involves a contract extending for 20 or more years.

These differences become more significant when considering how often consumers should compare available offers and how easily they can switch to an alternative provider.

Frequency of comparison

Energy comparisons should be undertaken several times per year. Energy retailers are continuously offering special promotions to entice consumers to sign-up. Exit fees associated with early exit from energy contracts can be recovered from additional savings and some plans even offer sign-on bonuses (probably intended to cover other retailer exit fees). The majority of consumers will find if they have been on the same energy plan for more than 12 months they are paying too much.

While financial institutions also offer special deal and incentives exit fees are often significantly higher. It is also important to note the sheer complexity of changing service provider suggests consumers will result in consumers only reviewing their financial service provider every couple of years.

Consumer Knowledge of the Market

The contestable energy market is new. The AEMC introduced the new market and then threw ill-informed and unprepared consumers into the market. The result was most ended up paying too much for energy. That most consumers continue to pay too much highlights the generally low level of consumer understanding of this new market.

Consumers have always had the freedom to choose from the “big four” and other financial institutions. The problem is not a lack of knowledge of the market but financial advice is consumer specific. This requires far more detailed analysis of the numerous different offers.

Accuracy of advice when using Amalgamated Data

Currently more than 95% of electricity users choose a fixed tariff. Accurate tariff comparison is possible using a single value, the total amount of electricity used. Unfortunately tariff “innovation” is looking to make what is currently relatively simply virtually impossible to understand. For example the AEMC mandated cost reflective network tariffs will require all the billing data. It is simply not possible to provide a number of amalgamated values to compare the full range of future tariffs.

Amalgamated financial data can reduce the highly confidential nature of the data. For example rather than listing individual credit card purchases amalgamated data might show the number of purchases and the total value. Similarly the number and total number of direct debits, number of times ATMs are used, online bank details are accessed.

This suggests one way to address the confidentiality of financial details involves removing individual transaction details and just showing the total number along with other details. Developing suitable rules to create amalgamated financial data which still allows accurate financial cost calculations will be time consuming. In this discussion it is highlighted amalgamated energy data cannot be reliably used to accurately compare energy options.

Industry experience with sharing consumer data

The energy market requires participants to share energy data. The secure networks used to share this data already exist. The data format used on the networks already exists. In fact the NERR even documents the format data is (supposed to be) provided to consumers.

The same cannot be said of the Banking Sector.

The ability for the energy sector to immediately define a common format should not be under-estimated. Waiting for the Banking sector to develop similar capabilities risks serious delays to consumer access to their energy data.

Attractiveness to Hackers

Hackers are constantly trying to obtain banking information. Phishing, scraping, false shop fronts, etc. Once they have the details they can access the accounts and ...

Despite virtually non-existent protection preventing hackers accessing consumer energy data Dr Gill is unaware of any attacks of this nature. The reason is the data is unattractive and virtually meaningless.

Using the banking framework to control access to energy data seriously overestimates risks.

Aside: People should be concerned about attempts to hack energy networks. For example attacks could use the remote disconnect switch included on all AEMC smart meters to destabilise the electricity network. While this may be concerning it is noted energy data access comes from the retailer computer servers. Energy data access does not require direct access to the meter. Existing firewalls are probably more than sufficient to protect the metering infrastructure from hackers.

Accreditation requirements for third parties receiving data

Before companies are allowed to connect to the Australian Energy Market Operator's (AEMO's) Business-to-Business gateway they must be accredited by AEMO. Further the systems used to attach must also be audited. This is an expensive process. It should not be assumed all third parties wishing to access meter data must be accredited by AEMO.

There is nothing preventing a consumer downloading their energy data and then choosing to forward it to a service provider. In this case no accreditation is required.

In the Banking sector strict accreditation is required. Implementing the same strict rules for the Energy sector risks killing the new market before it even starts.

Providers right to share customer data

If a bank chooses to share consumer banking details there are consequences, for example fines levied on the ANZ for the behaviour of some of their car financing operators. The same rules already apply to energy data.

It is therefore surprising the AEMC encourages meter providers to sell consumer smart meter data to third parties without consume consent. For example the AEMC describes the sale of voltage data and outage data to the local distribution business. That the AEMC do not feel consumer consent is required is revealing. It suggests their analysis has found minimal consequences from sharing the data (arguably in this case there are consumer benefits).

If the right to share energy data closely follows the guidelines developed for the Banking sector it is likely to restrict the financial incentives for meter providers to install more capable meters. These more capable meters ultimately support consumer benefits so the restrictions are not in the long term interest of consumers.

Over complicating the access framework “Consumer Consent”

The NERR already allows consumers to grant third party access to their billing data. Despite this an entire chapter of the consultation paper is devoted to “improvements”. It is noted current simple consent has not resulted in breaches. Implementing complex consumer consent rules and regulations is likely to act as a barrier to consumers granting third party access to their data.

There are also numerous examples where third party access is required ONCE, for example to estimate the optimum solar system size a consumer should install. The consumer requests their data and then once it has been received gives consent by forwarding it to the third party. This completely avoids potential questions about on-going third party access to the data.

The joint development of the Banking and Energy data access frameworks is placing a great deal of emphasis on the question “What is the risk if someone accesses the data?” In the Banking sector the risks are universally assumed to

be considerable. In the Energy sector the risks are ... minimal. There is very little personal information that can be reliably ascertained from access to energy data.

Reference is made to the National Energy Retail Law (NERL) which specifies how consumer consent can be given:

- In writing, signed by the customer;
- Verbally, provided it is evidenced in a way it can be verified; or
- By electronic communications generated by the consumer

No evidence has been provided to suggesting the above three methods cannot reliably be utilised to allow consumers to give consent.

Over complicating the access framework “Third Party Accreditation”

There is currently a thriving industry of companies offering to lower consumer energy costs. These companies are currently not accredited. Each company asks consumers for details about their energy data and current tariff before they provide “expert” energy advice.

For example a recent study by the Consumer Action Law Centre suggests there are 4000 to 5000 solar installers offering energy advice to Australian consumers (refer <https://policy.consumeraction.org.au/2017/11/20/knock-it-off/>). The Clean Energy Council (CEC) has prepared a code of conduct for these solar installers however the report states ‘the CEC website shows that only 43 solar retailers are officially identified by the CEC as “Approved Solar Retailers”’. It is considered significant less than 1% of solar installers choose to become accredited with their own industry association! This strongly suggests they would be equally reluctant to apply for any Third Party Accreditation to directly access consumer energy data. As the accreditation requirements are made more onus the number applying would fall even further.

Returning once again to the idea of having retailers accompany each energy bill with the associated energy data. When considering the installation of the solar system the consumer simply forwards the retailer email with the attached energy data file. The solar installer can use the data to estimate the optimum sized solar system giving consumers the best financial return.

Sharing energy data does not provide the same level of consumer risk as sharing Banking or Telecommunications data. Enforcing stringent accreditation requirements is considered unnecessary.

Over complicating the access framework “Other meter services”

A number of companies are currently offering to install metering solutions intended to continuously monitor energy usage. Any access framework should acknowledge support for these more capable metering solutions falls outside the CDR.

The AEMC smart meters are only required to support four services, with remote daily data collection the only service relevant to discussions about data access.

The minimum list of prescribed services provides retailers with plenty scope to offer smart meters supporting additional services of value to consumers. For example one major retailer offers to alert consumers should they detect issues with the consumer’s solar system. To support this service the retailer must install electricity meters capable of measuring the output of the solar system directly (so called gross metering). Unsurprisingly consumers wanting this service are required to pay the retailer an additional \$15 per month for the additional metering and associated monitoring service.

The consultation paper fails to understand additional metering services often incur additional expense for the retailer. It appears to require all meter data be made available. The second dot point in Section 5.1.3 suggests:

- change from net meter data (ie, the sum of electricity imports and exports to the network) to gross meter data (ie, the availability of both total imports and total exports to the network);

The national electricity market only requires the meter to measure the net flow of electricity. Only retailers prepared to offer their customers additional metering will have access to gross measurements. The suggestion the CDR be allowed to force them to share this additional data with the market would actively discourage retailers from offering more capable electricity meters to their customers.

Over complicating the access framework “Failing to use existing models for data exchange”

Since its inception the Australian Energy Market has carefully provided a common data format enabling the unambiguous exchange of energy data. The Australian Energy Market Operator maintains the NEM file format to achieve this.

As discussed retailers currently provide the Australian Energy Regulator with details of all their tariffs. While not published this file format already support the unambiguous description of all available energy tariffs.

Any proposed framework should not attempt to define more formats.

Arguments the market should decide the formats should be viewed with suspicion. For example the cost to develop Victoria’s SwitchOn tariff comparison tool was increased because retailers refused to agree on a common meter data format. The final result was they successfully delayed the development of the SwitchOn tool as it was forced to support a dozen different data formats.

Since the market already has all the data formats required to support a desirable consumer outcome it is strongly suggested there is no need to develop more complex arrangements.

Over complicating the access framework “Access to real time meter data”

If access to data is good then access to more data is better – **FALSE!!!**

When the NSW Energy Minister spruiked his support for the AEMC Smart Meter rollout he proclaimed “being able to view his home’s energy consumption on his phone in real time” as a benefit. This statement raises several questions.

- How did he intend to turn the continuous stream of data into an outcome (energy savings)?
- What was he looking at (since the AEMC smart meters do not support real time data)?
- After the press conference did he ever look at his real time energy use again?

Addressing the above questions

Many consumers are already suffering data overload. So providing a phone screen with lots of pretty graphs does not inform them what they need to do to reduce their energy costs. It may look good at a press conference but it ultimately fails to provide consumers with the information they require to lower their energy costs.

Technically there is another issue with the suggestion. Smart meter interval data is only collected daily (not in real time). The energy data is then checked for validity before being made available to market participants. The most up to date information the majority of smart metering systems can sensibly provide is yesterday’s data.

There have been multiple trials of In Home Displays. These displays connect directly to the electricity meter and show consumption in near real time. All of these trials show the vast majority of consumers use the display for a couple of weeks and then use quickly falls off. After couple of months most consumers are no longer looking at the device.

The overwhelming conclusion is the CDR does not need to support real time access to meter data.

Conclusion

The NERR already provides Australian energy consumers with access to their energy data. That most consumers are unaware of their current right to access their energy data does not justify the planned significant expenditure needed to “improve” consumer access to their energy data.

“Improving” consumer access to their energy data does not result in lower consumer energy costs. The reason is because Australian consumers do not have access to the tools allowing them to use their (useless) energy data to lower their energy costs. Given consumers already have access to their energy data it is suggested a better consumer outcome is achieved by assigning funds to design “improved” data access to the Energy Made Easy tariff comparator so it can utilise existing meter data.

Victorian consumers already have “improved” access to their energy data and can access a free independent tool allowing them to find tariffs lowering their energy costs. Unfortunately despite providing both data access and tools a recent study found Victorian electricity consumers continue to pay 21% more than they should. It highlights why funds also need to be allocated to significant consumer education programs.

The proposal fails to address other major roadblocks preventing consumers from lowering their energy costs. Comparing tariffs requires access to a list of available tariffs. While the Australian Energy Regulator has a database storing all Australian tariffs they refuse to allow third party access to the database. Without access to this database third party tariff comparison services must continue to use ‘special retailer relationships’ which includes hidden commissions for customer transfers.

The proposal also fails to consider why consumers find tariff comparison tools so difficult to use. Currently none are able to present compelling arguments for changing, for example “Changing to retailer XXXX could reduce your annual energy costs by \$974”. Tariff comparison sites can’t do this because they are unable to obtain details of the current tariff the customer is on (required to calculate the current cost). Suggestions retailers include the EME Plan ID in all correspondence with consumers is one step towards this (but still requires access to the AER database).

There is a great deal of ‘hype’ around the assumed benefits magically resulting from “improved” consumer access to their energy data. Since consumers already have access to their energy data there seems very little evidence to support the claimed benefits. This ‘hype’ is concerning because it risks over complicating the “improvements” to consumer energy data access.

As a baseline this submission suggests the vast majority of the benefits could be delivered by requiring retailers automatically email the energy data when they prepare the customer’s electricity bill. This suggestion avoids the high cost to implement the CDR because it utilises systems retailers have already implemented.

The suggestion there are benefits from aligning the CDR across the Banking, Energy and Telecommunications sectors is concerning. There are huge differences between the Energy and Banking sectors making it difficult to see how a common framework would be suitable for the two sectors. An assessment of the differences suggests alignment would increase costs, delay the implementation of Energy access while also negatively affecting outcomes.

“Improving” consumer access to their meter data is desirable, however evidence suggests the vast majority of consumers will only access their energy data once or twice (if at all). It is also important to note the significant expenditure is only “hoped” to lower energy costs. It fails to provide the vitally important tools consumers require. Far more direct methods are available including funding programs proven to lower consumer energy costs. This includes consumer education and regulatory changes addressing the issues leading to high electricity costs.

About Dr Martin Gill

Dr Martin Gill is an independent consultant specialising in the provision of consumer advice based on a deep understanding of the Australian energy industry and strong analytical skills. As a consultant he has prepared advice for consumer advocates, government regulators, electricity distributors, electricity retailers, asset operators and equipment vendors.

He currently represents the interests of consumers on a range of Standards Australia committees including metering, renewable power systems, battery storage, electric vehicles and demand management.

Dr Gill is a metering expert. During the National Smart Metering Program he facilitated the development of a specification for Australian smart meters. Innovative metering products developed by his teams have been externally recognised with the Green Globe Award, NSW Government's Premier's Award and Best New Product by the Australian Electrical and Electronics Manufacturers Association.

Comments or Questions?

The author is happy to receive comments or questions about this submission. He can be contacted at martin@drmartingill.com.au

Citation

Please accurately attribute all quotes and references to this submission. It would be appreciated if references also included the author's website drmartingill.com.au.