Dear Dr Schott

ESB Data Strategy

EnergyAustralia is one of Australia’s largest energy companies with around 2.5 million electricity and gas accounts across eastern Australia. We also own, operate, and contract an energy generation portfolio across Australia, including coal, gas, battery storage, Demand Response, wind, and solar assets, with control of over 4,500MW of generation capacity.

EnergyAustralia welcomes the opportunity to participate in the ESB’s Data Strategy (the Strategy paper) consultation. Good data relies on accuracy, access, and timeliness, these elements ensure that the data obtained informs and produces decisions developed from precise and targeted facts. EnergyAustralia strongly supports developments that improve and produce good data, and have in place a clearly articulated strategy. This strategy should include a framework for determining a pathway for implementation that is adaptive to changing circumstances. That framework should include factors to consider such as:

- Timing – alignment with other reforms;
- Cost – minimising impacts on consumer bills; and
- Consumer views and perspectives – empowering ownership to those that are paying.

It is also paramount the framework should clearly outline the overall benefits and costs associated with a particular change. Overall, our view is that the strategy should be drafted in terms of outcomes; i.e. what is sought to be achieved and why, rather than prescriptive in terms of how those outcomes should be achieved.

Data is information, it is not a new phenomenon, but the science, application, and benefit of it have never been as advanced or important, with it accepted this will only continue to evolve as we move to a more digitalised world. EnergyAustralia has experienced a notable increase in the data requests received from regulators, complying with which has associated costs. We understand why these requests have been made; but would like to understand better how the requests have resulted in better outcomes for customers. The ESB has appropriately progressed the discussions on data,
identifying areas it believes need immediate attention, where we should focus to enable the data needs of the future, and the oversight required to produce the intended outcomes.

While EnergyAustralia supports the need for consideration of the change required to improve data, we do not believe the Strategy paper’s intended outcomes can, or should, only be addressed through more, or improved, access to data; predominantly through increased retailer reporting. Where the Strategy paper’s recommendations require immediate action (needs today) there will be a significant investment required to achieve the objective. Our concern is there is a tendency for these recommendations to be established prior to confirming the intended outcome will be identified, or that data is required to resolve the perceived issue.

Predominantly, access to data is currently available; however, access to the range of data required under the Strategy paper’s recommendations is limited based on jurisdictional, organisational, and legal impediments. EnergyAustralia believes the first step in the Data Strategy should be identifying and addressing these limitations, as was the recommendation of the Finkel Review\(^1\) ‘a rigorous gap analysis, to be undertaken in consultation with industry and other relevant stakeholders’; this appears to be considered in the Strategy paper’s recommendations 20 and 21, yet is missing the requirement for this to be completed as a preliminary measure. Establishing the gap analysis – at a Strategy paper recommendation level, instead of the overarching assessment in the preliminary legal report completed by KWM and Galexia - will identify limitations and enable access to data that is currently available, which in most instances will establish if the perceived issue exists, and if they require additional data/reporting. The preference for this approach is to minimise the cost imposed upon customers, which ultimately occur with market participants required to make change (extensive in this case).

The Strategy paper aims to address market participants’ concerns of allocating funds to the recommendations by suggesting that a cost-benefit analysis test would need to be completed by the relevant rule change authority – as per their respective rule change making obligations and processes – and subsequently passed before any of these recommendations could be progressed. Unfortunately, cost benefit analysis are not routinely conducted by market participants or energy regulators and where they are completed they are impacted by an inability to appreciate the scope of the change, access to information that will establish the costs, or – more commonly – limited based on time constraints. EnergyAustralia believes that the ESB should consider delaying the progression of the recommendations until it has conducted their own cost benefit analysis.

The Strategy paper’s recommendations principally outline a perceived benefit to customers, it is therefore reasonable that the ESB should have considered what would be required to establish and continue their recommendations’ data requirements, this could then be compared against the perceived benefit to customers; enabling a review by the ESB and market participants as to whether the benefit may be achieved via other more cost efficient methods.

Additionally, it should be assessed whether the expenditure for all the Strategy paper’s recommendations combined would pass a cost-benefit analysis, when this investment may achieve the desired outcomes in a more effective method, i.e. investing the total expenditure in projects that provide security for the NEM or for vulnerable customers.

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\(^1\) Independent Review Future NEM Blueprint for the Future 2017 - Phase 1 pg.183
Recommendations

**Recommendation 1: Retail plans and billing**

This recommendation aims to address the ACCC REPI’s\(^2\) identified issues of confirming how much energy retail customers are paying.

EnergyAustralia supports stakeholders having a clearer understanding of what customers actually pay, and this goes to the heart of many interventions that have been imposed on the retail sector over the past two years. The effectiveness of reforms such as the DMO/ VDO and reference pricing cannot be properly gauged without understanding how customers on standing offers and legacy market offers have reacted to new disclosures in pricing advertising and communications, as well as other encouragements to switch retailers and generally ‘shop around’.

The ACCC has already requested a vast amount of information through a data request of retailers, examining mass market customer billing data for a targeted sample of customers from each. Our own data submission to the ACCC in early 2020 contained 845GB of data with over 90 million individual data points, including consumption, hardship and concession data, contract term, tariff structure (e.g. time of use), solar usage, payments outstanding etc. Of this information, the most recent ACCC report presented “actual prices paid” by customers in terms of an average per kWh billed amount across different regions and customer types including market and standing offers. ‘Policy’ questions or concerns explored by the ACCC included:

- the introduction of the DMO and VDO had improved affordability by bringing down high priced standing offers;
- the potential benefits arising from CDR and government comparator websites (based on the difference between prices paid by market offer customers and ‘time poor’ standing offer customers);
- the impact of concession and hardship schemes on what customers pay, as well as customers with rooftop solar PV (i.e. solar customers pay less than the average non-solar customers); and,
- whether the VDO had encouraged customers to become disengaged, based on the proportion of customers on standing offers.\(^3\)

We (and presumably other retailers) provided the ACCC billing information in March 2020, with the ACCC’s report being released on 21 September. The observations in the ACCC’s report are relatively high level, and the time taken to process the data submitted – in addition to the method outlined in the report’s appendix – illustrates the burden on any regulatory agency in processing this type of information.

The ESC also issued retailers an information request for billing data which was used in their 2019 VEMR\(^4\). Again, this involved an extremely detailed information set with many observations, and on the basis of the ESC’s report, this information was used in a very high-level manner.

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\(^2\) ACCC REPI review 2018, p320

\(^3\) ACCC Inquiry into the NEM, Chapter 2, pg.10

\(^4\) ESC Victorian Energy Market report 2018-19
We understand the ESC intends to issue another request for billing data, following publication of its first report on the competitiveness and efficiency of the Victorian retail market. Similarly, the ACCC are now consulting on their second billing data request.

As a provider of this information, and in examining how it is reported by the ACCC and ESC, we have some observations:

- We expect in future reporting, both the ACCC and ESC will produce more sophisticated insights with additional time series data, that will also likely explore new concerns or trends arising for policy makers and other stakeholders, rather than focus on reforms already in place or known issues such as customers benefiting from moving off standing offers.

- Billing data is one of several examples where regulators ask for similar customer information; however, do so in slightly different ways, none of which align well to our own reporting systems.

- We are frequently issued requests, with strict deadlines, according to each regulators’ own reporting timeframes, and while there is some ability to manage this, ideally each agency would coordinate their needs with one another.

- In discussions with regulatory staff post lodgement, it is apparent they have significant issues in ‘normalising’ this information, given different approaches and systems used by retailers to gather information. There is also a limited, but growing, understanding of the data they are requesting, such that data requests are refined and improved over time. The ESB’s issues paper appears to presume that there can be a ‘once off’ solution to data collection; however, new information will always be required due to changes in the market, customer behaviour, technology etc.

- We understand there is value in this information, but it is not yet clear how the data we provide and analysis conducted by the ESC and ACCC is being used to better shape new policy, or review existing policy interventions. To have a better understanding would be helpful to the industry and enable more efficient provision of the data. The ESB also presumes that publishing information would be of benefit to consumers, or the market, via additional transparency. The ESB should approach the ESC to understand how its stakeholders found value in the summary billing information reported in its 2018-19 VEMR.5

We can only see that a small subset of this information was used by the ESC is subsequent decisions, for example, its decision to regulate conditional discounts, where the ESC also referred to the ACCC’s prior findings and data.6

- The ESB suggests there would also be benefits in accessing this information in ‘real-time’. Noting that bills are issued monthly or quarterly, reports like the ESC and ACCC take snapshots over periods spanning 12 to 18 months, and analysis of this information, including the preparation of high level ‘dashboard’ type observations, takes several months. Even if rapid data processing were feasible, it is not clear what the benefits would be for policymakers and others in observing snapshots taken over shorter periods. Given the seasonal nature of energy bills and the updates and timing issues that can occur with meter data, we don’t believe that it would be useful for the information to be available in real-time. Instead this would create extra work and explanation for no addition benefit.

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5 ESC Victorian Energy Market report 2018-19
6 ESC Ensuring Energy Contracts are Clear and Fair
• Examining the success of policy interventions, such as the effects of reference pricing on customer comprehension, require much more intensive studies, including surveys and behavioural studies, and cannot be informed solely through examining large quantities of billing data.

Overall the policy questions and data arising in relation to billing data appears to be an evolving area and something we expect to be more thoroughly explored by the ACCC, and to a lesser extent the ESC pending the format of its upcoming data request. We recommend the ESB consult with these two agencies, retailers, and customer representatives, to properly explore the value of this information and expected benefits, including the need for it to be published frequently, the creation of dashboards, management and analysis of extremely large amounts of data, etc. We expect that there may need to be some exploration to settle on the ideal types of data sets and that there will be some change over time, but ideally, this is optimised doesn’t change substantially every time the data is requested.

We also consider that the ESB should properly appraise the likely costs involved in accessing settlement data. For example, it appears to consider that it would be able to streamline data provision by moving away from periodic requests from agencies like the ACCC, and gathering billing information, as well as switching and ‘competition’ data, from AEMO:

• requiring retail plans for individual meters to be reported with settlement meter data for all small energy users (residential and small business), along with current network tariffs and other retail competition and switching data

Linking retail plans to meters (via the AEMO’s Market Settlement and Transfer Solutions) would be a significant burden to populate and analyse. Based on what we know today, it would, in many cases, require the in-depth analysis of specific customers’ interval data to identify trends; importantly, this would be reliant on assumptions that the consumption pattern is indicating a trend. The belief that access to this information will enable greater insight by regulators is limited based on the specific circumstances of the customer, and the interpretation/ assumption of those assessing the data.

• ensuring that retail plans and metering data are accessible for privacy-protected, de-identified retail monitoring and analysis

It is imperative that access to billing data does not jeopardise the privacy and identity of customers. In particular, the ESB suggests that regulators will be able to share this information, which customers may be comfortable with, but we question whether consent would extend to academia and other researchers.

As outlined above, greater access to retail plans and metering data will allow regulators and possibly others to see the ‘truth’ in terms of what customers experience themselves, but the complexity and volume of information requires various assumptions and other methodological decisions to arrive at a ‘standard price’ to compare ‘similar’ customers against, as customers’ properties and consumption patterns vary significantly (regardless of their retail tariff). The results typically reported for analytical purposes are abstractions, and aggregation can lead to inaccuracies and inaccurate conclusions being drawn. As noted below, our own aggregation with AGL and Origin into a ‘big three’ narrative suits a policy discussion but, in our view, unfairly depicts our business as having a vastly larger customer base than some other retailers when this is not the case.

7 Testing Comprehension of the Reference Price: Research by AER and ACCC
• supporting a range of aggregate reporting or dashboard services on retail plans and consumer bill trends to increase transparency for wider audiences on a regular and more timely basis

There are many variations of billing that retailers offer, combined with the evolving nature of energy market and intuitive products, it is therefore unlikely that it will be possible to provide all this retailer information at a customer bill level; particularly, associating the range of offers and retailer revenue at a NMI level. The dashboard suggestion is targeted at improving access for regulators to obtain ‘near real-time’ data, EnergyAustralia does not believe that it is feasible to develop a dashboard that would have any meaning for an individual customer. Things like reference pricing, comparator websites, or similar reporting of market offers already exist to help customers navigate the market, and effort should be spent on improving awareness and use of these rather than adding more information and complexity to the customer experience.

Even if retailers were to provide very detailed billing and plan data, there are increasingly different types of plans that are bundled, or contain complex or behavioural components that would make it difficult to analyse and interpret the variations in customer charges and therefore margins.

When referring to current regulators’ ability to assess retail plans, the Strategy paper references the ACCC 2018 REPI ‘none of the reports are supported by effective information-gathering powers to allow regulators or governments to have a full understanding of retail costs and margins, and other complementary information like what types of offers consumers are on’. Firstly, we believe it is relevant to highlight this level of information is not deemed necessary or available for other industries. Secondly, the ACCC has these powers, until at least 2025, under section 95ZK of the Competition and Consumer Act. The ESC has collected data under section 37 of the ESC Act (VIC), and other regulators have similar powers in reflection of statutory functions e.g. annual monitoring of the retail market, specific terms of reference from the government, etc. EnergyAustralia believes there is merit in the ESB utilizing the current ACCC powers to establish if the data is truly necessary, which will then enable regulators and market participants to confidently agree to additional reporting.

Overall, it is unclear how increased reporting on retail price will benefit customers, as this is largely provided or accessible today, for example, the Strategy paper states that improving retail price monitoring would put ‘downwards pressure on consumer prices by ensuring effective competition’. Highly competitive markets are dependent on participants having common access to a wide variety of accurate and timely information.

In the retail market, this means that the most critical information is that which enables the customer to have a clear understanding of what they are currently paying, and what they could be paying if they switch to alternative offers or retailers. It is this price transparency, and the threat of switching, rather than reporting of customer billing data, which puts competitive pressure on prices and service delivery. Data collection and analysis by government agencies is not the best way to provide this information to customers. The Consumer Data Right will soon be introduced for energy consumers and this is a better way of providing customers with the additional ease of data access and transparency they need.

8 ESB, p. 84.
Adding retailer offers to AEMO’s MSATS Standing Data will have a significant cost and little additional benefit. The ESB’s references to simplified summaries of the ‘closest readily available plans’ or ‘tariff type’ classifications9, as it relates to customer billing data, would be basically of no use to customers. Customers can only benefit from switching to prospective offers, and this information (which can be customised for consumption, eligibility, concessions, etc. using the customer’s own billing information) is readily available from comparator websites.

**Recommendation 2: Streamlining price reporting**

EnergyAustralia supports moves to streamline and standardise data requests that retailers are currently responding to. We support the ACCC REPI recommendation 4010, requiring a single agency (AER) to be solely responsible for price reporting, with other agencies and jurisdictions stopping any duplicative price monitoring and reporting. Furthermore, the ESB should review the benefits of the ACCC’s gas enquiry and electricity monitoring, to establish the costs to the industry and what benefits customers have received.

We believe the core issue would be resolved via progressing the ESB’s recommendations 20 and 21, as this would ensure that data is accessible between the regulatory agencies. This will not enable real-time or up-to-date sharing of retail margins; however, it is unclear why this would be necessary as the retail margins are obtainable within the timeframe for their intended purpose (i.e. annual reporting). Real-time monitoring does not seem to produce a benefit for customers and would only slightly improve the process for regulators. Having a more detailed view of margins, say quarterly rather than annually, would not be as useful in energy as margins are seasonal and in a heavily regulated industry it is not uncommon for costs to be decided and applied retrospectively (e.g. green costs, network costs, etc.

**Recommendation 3: Tracking commercial and industrial prices**

The ESB states that a lack of information on the Commercial and Industrial (C&I) contracts market denies regulators the ability to identify if C&I businesses are being impacted by price changes in the wholesale market and how they respond to price signals. As the ESB and the reports it has cited highlight, there are concerns around price transparency for large customers and ‘plans’ for these customers are opaque compared to those for small customers.

The ESB also states that transparency challenges for the large customer ‘sector’ are growing in proportion to the role of Demand Response, and to enable effective demand side participation requires more information on large energy users to support demand forecasting. Large customer energy pricing is often bespoke, in terms of the type of plan and particularly based on the customer’s energy usage profile and the time the contract. We understand why large customers may feel concerned, however, the ACCC already has sufficient information and could report on pricing and competition in this market. However, we see this is as very competitive market, the customers often have a sophisticated understanding of energy purchasing and those who don’t often use the services of a broker to get the best deal from a range of retailers. The adequacy of competition in the market can be ascertained in several ways, but we don’t believe that transparency of pricing would bring any additional benefits for large customers.

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9 ESB, p. 84.
10 ACCC REPI review 2018, p321
We recommend that the ESB undertake more considered analysis of the type of information identified in its recommendation 3. We are concerned that increasing the reporting of prices, trends in contract cycles, liquidity and additional terms and services will not achieve the outcomes sought by the Strategy paper in terms of improved ability of larger users to negotiate or otherwise lower their prices. There is a significant risk of misinterpretation of contractual information for large customers, and there is an additional concern in providing too much commercially sensitive information i.e. sensitivity that competitors will know each other’s costs in concentrated industries.

As the ESB notes, C&I customers often have non-standardised contracting arrangements, bespoke pricing, and dedicated account managers. They often contain tailored components such as Demand Response arrangements or particular shape prices. The resulting difficulties in comparing prices on a like-for-like basis, that would be useful for contract negotiations, arise from factors such as:

- **The period of the day the customer consumes energy**

  This dictates the volume of swaps and caps the retailer must buy to manage the price risks for that customer’s usage profile e.g. midday use is cheaper than evening peak use, weekends cheaper than weekdays, etc.

- **How customers contract their electricity**

  1. **Basic, unbundled pricing** – which consists of unbundled components and is more standardised compared to other Large Customer products:
     a) A wholesale energy price based on the customer’s annual load profile (peak and off-peak usage pricing)
     b) metering charges,
     c) network charges (based on tariffs assigned by the distributor),
     d) environmental charges,
     e) market charges (including pass through of NEM participant fees and frequency control ancillary services), and
     f) retail costs.

  2. **Pool pass through (full spot pricing)** – This exposes the customers to wholesale spot prices.

  3. **Highly bespoke pricing** which is negotiated on a case by case basis. For example, progressive purchasing of wholesale contracts which the retailer buys on the customers’ instructions i.e. they purchase energy in blocks.

    Both pool pass through and highly bespoke pricing have add on features such as solar, wind or battery Feed-in tariffs, Demand Response credits, green power, which can be selected by the customer but are again often tailored to the customer’s attributes.

- **Their transmission and distribution costs** – some of which will be highly specific to one customer or a very small cohort of customers.
Similar issues and cost drivers arise in the case of pricing for gas C&I customers. On that note, it is unclear whether the ESB is suggesting reporting for both electricity and gas C&I customers. We assume it is only interested in electricity pricing given its references to Wholesale Demand Response, and that it does not refer to the extensive reporting of gas pricing and cost trends for C&I customers in the ACCC’s Gas Inquiry reports, nor the suite of measures associated with COAG’s new measures to improve gas market transparency. We note, however, that the ACCC’s REPI did not contain recommendations regarding electricity price transparency for C&I customers. To us this suggests, alongside the comparable focus on gas customer pricing, that there are relatively fewer concerns around pricing for electricity C&I customers. This low level of concern is aligned with the very low and decreasing retail margins reported for C&I customers in the ACCC’s Final REPI report.11

Irrespective of the fuel type, for pricing data to be meaningful for individual customers, the range of industries, usage profiles, location and other data need to be identified. This creates a challenge in determining the appropriate aggregation level that allows comparisons without revealing sensitive pricing information to competitors, particularly in concentrated industries such as metals processing and ammonia production. Despite aggregation by sector, the bespoke nature of pricing, based on usage profiles and possible Demand Response arrangements may make this information difficult to interpret. This may be exacerbated by varied pricing across regions that reflects the wholesale market pricing and network costs in different regions of the NEM. Industries with small numbers of participants may find it difficult to see relevance in the information reported at a national scale and state-based reporting may be difficult to achieve without revealing sensitive pricing information. While the ESB may not be interested in gas customers, we recommend it liaise with the ACCC’s Gas Inquiry team to explore how it has dealt with these challenges, and also to collate evidence around how C&I customers have benefited from the information contained in the ACCC’s reports.

EnergyAustralia suggests the ESB should explore how its objectives could be achieved by monitoring the wholesale market prices (using the ASX/ AFMA powers), establishing what the C&I customers will be paying on average, and then sampling of some customers (not their retailers). We acknowledge the results will still be limited due to the variables explained above; however, this will be a more cost effective approach than having retailers produce large volumes of complex contractual information that then needs to be carefully digested by appropriately qualified regulatory staff or other stakeholders.

Recommendation 4: Contract market monitoring

We note the importance of wholesale markets and contract trading to overall energy costs. Over several years we have spent considerable time discussing arrangements with regulatory staff to improve their understanding of trading arrangements as they are highly complex, and complexity can breed distrust.

Further to our previously expressed views on the ACCC REPI recommendation 4112 ‘AER contract market reporting’, we note the ability to obtain and analyse contract data is already available through AFMA. The ESB suggests, however, there are “significant limitations” in AFMA’s ability to enhance their voluntary survey of contracts. It does not elaborate on what these limitations are nor why they cannot be resolved by AFMA. Instead, the Strategy paper suggestion is for the contract monitoring powers to be the remit of the AER, while outlining some limitations in doing so:

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11 ACCC REPI final report, p. 32.
12 EnergyAustralia’s submission to ACCC REPI Recommendation 41
‘support for the proposed contract registry has faced a range of challenges, in considering compliance costs for industry due to the relatively small size of the OTC market compared to exchange traded volumes, capacity to usefully interpret diverse bespoke contracts, and challenges raised in the design and operation of similar registries internationally. Further analysis of this option and alternatives is needed but cannot sensibly be undertaken prior to expansion of the AER’s powers.’

EnergyAustralia does not believe it is a prudent investment of market participant’s capital to provide the AER powers that are currently available through AFMA, particularly, if establishing the need is unachievable prior to expanding the AER’s powers, and where this would create a duplication of requests.

OTC data is complex and bespoke, and only one element of a retailer’s risk management strategy. Interpreting the data in isolation may be challenging, rendering the provision of such data redundant. Retailers undertake various forms of risk management, some of which sit outside direct linkages to the electricity market. Further, the contract market does not sit within the national energy laws as it does not pertain to the delivery of physical electricity. The suitability of the AER reviewing financial market data should be questioned. If there are concerns regarding compliance with financial regulations, we suggest ASIC is better placed to review OTC contracts. This would also capture activity by non-physical market participants which may not be able to be captured sufficiently by energy laws.

Recommendation 5: Retail margins

Retailer margins are important for customers and stakeholders to understand, particularly where these show trends over time that reflect problems with the market or in response to broader economic conditions. For example, ACCC REPI review reported electricity retail margins for 2016-17 being amongst the highest in the world13, and high margins in Victoria, contrasted with similarly high rates of customer switching, associated with highly competitive markets. Notably, retailer margins prior to and since the REPI was released were significantly more constrained, culminating in some instances with retailers achieving negative margins. The likely interest in margins is now around monitoring retailer viability in the wake of retail price regulation and other competitive reforms introduced recently (particularly in Victoria), as well as the impact of COVID-19 on levels of debt and economic recession.

The reporting of margins is challenging for at least three reasons.

Margins are taken as shorthand for the deficiency of competition within a market. They are a useful starting point, but further context is required to identify if there is a problem and determine its underlying cause.

The second challenge is similar to the reporting of many datasets touched on by the ESB in that it is challenging to present a ‘true’ picture of something that is also simple and consistent across retailers. For example, judgements must be applied including determining which measure e.g. EBITDA, NPAT etc. and also controlling for different accounting rules, including allocation of corporate costs, depreciation, taxation, and the impacts of vertical and horizontal integration.

13 ACCC REPI Chapter 1 pg.145
The third challenge is one for retailers in dealing with the misinterpretation of this information. While the ACCC and others put appropriate qualifications around the data they present, the findings around margins are often much more subjective and could lead to inappropriate policy responses unless the government agency tasked with the review of margins consults with the companies who provided the data.

One ongoing narrative from the REPI report and something that appears to continue into the ACCC’s more recent reporting is that the ‘big three’ do not compete aggressively with smaller retailers. This view appears to be supported by the ESB. This analysis has always been simplistic and the grouping of EnergyAustralia, Origin Energy and AGL is largely arbitrary. Our expectation is that the reported data across these three entities e.g. average prices, notional margins etc. varies widely. For reasons of commerciality, this information cannot be disaggregated. Yet we would be interested to know if data reporting by regulators in other industries presented averages or aggregated metrics based on three observations in a way that was considered as robust or informative as it is in energy.

The ‘big three’ narrative has been perpetuated against incumbent retailers in an attempt to encourage customers to switch to smaller retailers without consideration of whether this is actually a better outcome for them. It is not based on an appropriate assessment of size (noting EnergyAustralia is not the one of the largest retailers in many regions).

Furthermore, it is worth noting that conclusions on competition cannot be drawn on the basis of margins alone, the graph (Figure 9) provided in the Strategy paper was provided to highlight that increased margins of incumbent retailers indicated the ‘market structure allows the big three players to not compete aggressively, letting smaller higher-cost players set prices and providing for larger margins’. This assumption, that increased margins to incumbent retailers, due to a high portion of ‘sticky’ or Standing Offer Tariff customers (something that regulators have unsuccessfully attempted to address via a range of regulations), correlates to reduced competition, does not appreciate that the reported margins are indicating a competitive market operating effectively; with non-incumbent retailers competing aggressively – to the point of reduced margins – which motivates customers to transfer.

We would welcome more transparency and reporting of retailer and other data if it assisted the ACCC and other regulators in their task of appropriately analysing market dynamics and in maintaining current levels of competition. Examining retailer margins is important but not particularly informative in determining the presence or sources of market power, which go to the heart of good policy design.

Recommendation 6: Access to meter data for public-good research

EnergyAustralia is supportive of enabling ‘prescribed entities’ to have access to AEMO’s meter data for public-good research. Establishing AEMO as the responsible party for management and distribution of this data is the most effective option, as they currently store significant amounts of meter data for settlement purposes, and for its soon to be required obligations to provide meter data under the CDR. Aside from AEMO the request could be directed at the responsible meter providers; however, this would require many agreements and would likely result in a greater cost.

14 ESB Data Strategy pg. 94
**Recommendation 7: Gas meter data**

The gas consumption at a site will assist in developing an indication on demand for total energy; however, it is debatable how accurate this information will be, and whether this forecasting precision is required. The increased information with the proper analytical assessment could produce better energy forecasting; however, it is likely the scope of error would not be too dissimilar to the demand forecasting that is achieved from reviewing the total gas consumption in a distribution zone.

The cost benefit analysis on storing gas meter information within AEMO standing data would not likely ‘stack up’ to the potential benefits. Historical gas consumption at a distribution zone level provides enough information to understand consumption patterns, for this to be reduced more granularly, you are aiming to achieve a level of precision which is unrealistic, i.e. you are investing significantly to establish the consumption patterns of single households, but the forecast consumption can change regardless of your greater insight (i.e. people vacating the property and going on leave). How much information is too much?

Ultimately, forecasting at this granular level is unlikely to be used for significant investment in generation, it is more reasonable this will be used for more precise dispatch ability, such as, allocating DER at a feeder level. While this level of granularity will provide benefit in limiting augmentation of the distribution zone, it does not address a pronounced issue, as we have generators that can address under forecasting if it has occurred.

Gas networks have been exploring the possibility of remote metering for some years, while the introduction or remote metering would enable more precise and timely understanding of gas consumption, the value has not been deemed worthy of the large investment required. If regulated networks have not passed a business case for this, how could this be considered to be a reasonable to pass through via other methods?

**Recommendation 8: Review of consumer surveys and Bill Benchmarking**

EnergyAustralia understands from customer surveys that bill benchmarking is not valued by customers, this is generally due to the inherent limitations; regardless of how good data is, it will never accurately translate to something that is useful for the individual customer. Properties are different, even the ones that are identical have different appliances and usage patterns.

While the proposed recommendation would be an improvement on the current bill benchmarking, it would still be limited in its ability to be accurate. We do not support further investment in this space while the limitations on accuracy of comparable information are present, as this is a main driver of poor customer experience.

**Recommendation 9: Data on vulnerable consumers**

Prior to progressing this recommendation, it may be equitable to consider if the investment in this would be more effective if directed at customers experiencing financial hardship, via appliance swaps, debt waivers, etc. Increased reporting and analysis of vulnerable customers will conceivably lead to more recommendations on retailers becoming the channel to administer public support, it must be considered that retailers may not be the best placed to fund this continued assistance to vulnerable customers.
It may be more appropriate for governments to deliver these measures so that the costs are socialised across the general population, rather than spread across a service provider’s customer base. There may also be additional efficiencies in centralised government administration of these assistance measures, compared to delivery by each individual retailer; and clear efficiencies in ensuring consistency across the different federal/state/territory jurisdictions.

What is not considered is that access to more data will not address an underlying issue with a portion of vulnerable customers, they are disengaged. Retailers have attempted to move customers that are on more expensive plans to better offers, this has been through mail outs, phone calls, television advertising, government websites, yet they are still not interested.

The Strategy paper mentions the AER reports on some vulnerable customer metrics. We note that some state departments are also now requesting data about vulnerable customers, mainly the NSW Department of Planning, Industry and Environment is requesting periodic data about the plans that concession and rebates customers are on and their consumption. Introducing new data provision requirements would duplicate reporting to the NSW DPIE. State/territory agencies may also be better placed to gather this data given their expertise in the very complex state/territory concession regimes which differ from jurisdiction to jurisdiction.

**Recommendation 10: Commercial consumers**

At a single site level, the key data – metering data - is available already. This can be extrapolated based on impacted businesses or areas, or re-cut as participants require it. The reporting of all businesses would be extremely expensive to establish and maintain, and the information would be hard to maintain accuracy on, thereby reducing the validity of decisions made based on this data.

The Strategy paper outlines that this information will assist in assessing economic impacts, why should the energy industry be funding the data to support understanding of economic impacts, are there not govt agencies that have the power to obtain the information?

**Recommendation 11: Research impacts of current voltage levels**

Improvements in voltage levels will increase the life span of customer’s appliances and improve the reporting of consumption, the concern is how much needs to be invested to achieve these benefits and whether the benefits outweigh the cost. Over-under voltage issues, are the remit of networks. There are guidelines they must be within, which they are largely not achieving.

Additional monitoring would be beneficial; however, the cost for this service must be considered, as it may be significant. It should be considered that the investment in the data source may be better invested in the roll out of advanced meters, which will provide a similar service (if networks are provided access to the voltage information).

The Strategy paper states, ‘A range of networks have already struggled to develop well supported and approved monitoring investment business cases’, if the regulated networks which are responsible for monitoring voltage levels have not passed a business case for this, the appropriate avenue to address this is through examining regulatory approval and compliance processes.
EnergyAustralia support Dynamic Operating Envelopes (replacing static export limits with dynamic); however, there are workstreams underway (meter and inverter changes in South Australia\textsuperscript{15}, AS4777.2 Interoperability\textsuperscript{16}) that are expected to achieve a similar result.

**Recommendation 12: Sharing network data for research**

The sharing of data sources to improve oversight of the LV network, seems to be the most cost-effective way of monitoring reliability. The Power of Choice reforms removed a necessary benefit of network’s managing metering, the capacity to monitor the LV network more accurately; improving the sharing of this data will be beneficial to customers.

The Strategy paper implies that retailers would be hesitant to provide access to the metering data they are responsible for; however, if the sharing of the additional metering information results in reduced or more efficient network expenditure it would be in retailer’s best interest to share this information, as this will ultimately reduce our customers’ bills.

**Recommendation 13: Building analytic capability in LV data and modelling**

Networks should lead this work, but it should be reliant on them conducting a trial to establish if they can achieve the efficiency benefits required to justify the investment. Networks can accumulate all the data sources and establish conclusions; however, the expertise to assess the range of data may be outside their skillset. Increased data for networks would produce efficiencies; however, it is worth considering that a prudent business would build the platforms it needed to efficiently operate, so it is likely that whilst this is an emerging issue it has not been worth network’s investment to date.

**Recommendation 14: LV reporting to provide transparency for DER investors and planners**

EnergyAustralia agrees that there is a benefit that could be obtained by allowing DER aggregators and service providers to target areas that are less constrained or have greater hosting capacity. The networks have had the capacity to enable this reporting and have generally elected to not do this. 

Barriers/concerns on the effectiveness of this data is reliant on the timely nature of the reporting. It will provide little value if the information is significantly outdated. Note: EnergyAustralia does not suggest or support moving to real-time data (as the cost would outweigh the benefit).

**Recommendation 15: Review of metering requirements and roll-out**

EnergyAustralia is supportive of any initiative that provides greater insight into network constraints, as this is beneficial to how we service our DER customers. While this is largely within the remit of the networks, we have expressed views on the changes the ESB are hoping to achieve:

**Minimum meter data access rights**

This is a reasonable request and something that needed to occur following the Power of Choice reforms. We also note that this is distinct and directed at different purpose to the sharing of metering data under the Consumer Data Right.

\textsuperscript{15} Recommended Regulatory Changes for Smarter Homes
\textsuperscript{16} Distributed Energy Resources - Initial Standard
Network connection point
The specific location is rarely required. The house/NMI location is suitable to identify the feeder in most cases. GPS locations will be added as part of the MSATS Standing Data review, this will provide the specific location information required.

Voltage reporting
The voltage information is available and in some cases is already provided with the meter data; however, despite the Strategy paper’s suggestion, this enabling this information for all remote meters will not be a modest cost.

DER generation – gross metering

EnergyAustralia agrees that further consideration is required for gross metering data, with any data requirements limited to commercial meters that are, or can be, configured to provide the required data. Any requirement to apply this retrospectively to existing DER that cannot meet the data requirements will be very costly.

We note that gross metering data can be accessible via commercial arrangements, and it is not currently required by regulation. For example, gross metering data is used to support the operation of Demand Response – by showing how much electricity is being stored or being used by the device so that Demand Response operators can adjust load. The data is available today through the manufacturer’s portals that are built to enable Demand Response.

The ESB should consider the value of gross metering data for DER generation, for the purposes of understanding whether it assist in the efficient operation of the NEM or for network planning purposes only, rather than just for other purposes, like Demand Response. One potential policy issue to consider is whether gross metering for DER generation would facilitate other market reforms being considered by the ESB under the 2020 Market design, in particular the two-sided market design initiative which considers much greater demand side participation in the NEM. It could be desirable to have this information made more generally available to customers, providers and AEMO, but it will take a concerted effort to achieve in a cost-effective manner, particularly for residential and small business customers. Currently, millions of meters would need to be upgraded (probably requiring manual work at site) and the regulatory framework would need to be updated to enable a standardised requirement for this data to be provided.

Review of metering roll-out
The roll-out has been hampered by technical, regulatory, financial incentive, and customer choice issues. The Power of Choice reforms were not intended to involve a forced roll-out of meters, the choice was for customers to make. Any inclination to promote a roll-out will be reliant on retailers absorbing negative customer reactions, which has been a main reason a roll-out has not occurred to date.

As a further consideration, the ESB should assess the benefits of enabling metering to provide real-time data, to a centralised location. There are many commercial barriers to accessing real-time meter data, that will provide great benefits to retailers, network operators, and AEMO. This is particularly important in a two-sided market where Demand Response is more prevalent.

While the provision of day behind meter data is mandated and accessible via MSATS, the availability of real-time meter data is not consistent across Meter Data Providers (MDP). While some MDPs provide access to this real-time data, they do not do so in a consistent way; some via slow File
Transfer Protocols, others via Application Programming Interfaces (API), and many not at all. Then, if they do provide this data, they do so at a very high cost, or the meters are not compatible and require a site visit to update hardware or firmware. The ESB should consider whether MDPs should be mandated to provide meters with this capability and develop APIs to access this real-time meter data (i.e. 5-minute data with minimal delay) or establish another mechanism that this data can be accessed securely, reliably and with minimal delay.

**Recommendation 16: Evolving the DER Register to wider needs**

As discussed in previous recommendations, EnergyAustralia support greater insight into DER; ensuring better decisions can be made on operation, where to invest, forecasting, etc. We believe it is prudent to exploring how the DER Register can be expanded to provide greater insight and access to the interested parties; once again, it’s imperative a cost-benefit analysis is conducted as market participants have already invested in the current register and any further investment should consider the total expenditure.

We believe that by providing retailers access to the DER Register details of their own customers it would enable an enriched understanding and more targeted retailer plans, aimed at benefitting customers with improved plans and offers.

**Recommendation 17: Electric vehicle data**

The market is in infancy, too much regulation on EV will hinder the adoption of the technology. When there is greater market share, the impacts will be better understood. Analysis should be conducted when there is data available to determine an issue exists as this will build confidence in how the outcome can be achieved.

Ensuring ownership and governance for coordinating the management of EV within the energy system may be appropriate, as there will need to be strong involvement between and coordination of impacted parties, and this is unlikely to occur where the regulation, rules, laws are lacking.

EnergyAustralia agrees with assessing the issues that will be encountered due to the adoption of Electric Vehicles (EV); however, this should be handled by the DEIP\(^\text{17}\), a separate process is not required.

**Recommendation 18: High-level energy data principles**

EnergyAustralia supports this recommendation. The fundamental aspects to the DSB’s proposed High-level energy data principles are maintaining privacy safeguards and ensuring that as the sector moves from protecting data to releasing it with explicit rights, the consumer is placed at the centre of these data decisions, where appropriate.

**Recommendation 19: Overhaul of the legislative framework**

EnergyAustralia support the intent of this recommendation; however, at this stage the proposal is vague, and we are reluctant to agree this should be progressed without a greater understanding of the details.

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\(^{17}\) DEIP EV Grid Integration Workstream
**Recommendation 20: Incremental regulatory changes**

EnergyAustralia supports this recommendation and believe that this and recommendation 21 should be progressed prior to any other recommendation, as this will enable the sharing of data that is currently held within the regulators. Once this information is available, the need for the additional recommendations will be clearer; specifically, the recommendations that require additional data sets, as they are potentially achievable within the data already obtained by the regulators.

**Recommendation 21: Common guidelines for data collection and sharing**

EnergyAustralia support this recommendation and believe that this and recommendation 20 should be progressed prior to any other recommendation, as this will enable the sharing of data that is currently held within the regulators. Once this information is available, the need for the additional recommendations will be clearer; specifically, the recommendations that require additional data sets, as they are potentially achievable within the data already obtained by the regulators.

While we broadly support further development of this recommendation, it is also important that the regulatory framework makes it very clear what information will be shared among agencies; and for information identified as confidential, clear processes apply around disclosure of confidential information – including that agency seeks the permission of the business or that the business is informed before disclosure occurs, whichever is appropriate balancing public benefit considerations.

**Recommendation 22: Support coherence with the CDR**

EnergyAustralia supports this recommendation. The design and implementation of Data Strategy should be coherent and consistent with the CDR. We seek to address the notion that the recommendations in the Strategy paper leverage the data or the infrastructure built for the CDR.

The CDR focusses on data holders (AEMO, retailers, and Government comparison sites) sharing data with third parties about an individual consumer (the consumer’s energy plan, metering data, and bills) but only with the consumer’s explicit and ‘unbundled’ consent to disclose that data. The data can then be used for purposes that a consumer has also consented to. The third parties must become accredited, which imposes obligations around information security and privacy on those third parties. Infrastructure to support the CDR will include APIs built to transfer data from data holders (e.g. retailers) and AEMO who will act as the intermediary in transferring data to third parties (third parties will also build APIs to AEMO to receive data).

Many of the recommendations in the Strategy paper suggest efficiencies can be achieved by tapping into the CDR data, i.e. access to customer’s retail plan information. They appear to require disclosure of data across a retailer’s entire customer base – which is at odds with the CDR’s current requirement for individual consumers to consent to each specific data recipient and data disclosure purpose. They also imply disclosure of data to ‘trusted’ agencies and it is unclear whether these agencies would be accredited or not.

Where the recommendations involve the transfer of data between retailers and recipients, there may be synergies/efficiencies in using the CDR infrastructure. The broader and bulk sharing of data is a significant departure from the CDR’s current design, and the CDR regulatory framework would need to be redesigned to enable it. This could be enabled by a regulatory “exception” – allowing for consent processes to be avoided for disclosure to regulatory agencies. However, we emphasise this is fundamentally different to the CDR which is meant to give the customer a data right, to support the data economy and to promote competition in the sectors it applies to.
We also emphasise that the CDR is intended to be economy wide – and this has been a key consideration throughout its design. Any regulatory exception for the energy sector would be inconsistent with the design of the CDR for other sectors. We encourage the ESB to work with Treasury and the ACCC to discuss if it is necessary or useful for the data strategy to access this consumer data and, if so, if there is a suitable and efficient way to use the CDR infrastructure.

**Recommendation 23: Data Leadership and Coordination group**

Oversight and coordination are vital when progressing significant change, the Data Leadership and Coordination Group (DataLAC) is one available option to achieve this. EnergyAustralia is largely supportive of the DataLAC proposal, with our main contention being:

- the DataLAC requires industry representation. As the industry will be heavily impacted by the direction of the DataLAC, it is reasonable that – at a minimum – industry groups (AEC & ENA) are able to present an industry-wide, balanced, view at the preliminary stage of any DataLAC direction;

- the DataLAC should be limited to a co-ordinating body. There should be no formal advisory powers/framework, ‘Energy Ministers should agree to clear terms of reference and a forward plan for the group, including regular public reporting’. This role is not required, as it is achieved, and should remain, the remit of the existing market bodies and rule-change framework; and,

- the DataLAC should be run efficiently, both in time and cost. Consideration must be provided to the constrained schedules and priorities of its members, by ensuring meetings have clear and defined objectives/agendas.

**Recommendation 24: Data Users Group (DUG)**

EnergyAustralia supports the formation of a DUG, as this will provide further control of how and when data is reasonably requested. Our view is that the proposed DataLAC and DUG should not bypass existing consultation processes, instead predominantly focus on achieving the data goals within the existing information sharing regulations.

**Recommendation 25: Common data portal**

EnergyAustralia support the intent of this recommendation and we believe that initially progressing recommendations 20 and 21 will establish the landscape of data availability, thereby enabling confidence that any new data requirements are not already achievable within current capabilities.

**Recommendation 26: Resources and capability to support access**

EnergyAustralia support the intent of this recommendation. If this were progressed, we would, however, require a greater understanding of how the sharing of this information will achieve the ‘public-good’ benchmarks. Ultimately, market participants will fund the increased sharing of this information, where there is an actual benefit to energy consumers this cost is reasonable; however, as previously stated, our belief is that the investment in establishing these recommendations may be more precisely and effectively allocated to the areas of need.
**Recommendation 27: Reporting and analytics capabilities**

EnergyAustralia supports this recommendation, and our belief is most of the issues identified within the Strategy paper would have been addressed earlier if the consideration for common reporting needs and the resource/responsibility needs had been a shared priority of regulators. Ideally this analysis should be able to be completed through progressing recommendations 20 and 21; if this is not the case, then we would support recommendations 23 and 24 (along with recommendations 20 and 21) being developed as a priority to enable the capacity for this recommendation to proceed.

**Recommendation 28: Forward review of Data Strategy against outcomes**

EnergyAustralia fundamentally supports the analysis and review of any change/regulations that occurs as a result of the ESB Data Strategy; however, the ‘outcomes identified in the Strategy’ are not clear, therefore we are reluctant to agree this recommendation should be progressed without a greater understanding of what the specific outcomes are and the how success will be determined.

**Recommendation 29: AEMC Rule guidance**

EnergyAustralia agrees that the AEMC should be cognisant of how future rule changes may have data access requirements, this should be a consideration regardless of how the ESB Data Strategy progresses.

We support that the AEMC should update external guidance to Rule change proponents to be consistent with the wider principles on data policy and consideration of more adaptive approaches; however, at this stage the proposal is lacking detail, and we are reluctant to agree this should be progressed without a greater understanding of how this might limit the AEMC’s rule making ability.

**Recommendation 30: Forward Rules advice**

Enabling the DataLAC to provide views on future data requirements for any new Rules, guidelines and procedures, would put the onus on establishing the impacts on the appropriate body; as compared to relying too heavily on a specific regulator (a concern of recommendation 29).

However, we are concerned that this power may undercut the authority of the AEMC’s rule-making process. As such, we are reluctant to support this recommendation without a clearer understanding of how the DataLAC will be limited to an ‘advisory role only’.

**Recommendation 31: Guidelines for research data and related reforms**

EnergyAustralia support this recommendation, we believe that this should be the progressed along with recommendations 20 and 21, to establish the landscape of data availability, ensure that access issues are addressed, and to prioritise the efficient allocation of market participant’s resources.

Ultimately, our concerns throughout the recommendations is how market participants’ expenditure will have a corresponding impact to consumers, we believe that progressing recommendations that have the potential to identify the range of issues outlined in other recommendations should be the preference for the ESB.

**Recommendation 32: Improve accessibility of research data**

EnergyAustralia support the intent of this recommendation; however, at this stage the proposal is vague, and we are reluctant to agree this should be progressed without a greater understanding of the details.
In summary, we appreciate the ESB’s regard for the energy market’s current and forecast data needs; however, we are concerned that the appropriate level of consideration has not yet been provided to assess the capability of the current framework to achieve the desired objectives, and that without this understanding the recommendations risk a significant investment that will ultimately be worn by customers.

If you would like to discuss this submission, please contact me on 03 8628 1704 or Travis.Worsteling@energyaustralia.com.au.

Regards

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