Exploring a consumer data right for the electricity sector: SolarZero submission

Eric Pyle. Director Public Affairs and Policy, SolarZero, 10th October 2024

Introduction

The ideal real world scenario is that a customer is able to log onto a website/app, provide permission for their usage and pricing data to be obtained, and the website/app provides them or their agent with information about the offers available from other companies, or a solar offer, or a solar/battery offer, or how purchasing an EV might impact their bill and so on. The question is how to get to that future, which is absolutely technically possible today.

This consultation document is timely. The technology now available in the electricity sector is well ahead of electricity sector practice. It is high time that policy and regulation was updated across a number of areas in the electricity sector, of which consumer data is one, to reflect the opportunities provided by new technology.

Over the last five or so decades the electricity sector has gone from a technology leader to laggard. Policy and regulation is key to enabling the industry to adopt 21st century technology. This document is welcome because it seeks to move an important part of the electricity sector – consumer data – into the 21st century.

For the electricity market to work effectively, consumer data and pricing plans must be made readily available. That is axiomatic to a properly functioning market.

SolarZero's experience is limited to household and commercial enterprise data. This submission reflects SolarZero's experience with these two classes of electricity users.

1. What are your experiences of accessing consumer and product data for electricity under the status quo?

Accessing consumer data is not easy, be it for a household or a commercial enterprise. Data arrives in a variety of formats and not in a particularly timely fashion. For example, SolarZero has received data in pdf format and it can take days to arrive.

Our ideal is that while we are talking to a potential customer they are able to give us authorisation to access their usage data and pricing plan. In real time we should be able to digitally access that data and analyse it in terms of the product suite we have. That should be the norm and the target that regulation seeks to achieve. It is technically feasible now.



2. Do you agree with our summation of the status quo and problem definition? Is anything missing or incorrect in your view? And please provide any evidence you may have to support your views.

Yes – we agree with the summation. We would add that the electricity sector is still acting in accordance with 20th century (or even 19th century) practice. Data is a key element of 21st century business practice. Enabling good digital access to data will help enable the electricity sector move from 20th century practice to 21st century. Callaghan Innovation considers that the electricity industry is the second least innovative industry sector in New Zealand and the Commerce Commission believes that productivity in the electricity industry is declining. This data initiative is one of many that is needed to drive the electricity industry towards greater productivity.

3. Do you think that regulatory options are necessary to unlock better access to customer and product data?

Yes. The electricity industry is intensely regulated and for good reason in terms of safety and the like. The industry will not innovate without effective regulation. The challenge is that the regulations are well behind technology and the regulatory settings now need to catch up and enable the productivity gains from new technologies to be realised in the electricity sector, as they have in other areas of the economy.

4. What do you consider to be the likely outcomes for access to customer and product data in the absence of a CDR for electricity?

The status quo – a low productivity (and therefore high relative cost) power system that remains the second least innovative industry in New Zealand.

5. Who else may be impacted by a designation of the electricity sector? Should particular groups or classes of entities be explicitly included or excluded from a potential designation?

The vision outlined in paragraph 45 is the correct one. This section of the document captures the people affected. The general assumption should be inclusion and we can't think of situations where exclusions should be put in place, provided the consumer approves access to the data and data security and privacy considerations are observed.



6. What customer data do you think is the most important? And what else (now or in the future) would be important? And why? What are the benefits from consumers having ready access to this data?

The important data is high granularity (30 min or less sampling interval) usage and the price plan including buy-back tariffs and the like. We suggest start with the "simple stuff" and don't delay the implementation of this because not everything has been thought through. The rules need to be easily upgradeable so that as issues are identified and technology evolves, the regulations can keep pace and ideally stay ahead of what is technically possible.

7. If access to customer data is designated for all consumers (residential, small business, large business and large consumers) what are the potential benefits, risks or costs associated with each type of customer? and why?

We only see upside. We don't see any downsides. However, safeguards do need to be put in place, e.g. bona fide accessors and customers having to give permission for the data to be accessed. There may be some additional cost in terms of security and legacy database structure revision but nothing that best practice wouldn't already require of entities holding client data.

8. What product data do you think is the most important? And what else (now or in the future) could be important? And why? What are the benefits from this data?

Readily available, accurate and up to date pricing plans is absolutely critical to making the market work effectively.

9. Are there any other issues with product data we should be aware of? And why? Please provide examples.

Whether this initiative opens the opportunity for scammers needs to be considered. Also the use of bespoke price plans to retain customers has been a feature of retailer differentiation strategies. Arguments about commercial sensitivity of data may well arise and need to be addressed.

10. What factors should be considered when identifying who the best data holder is under a potential CDR regime? and how will contracting agreements affect the application of a CDR in regard to data holders? (e.g., contracts between metering equipment providers and retailers to share data).



SolarZero does not have the experience to address the issue raised in paragraph 77, which the documents highlights is an important point, i.e. role of metering providers and retailers.

11. Do you agree with our initial framework for how to identify/designate data holders? Why or why not?

We suggest starting with retailers as data holders. As the document points out in paragraph 75, the set of "data holders" could be expanded over time as, for example, technology evolves. Start with something that can work and then build on that in the future.

12. What actions could be designated for electricity under a CDR? And why? What are the potential benefits from these? Please provide examples.

Potentially there are a wide range of designated actions. As the document points out these could include switching. Another aspect could be providing energy efficiency services. Assuming the data does become easily accessible a range of activities could be developed that may not be able to be easily anticipated. It is better, therefore, not to designate actions if that in some ways constrains innovation. It might be better to define the permissible intent of any action rather than presuppose the outcomes.

13. What are your thoughts on the potential impacts of a designation on the interests of consumers? Are there any specific benefits that are likely to be enabled with designation? What is the likely scale of these benefits, and over what timeframe will they occur?

We think that the benefits for the flexibility industry will be significant. In turn the ultimate benefits will be all consumers because with better data availability the whole power system should be able to be operated more efficiently, resulting in greater productivity which produces benefits for the whole of society.

14. Do you have any comments on the specific interests of different types of consumers, such as, residential, business, industrial, rural, Māori, or other groups of consumers?

No comments.



15. What are your views on the nature and scale of costs/benefits? Who would these costs/benefits apply to and when?

The costs of enabling digital access are small and the marginal costs are next to zero. A solution may be to have the meter data in a public repository funded by a levy via the Electricity Authority. It is axiomatic that for the electricity market to operate efficiently, easy and quick access to key data is essential. The government, via a levy, may need to provide some very small amount of funding to operate a data repository and access system.

Ultimately the benefits accrue to all consumers because the market should operate more efficiently and the productivity of the power system increases. In other words there is a public good dimension to enabling data to be available.

16. Would you be able to quantify the potential additional costs to your organisation associated with designation under the Bill?

We only see benefits from making data more readily available.

17. Do you have any comments on the benefits and risks to security, privacy, confidentiality, or other sensitivity of customer data and product data?

As above, the mechanics need to be thought about in terms of possible scammers and existing frameworks such as GDPR referenced.

18. Are there any risks from the designation to intellectual property rights in relation to customer data or product data?

We see no risks in relation to intellectual property rights. Intellectual property sits in the derived data products and commercial models not the basic data. There may be some arguments about the IP in pricing plans, but these should be in the public domain anyway.

19. What do you consider to be important if designing an accreditation regime for the sector?

The list in the document is a good start.



20. What are your views on fees for requests for customer electricity data under the Bill? If fees are charged, what limits or restrictions should be placed on fees? Do you have any comments on the costs and benefits of the various options?

Assuming the marginal costs are next to zero, there may be no need for charges because, for example, it may not matter how many times a customer's data is obtained. If, as one would expect in the 21st century, data access is digital and the cost of capturing the data is already recouped through metering charges it is hard to see a justification for charging.

21. Are there any particular considerations for electricity that should be taken into account for a consumer consenting process?

We can't think of any particular consenting issues that are specific to the electricity sector.

22. Do you think that standards should be led by industry, by government or co-led? What is the role of industry in developing standards? And why?

We don't have a view on this.

23. How do you believe a CDR and the Code could/could not work together?

Ensuring the CDR and Electricity Code works together requires detailed analysis by specialists in this field.

