

# Submission, Retail data project: access to consumption data

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## Introduction

Thank you for the opportunity of commenting on access for consumers to their retail data, and to their tariff information. I strongly support both initiatives, but not to the extent of prioritizing these over the retail data monitoring and analysis, which was Part 1 of the retail data project.

A single element of retail data access should be very simple to provide, both to individual consumers who ask for it, and for the Authority as an initial monitoring exercise. Find the amount of electricity you have used over the last year, and the total amount paid in that time. The quotient is simply the price/kWh YOU paid. You might then want to compare it with the average price/kWh for all residential consumers in NZ, or in your lines company area. The Authority could require this figure to be reported for each ICP, which after aggregation for privacy purposes, could yield median and quartiles for the full customer base, plus average over all residential kWh sold.

I agree that both consumers and suppliers need to engage in the competitive process if its potential benefits are to be realized. But some consumer segments are in practice unable to engage in that process – some are in debt or otherwise unable to pay on time, some have no computer access, some have specific reasons not to trust direct debit systems, etc.

Gentailers have to date not offered choices to effectively-captive consumers, except at high prices such as for pre-pay meters. This is price discrimination, charging the highest prices to the least elastic – the most captive – consumers, then maximizing their sales by offering lower and lower prices to attract more and more consumption. This practice is usual in selling air tickets, hotels, and similar businesses. But applied to essential services, price discrimination is frowned on or forbidden in most regulatory regimes.

I agree consumers need access to retail consumption data to fully realise their potential savings. This consultation document only addresses benefits of switching to other retailers. But the real savings of cost of supply comes from reducing demand at peak times or responding to other variations in actual cost of supply. We are dependent on retailers to make such offers. Even Unison's smart meter trial appears to be aimed to enable more rapid response to outages, rather than to offer monetary reward for consumers who reduce their demand when supply costs are high.

ç	General comments in regards to the:	Response
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<p>Q1.</p>	<p>Do you have any comments on the description of the current situation, including:</p> <p>a) The link between consumer engagement and retail competition?</p> <p>b) Current levels of consumer engagement?</p> <p>c) Current limits on access to consumption data?</p>	<p>(a) Consumer engagement is essential for competition to deliver benefits to them; otherwise they are just passive recipients of whatever the market offers. 2.4.18 says "...retailers are using their interval data to provide value-added services to customers to increase loyalty, rather than to assist their customers to find the best offers." But the What'sMyNumber campaign is promoting the "best offer" in terms of price alone. 2.4.18 continues, "but cannot effectively search or compare tariff offers and services from other retailers". But we're still waiting for those innovative offers. It must be said that the launch of Flick Electric could be a significant change to the standard model – but who would dare to buy at pure spot price when two half-hours on August 19 the spot price was \$34/kWh? - with no more than a half hour warning, a price of \$1.50/kWh. This may be a fun exercise for sophisticated consumers, but the risks seem pretty high ...</p> <p>S 2.3.5 offers two options for offering consumer choice – simplifying tariffs, or providing consumers with tools to manage more complex ones. I consider too much simplification – the Ofgem choice – is likely to remove the best opportunities. The complexity in my view is being caused by multiplicity of retailers, something that many or most consumers don't really like.</p> <p>S 2.1.9 – I agree with Orion's concerns that one problem is "all stakeholders have a limited understanding of what drives retail prices." They say the solution isn't necessarily "big data". I couldn't agree more! What is needed is careful monitoring and analysis, with peer review, of data which help us understand what drives retail prices. This comes right within the Authority's function: "undertake and monitor the operation and effectiveness of market-facilitation measures ..." Well, WhatsMyNumber is market-facilitation, this has effects on both "winners" and "losers" from retail churn. Surely it's time to monitor and analyse these effects, before designing a new initiative to further promote retail churn. The EA only talks about the benefits to the winners from competition, not the ever-rising prices to less-competitive consumers. Part 1 of the retail data project should not be deferred.</p> <p>(b and c) I have insufficient knowledge to comment.</p>
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Q2.	What are your comments on the Authority's assessment of the problems arising from limited access to consumption data?	<p>The problem arising from limited access is that most consumers only know how much they've used when they get their monthly bill. And are some billed less frequently? Whereas the retailer knows your half-hourly consumption pattern, and can decide whether to focus their marketing effort into your region, or your income group, or whatever, depending on whether your custom is profitable for them. Asymmetric information allows serious distortion of competitive markets.</p> <p>3.1.2(b) and 3.2.2 (b) helpfully include third party energy service providers, as creating competition. Such providers could use retail consumption data to identify the most profitable opportunities for them to develop. Aggregated data, from the now-deferred Phase 1 of the Reail Data Project, could help them focus their business strategies, stimulating innovation for the benefit of consumers.</p> <p>3.2.3 implies that retailers have data on their own customers, and can then develop and offer innovative tariff plans based on their knowledge. This was confirmed at a meeting addressed by Dennis Barnes, CEO of Contact Energy – they intensively analyse the consumption patterns of their own customers. But where are their innovative tariff plans – or anyone else's?</p>
Q3	Do you have any comments or suggestions about whether the criteria used in developing the proposal are a suitable basis for the proposed Code amendment?	4.22 (c) The criteria seem appropriate; consumers should be able to download Kwh half-hourly, and \$ of the power bill monthly (or however often billed, in a format that allows summing over shorter or longer periods, basically an .xls file should be available. Many older people don't have .xlsx
Q4.	Do you have any comments or suggestions about the requirement for retailers to provide consumption data?	<p>Cost per request is likely to be a barrier – a customer who might hope to gain \$150 by switching won't want to pay half that, just for access to data. They'd have to charge a very very nominal amount, almost not worth it. Better to organise their back office so this can be selected automatically by the consumer herself, after satisfying the usual security procedures.</p> <p>Interoperable data formats are critically important.</p>

Q5.	Do you have any comments or suggestions about the process for responding to requests to provide consumption data?	4.3.11 , 4.3.17 – these days data storage is cheap, I've benefitted from observing more than 2 yrs of my consumption data (though the large majority wouldn't bother).  The standard described in 4.3.21 seems appropriate for NZ.
Q6.	Do you have any comments or suggestions about the development of procedures requiring the supply of data using standardised formats and structures?	Standardised format is essential.
Q7.	Do you have any comments or suggestions about whether retailers should be required to hold consumption data?	Well if you don't have a half-hourly meter you can hardly expect to get half-hourly data. If "low service" means installing a half-hourly meter and treating it as an accumulation meter, then I'd hope they'd discount properly for the "low service". That would suit passive consumers, and should remain an option.
Q8.	Do you have any comments or suggestions about the requirements of the process for providing interval data?	4.3.29, automated processes are highly desirable, and should eventually become a requirement.  Four free requests in a year sounds ok, but with automated systems, queries should barely incur a cost at all (zero marginal cost, but of course they'll want to add something to reflect the cost of the billing engine. They shouldn't – this is just part of doing business these days.
Q9.	Do you have any comments or suggestions on privacy, confidentiality and security of consumer data?	I agree consumption data is personal information and should be very strictly limited. Non-participant service suppliers must also be given access only at the consumer's direct request. I do anticipate privacy problems arising.

Q10.	Do you have any other comments or suggestions on the proposal?	no
Q11.	Do you agree that the purpose and objectives of the proposal as set out in section 5.2 are appropriate and consistent with the Authority's statutory objective? If not, why not?	<p>Agree with 5.2.1 – “drive retailers to innovate and seek efficiency gains.” This seems to be missing today, though I’m not sure incomplete access to retail data is the main cause.</p> <p>5.2.2 (a) agree competition needed including new retailer AND energy service providers.</p> <p>(b) – efficiency will increase most through consumer decisions on timing of demand, and investing in e. effic. and automated appliances. Reducing transaction costs less of a deal, because once a consumer interacts effectively with the market it's unlikely they'll want to switch all the time. But they'll still want their consumption data.</p> <p>(c) Reliability should be the biggest deal – tariff offers should promote more reliability through real-time offers to reduce demand during system constraints. Yes – “ability of consumers to respond to price signals.”</p>
Q12.	Do you agree that the proposal is preferable to other options? If not, please explain your preferred option in terms consistent with the Authority's statutory objective.	<p>Option 4 is Big Data writ large. Don't know enough about benefits and risks of Big Data, but if all were automated, with stringent privacy arrangements, it should all be so simple...</p> <p>Anyway Option 4 could and likely would evolve out of Option 1.</p> <p>I do not recommend Options 2 or 3.</p>
Q13.	In particular, do you agree that option 1 is better than option 4?	4 evolves out of 1 if and when it delivers benefits.
Q14.	What are your views on the establishment of a centralised meter data store at some point in the future?	See above

Q15.	Do you agree with the assessment of benefits, costs and net benefits? If not, please explain your reasoning.	<p>This consultation is about one element in an evolving electricity market that encourages consumers to be active. Beyond this element, we have smart grids, and regulation of distribution companies that encourage energy services providers to contest investment in distribution assets. Attempting to quantify element 1 out of context does seem not a very useful exercise. No, I don't agree with the assessment.</p> <p>The CBA seems to address only the benefits of increased switching, not the system benefits of consumer response to cost-reflective tariffs enabled by a vigorous energy management industry, including non-electric options.</p> <p>Importantly the calculation assumes an elasticity (price sensitivity) of -0.26. This figure has been around for a while, with little or no new evidence to support it – yet residential demand has fallen progressively since that estimate. Why? Does it result from price sensitivity, or new investment in energy efficiency and smart appliances – and efficient wood burners? You've assumed away exactly what Phase 1 of the Retail Data Project should have elucidated.</p> <p>5.4.13, I agree with, entirely – we want to actually reduce the cost of supply. A wealth transfer from retailers to consumers is nice, and I expect workable competition from energy efficiency and alternative fuel suppliers would make far more than a saving of more than \$150 per year. Is there no interest in outlining different strategies and possible savings, to both power bills and cost of supply?</p> <p>A final comment on CBA, this like others reports calculated benefits to several, even many, significant figures, whereas assumptions (such as price elasticity) are little more than pulled out of a hat. This is unscientific.</p>
Q16.	Do you agree that with the Authority's assessment that the proposed Code amendment meets the requirements of Section 32 of the Act?	Generally yes; the details contained in the remarks above

**Postscript: Competition, monopoly**

Most residential electricity consumers, if they think about the electricity market at all, have no faith that it is delivering benefits to them. They want to know: What is actually driving residential power price rises? MBIE's statistics throw no light on this; in recent years MED reported only posted

prices (for a consumer using 8000 kWh per year, or 9000 in the colder regions). Only this year has MED offered sales-based prices, the quotient of income received from the residential sector, divided by the residential kilowatt-hours sold.

Part 1 of the Retail Data Project promised to gather and analyse data to gain better understanding of why prices are rising – “Incomplete data about retail prices and costs is preventing meaningful and relevant assessment of the changes in prices of electricity services over time.” I agree!

For decades, consumers have been told that prices need to rise, to enable new power stations to be built. For Transpower, the answer is different – once new assets were commissioned, prices had to rise to give a proper rate of return on the expanded asset base – whether or not the new assets were used and useful. Transpower gained a property right to the future revenues, the Authority said (in its “sunk costs” paper in the series on transmission pricing methodology) once the proposal passed the Grid Investment Test.

Transpower’s is a regulated price model, not a competitive one. But an extraordinary statement by retiring CEO of Mighty River Power, Doug Heffernan, blurs the distinction between regulated and competitive:

He was asked – your profits have increased greatly despite flat or falling demand, so are you price-gouging consumers to make your profit?

He replied: “We just completed a \$500m geothermal investment. Surely you’d expect ... to get some return on that.”

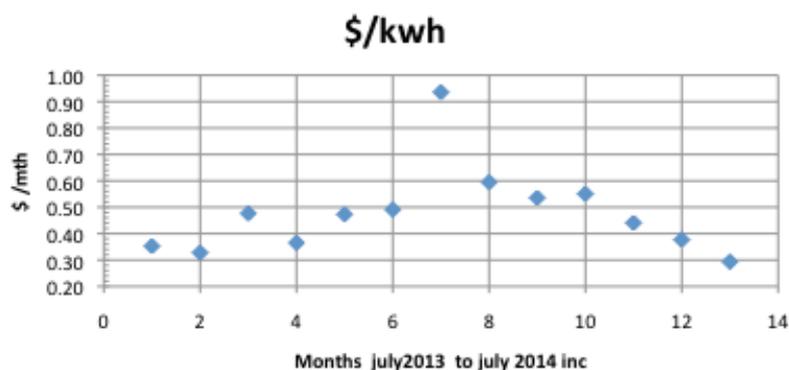
Actually – no! In a competitive environment, if you invest ahead of time, and demand has not grown to use the product, your competitors can undercut your price. Heffernan’s rationale precisely mirrors the Transpower property right, it is an investor’s viewpoint not a consumer-responsive one.

### PostPostScript:

To show the effect of fixed charges on actual power bills, one of my acquaintances, with Genesis, spent five hours trying to organize the data made available. He asked for a monthly breakdown of energy usage (kWh) and dollars paid. The dollar data were in excel format, he spent hours trying to convert an unknown file type to Excel.

Results: over 12 months, his usage was 5294 kWh. The average price was 43c/kWh, highest “price” was in January, 94c/kWh, lowest price was in July, last month, at 29c/kWh.

He wasn’t aware there’s a low fixed charge option, so will be ringing Genesis ASAP. Why didn’t Genesis tell him??



Additional submission, Molly Melhuish: Access to Retail Data

Every power bill should have a dashboard at the top, with just three numbers (four if you have a night rate. Based on the example at the bottom of my main submission:

Your electricity this month cost **29** cents per unit

Your electricity over the whole last year cost **43** cents per unit

Each extra unit of electricity you use from now on will cost **15** cents per unit,  
**12** cents if you use it at nighttime.

One unit of electricity is one kilowatt-hour.

For gas, a second dashboard. There will be no night rate, so only three numbers (as for electricity plans that have no night rate).

The last line on the gas dashboard would be: One unit of gas provides the same amount of heat as 1 unit (one kilowatt-hour) of electricity from a plug-in heater.

This should be specified in the Electricity Code by specifying the content and format of the dashboard, and the location on the power bill (upper right hand corner).

Of course you need professional design input to make it readable and attractive. I stand by the principle of simplicity. You should round the numbers to the nearest cent per unit. Beneath the dashboard, you should offer the link, and procedure, to get your detailed data.

The electricity and gas costs per consumer for residential consumers should be disclosed quarterly to MBIE, who could then report median and quartiles as well as average prices for both electricity and gas, per “unit”.