15 October 2024

To: Electricity Authority

c/o policyconsult@ea.govt.nz

FlexForum advice on the proposal to improve consumers' access to their electricity data

FlexForum exists to support coordinated and collaborative action across the electricity ecosystem and speed up progress to make it easy and routine for households, businesses, communities to maximise the value of their distributed and flexible resources.

We are an incorporated society with 39 Members from across the electricity ecosystem including gentailers, retailers, metering services suppliers, electric vehicle charger manufacturers, energy management software firms, Transpower, distributors, solutions providers, universities, and some real people.[1] We are fortunate to have people observing and contributing to our activities from the Electricity Authority, Ministry of Business, Innovation and Employment, Energy Efficiency and Conservation Agency, the Commerce Commission, and Utilities Disputes.

We are focused on getting things done. Our touchstone is Flexibility Plan 1.0 which is the sole whole-of-system list of the practical steps and actions that must be taken by the electricity ecosystem to make it easy for people to maximise the value of flexible resources and support the affordable and reliable operation of the electricity market and system.

The Flexibility Plan provides a reference point for coordinated action, collaboration and providing accountability to maintain the pace and direction of progress by the electricity ecosystem – covering existing industry participants, policy and regulatory bodies, emerging participants and others influencing the choices and actions of people. Real progress requires:

- coordinated action – the whole-of-system checklist sets out what needs to be done
- collaboration – each step describes the activity required to make progress and the parties who should be involved
- accountability – we can maintain the pace and direction of progress by measuring what has been done against each step and make considered assessments about priorities and sequencing of efforts.

The Flexibility Plan is a living document and will evolve over time as we amend, add and tick off steps based on new information and improved understanding about the steps required to address the difficulties faced by households, businesses and communities in making choices about and maximising the value of their flexible resources. We expect Flexibility Plan 2.0 to be published in early 2025.

This is the FlexForum perspective and advice on the Authority's proposal to improve consumer's access to their electricity data. It was developed based on the Flexibility Plan, plus the discussion and insights shared at a FlexForum workshop on 28 September 2024 attended by 39 people. The advice is provided within the context of the FlexForum objective and purpose to support coordinated collaboration to make it easier for households, businesses and communities to maximise the value of their distributed flexibility. Individual FlexForum Members will have their own perspectives and positions.

[1] The list of FlexForum Members is available here.

Overview of the FlexForum perspective and advice

The Electricity Authority proposal is directly relevant to delivering Flexibility Plan step # 2: Ensure people and their agents have streamlined (automated) access to historical consumption information, plus other connection-related information.

The proposal will not deliver step #2 and will not result in any substantive development of advisory tools and services that people can use to easily and routinely make electricity-related decisions. The proposed timeframes are 'still pretty slow' and will not provide the instantaneous exchange of information that is needed to underpin investment in advisory tools and services - households, businesses and communities will see no practical change or benefit.

People want prompt advice, not data. People who can easily and routinely get prompt and personalised advice will be more able and more likely to make informed and confident choices which accelerate electrification and decarbonisation and save time and money for themselves, the power system and the wider economy. This prompt and personalised advice relies on instantaneous exchange of electricity information. Having it will enable people to realise significant benefits.

Our advice is that the Authority nominate in the Code a specific date for secure machine-to-machine communication and the instantaneous exchange of peoples' electricity data and information. The date must be set considering implementation timeframes and that people and the economy are incurring costs because prompt and personalised advice is not easily or routinely available.

The proposal leaves an open question around the timing for future evolution of the arrangements. Nominating a specific date will provide the parties who would invest in advisory tools and services and the electricity retailers who need to plan and implement the relevant IT system changes with the certainty required to ensure efficient, minimum costs of implementation and product development.

There are several details to be considered through the implementation process:

- format and structure of data needs to be consistent across retailers, and the standardised data structure (headings, content etc) needs to be enforced to underpin a consistent and useful customer experience
- existing processes to confirm that an electricity information request is genuine and the requester has authority from the household work for parties who are 'known' and routinely request electricity information. Changes to the processes are not obviously needed, but care will be needed to ensure life is not made unnecessarily difficult for new requestors
- households that are not internet literate or enabled should also be able to benefit from advice based on their electricity information.

Improving peoples' access to their electricity data is step #2 of the Flexibility Plan

We understand the Authority wants to give people 'better access to their own electricity information, including in a timelier manner and on a more regular basis. This will enable people to benefit from more innovative products and services (including those that use their electricity information to evaluate options in the market) and encourage providers to develop such products and services'. The proposed way to achieve this is to amend the Code to:

- require retailers to respond to a request for electricity information within 1 business day for 70% of requests, within 2 business days for 90% of requests and within 5 business days for 100% of requests
- allow people to to make 12 requests without charge in the 12 months after the Code change, after which people will have unlimited requests at no charge
- clarify that electricity information includes information about the injection of electricity into a network from a consumer's ICP, and raw meter data.

The proposal is directly relevant to delivering step # 2: Ensure people and their agents have streamlined (automated) access to historical consumption information, plus other connection-related information.

We recently completed an initial assessment of the pace and direction of progress with delivering the Flexibility Plan based on the extent to which a person has or can expect to experience a practical and tangible difference given the progress with each step.[2] Step #2 was assessed as having no substantive activity. The lack of activity and progress is part of a wider pattern of no or slow progress on steps at the start of the flexibility journey when people are trying to discover and assess their flexibility-related choices.

People will benefit from instantaneous electricity information

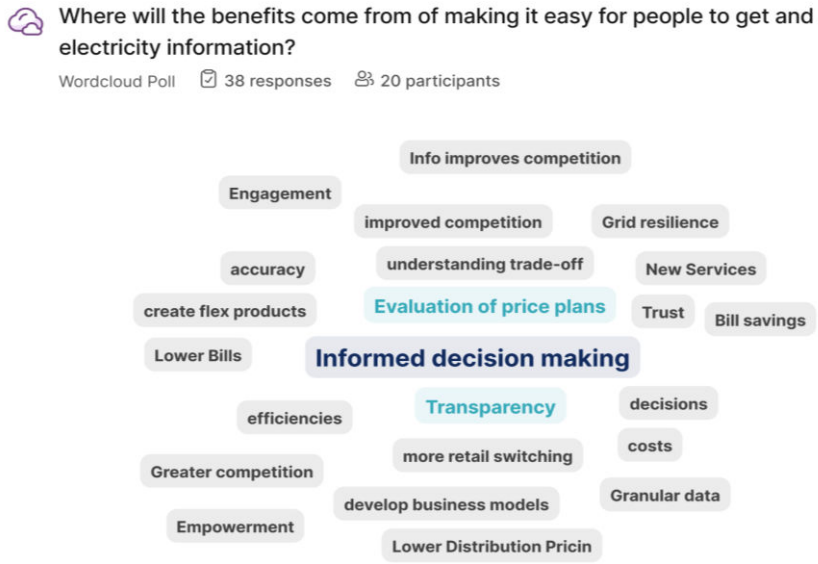
People will benefit from instantaneous electricity information through greater opportunities to get prompt and personalised advice which enables informed decisions about flexibility, electrification and decarbonisation.

We see that the balance of 'flexibility progress' is occurring around 'how do we make flexibility work inside the electricity system?' and 'how do we make it usable for market participants'. This is valuable work. But much less progress is being made at the human end – how do we help them evaluate their options? Can they get the rewards for making it available? Is it easy for them to do this, in their busy lives?

We need progress on both fronts. FlexForum exists to make it easy for people to get value from their flexibility, which means asking 'what's making it hard?'. What our insights show is that better access to electricity information is needed so people or their advisers can prepare the flexibility 'business cases' that underpin electricity-related decisions.

People have electricity-related decisions ranging from comparing retail pricing plans, to switching retailers to sizing solar arrays, battery systems, and assessing the lifetime benefits of buying things like an electric vehicle, electric hot water system, heat pump, or an energy management system. Many decisions are major capital investments requiring large outlays. But individual households, businesses or communities will rarely have the data, resources or expertise needed to prepare the flexibility business case and make informed and confident decisions.

People who can easily and routinely get prompt and personalised advice will be more able and more likely to make informed and confident choices which accelerate electrification and decarbonisation and save time and money for themselves, the power system and the wider economy. FlexForum Members highlighted a wide range of benefits from easier access to data.



Source: FlexForum Workshop, 28 September 2024.

[2] FlexForum. Progress with delivering the Flexibility Plan. An expert assessment of the pace and direction of progress towards maximising the value of flexibility, August 2024, available here.

We are not going to attempt a detailed assessment and enumeration of the benefits or costs. We can however highlight two simplified examples of the source and scale of benefits.

About 35,800 people switch their retailer (a proxy for retail pricing plan) each month. Those who don't are estimated to leave average savings of $400 a year on the table based on Powerswitch data. Households would collectively save about $4 million a year for each additional 10,000 people who accessed that average saving if comparing pricing plans becomes easier because there are user-friendly advisory products and advisers needing a minute or two of effort.

This is small change. A back of the envelope estimate suggests households will spend around $150 billion on electrifying and decarbonising between now and 2050 (or about $6 billion a year for 25 years), an amount equivalent to what is estimated will be spent on generation and network infrastructure over the same period.

We think households and businesses have the opportunity to make significant savings on their big ticket electrification investments such as buying an EV or swapping to electric appliances **IF** they have the ability to use prompt and personalised advice to make informed decisions. If you can believe that easy and routine access to advice would enable people to save 1% on the capital cost of these investments, the individual and economy-wide benefits would be $1.5 billion or $60 million a year.

The benefits would be much greater after accounting for the accelerated emissions reductions because people make a decision sooner and the individual and economy-wide benefits of substituting expensive fossil fuels for cheaper electricity.

Step # 2 will be delivered when there is streamlined exchange of electricity information

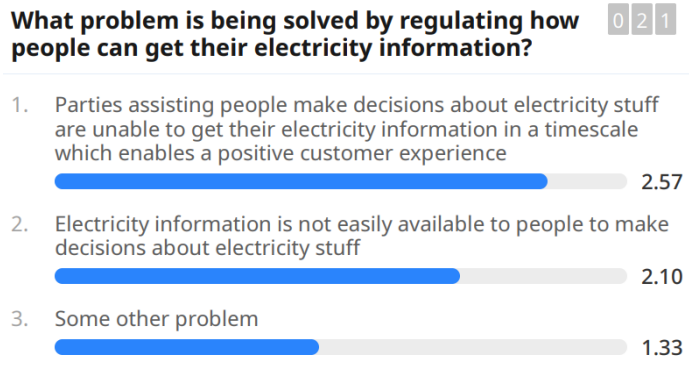
Streamlined exchange of electricity information means secure machine-to-machine communication and the instantaneous exchange of data and information between the party with the data and the party asking for the data.

Someone making a request for electricity information should be able to click a button and get the results straight away. This is an everyday experience for households and businesses who confidently use all sorts of online tools and services that rely on their data whether held by the tool provider or some other party.

This outcome aligns with the Authority's vision of 'a future where a consumer can automatically access their own consumption data or authorise another entity to access their data on their behalf, in real time so that they can seamlessly compare electricity plans and choose the best plan for their circumstances.'

People want prompt and personalised advice, not data

Households mostly already have access to their electricity use information through retailer apps or websites. But this does not mean people can easily and routinely make informed decisions because very few people have the time or expertise to analyse the data themselves or the time to jump through hoops to get and pass the information to an adviser. FlexForum Members recognised this when responding to the question "what problem is being solved?".



Source: FlexForum Workshop, 28 September 2024.

Research by the Consumer Advocacy Council published in June 2024 indicates 57% of households in 2024 are confident in making decisions about retailers and pricing plans. This confidence needs to be contrasted with what people actually do. Of the households surveyed, 15% said they changed provider or plan in the previous year while 50% had looked at their options but didn't change provider or plan. This latter group didn't change anything due to insufficient savings (36%) and it was difficult to work out whether it would be cheaper than the existing provider (32%).

The research also found that 36% of households bundle electricity with other services, and of this group 24% found it hard to work out if they were getting a good deal and 10% later worked out services were more expensive when bundled.

Comparing pricing plans is perhaps the lowest stakes electricity-related decision that people can make. The cost of choosing a pricing plan that doesn't deliver the maximum savings available is less than $400 a year (on average)[3] plus the time spent making the comparison. Yet despite the low stakes, there is still considerable decision making inertia.

Other electricity-related decisions are more complex and much higher stakes with the price tag of EVs, solar panels, batteries, hot water systems in the thousands to tens of thousands. There is no research about the confidence people have in making decisions about these things, but the experience of FlexForum Members is that decision-making inertia is real and people would value prompt and personalised advice to help decide what to do.

It is very difficult to escape that it is practically difficult for people to easily and routinely make informed electricity-related decisions because electricity information is not available in a timescale which enables the development of a range of user-friendly advisory products and services.

The proposal will not provide streamlined exchange of electricity information or result in prompt, personalised advice

The proposal will help, but will not result in the streamlined exchange of electricity information or result in people getting easy and routine access to prompt and personalised advice.

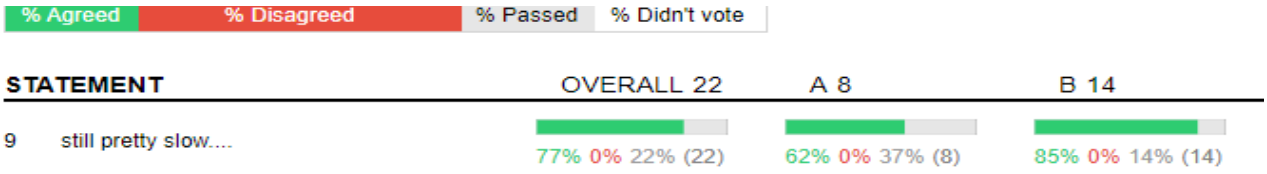
The helpful parts of the proposal are:

- people will be able to make 12 requests without charge in the 12 months after the Code change, after which people will have unlimited requests at no charge
- electricity information will be defined as information about the injection of electricity into a network from a consumer's ICP, and raw meter data.

These aspects will remove constraints on the how often people seek advice from one or more advisers over a year and will make sure the data needed to develop that advice is available to be used.

The proposal will not result in the streamlined exchange of electricity information because retailers will be required to respond to a request for electricity information within 1 business day for 70% of requests, 90% within 2 business days and 100% within 5 business days.

FlexForum Members at a workshop on 28 September generally agreed that the changed timeframes will result in data exchanges that are 'still pretty slow'.



Source: FlexForum Workshop, 28 September 2024. Green = agree; red = disagree.

[3] Powerswitch tells us that over 90% of people who use Powerswitch find they can save, with average savings of around $400 a year.

The Authority identified the problem as 'five business days is too long a period for consumers to wait for retailers to provide their information' … because … 'There are innovative products in the market that currently require electricity information from the retailer.' And… 'five business days acts as a barrier to consumers utilising these tools effectively, and therefore limits their access to innovative products in the market.'.

The workshop consensus was that the proposal does not take things far enough to provide the faster access to information that is needed to enable development of the advisory tools and services that people can use to easily and routinely make electricity-related decisions.

The proposed timeframes perpetuate this problem and the existing barriers to people having access to and using advisory tools and services to make informed decisions, that is, it is hard to see the proposal resulting in any change to the status quo. The problem and barriers will not be addressed until there is instantaneous exchange of data and information between parties by secure machine-to-machine communication (ie, autonomous).

The costs of digitalisation fall on the electricity sector

Streamlined exchange of electricity information involves digitalisation. The costs of digitalisation and the sort of investment required to enable streamlined electricity information fall on the electricity sector.

> Households, communities and businesses are starting on an electrification journey resulting in the proliferation of electric vehicles (EV), EV charge points, local generation, battery storage, electric space and water heating, electric motors and other smart devices. These DER will need to be seamlessly integrated into the networks, electricity system and market in a way that gives opportunities to provide additional value to their owners, while preserving the security and reliability of the physical networks for all consumers.
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> Digitalisation must be at the heart of this integration to deliver the information needed to balance the electricity systems required to keep the lights on from second-to-second, across seasons and for planning years ahead. This information also enables households, businesses and communities to make choices about electrification and their level of participation in the electricity markets, including the choice to invest in and supply flexibility.
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> FlexForum, April 2023, A digitalised electricity system is needed for flexibility to fully play its part in electrification and decarbonisation.

The extent to which the costs of streamlined exchange of electricity information are outweighed by a benefit saw significant divergence across attendees at the workshop. Statements relating to the cost of implementation saw two broad types of response - strong agreement (Group A with 10 members) and disagreement/unsure (Group B, with 8 members).

	STATEMENT	OVERALL 18	A 10	B 8
19	2.2mil customers, what $ per customer should industry spend to solve it? Cost benefit simplicity	58% 17% 23% (17)	100% 0% 0% (10)	0% 42% 57% (7)
8	What total cost of implementation is appropriate and solve within that cost envelope?	68% 6% 25% (16)	100% 0% 0% (10)	16% 16% 66% (6)

Source: FlexForum Workshop, 28 September 2024. Green = agree; red = disagree.

We know that electricity retailers have scarce capital, significant investment plans and must prioritise time and capital across many projects. In this environment, we understand that priority is given to large scale and critical infrastructure projects over digitalisation and information technology projects which do not drive significant earnings growth.

The investments required to provide digitalised, streamlined access to electricity information are not necessarily business critical for electricity retailers. Enabling people to have streamlined access to their data will be achieved most effectively through the

introduction of a specific requirement, such as a Code obligation. In the absence of clarity around the intended future state for data access and this type of requirement, there is likely to continue to be delays in achieving the necessary investment in the automation of systems necessary to enable streamlined electricity information exchange. This will further delay the significant benefits of introducing the smart system being realised that were identified in the Future is Electric report by the Boston Consulting Group

Further, unless and until providers of advisory tools and services are confident that the exchange of electricity information is streamlined, they will not invest to make these available.

The system upgrades will occur at some point. The costs are a matter of timing - it's about when, not if. The Authority can provide both parties the certainty they need by nominating a specific date for achieving secure machine-to-machine communication and the instantaneous exchange of data and information between parties. The date must be set recognising that each year people incur the costs of benefits foregone from decisions not made because prompt and personalised advice is not easily or routinely available.

Effective action to make it easy for people to get prompt and personalised advice could easily get mired in a lengthy debate about costs and benefits. Before heading down that dark path, it is worth remembering that there is a clear case that streamlined exchange of electricity information to enable customers - the people who ultimately pay for the entire system - to save them time and money should be considered fundamental to the effective operation of the market.

Important details to ensure the secure and streamlined exchange of electricity information

FlexForum Members raised several implementation details which are relevant to the secure and streamlined exchange of electricity information.

- format and structure of data needs to be consistent across retailers, and the standardised data structure (headings, content etc) needs to be enforced to underpin a consistent and useful customer experience
- existing processes to confirm that an electricity information request is genuine and the requester has authority from the household work for parties who are 'known' and routinely request electricity information. Changes to the processes are not obviously needed, but care will be needed to ensure life is not made unnecessarily difficult for new requestors.
- households that are not internet literate or enabled should also be able to benefit from advice based on their electricity information.

	STATEMENT	OVERALL 18	A 10	B 8
3	Format and structure of data needs to be consistent across retailers	100% 0% 0% (17)	100% 0% 0% (10)	100% 0% 0% (7)
4	we need to make sure that consumer information is protected	93% 0% 6% (16)	100% 0% 0% (10)	83% 0% 16% (6)
5	Does the output actually work for consumers	83% 5% 11% (18)	100% 0% 0% (10)	62% 12% 25% (8)
10	data format	100% 0% 0% (16)	100% 0% 0% (10)	100% 0% 0% (6)
15	What data, what format, what time period, what granularity etc is useful for customers or the third party requesting the information	100% 0% 0% (18)	100% 0% 0% (10)	100% 0% 0% (8)

Source: FlexForum Workshop, 28 September 2024. Green = agree; red = disagree.

A further detail is the potential interaction between this Code-based mechanism and any arrangements emerging from the Consumer Data Right (CDR). In particular, is there any reason the streamlined exchange of electricity information is dependent on implementing CDR because it is not apparent it is or should be.

Concluding points

FlexForum is super keen to step # 2 be delivered. People want prompt and personalised advice. Making it easy and routine for people to get advice which uses their own information will assist them to step through the discover and assess phases of the flexibility journey and support the business case for flexibility for each household, business and community.

Secure, instantaneous machine-to-machine communication is the only way to stimulate the development of advisory tools and services, and therefore the only way that people will be able to easily and routinely get tailored advice about their electricity-related decisions. It is hard to see the proposal resulting in any change to the status quo.

The proposal and exercise has highlighted areas of consensus and difference across our Members.

FlexForum Members who are electricity retailers identified that streamlined exchange of electricity information will require them to incur material costs. However, there is a general recognition that system upgrades will be required at some point to enable people to easily and routinely access and use their data. It's about when, not if, these system upgrade costs should be incurred and ensuring appropriate time is afforded for implementation

Nominating a specific date for achieving secure machine-to-machine communication and the instantaneous exchange of data and information between parties will give the investment certainty that electricity retailers and the parties who would invest in advisory tools and services need to efficiently plan and implement the relevant IT system changes.

However, the date must be set recognising that households, businesses and communities incur costs - easily $60 million a year? - because they do not have easy and routine access to prompt and personalised advice.

This response presents the FlexForum perspective on the Authority's proposal to improve consumer's access to their electricity data. It is provided within the context of the FlexForum's overarching objective and purpose to support coordinated collaboration to make it easier for households, businesses and communities to maximise the value of their distributed flexibility. Individual FlexForum Members will have their own perspectives and positions.

You can contact FlexForum at info@flexforum.nz with any questions and to arrange further discussion about this perspective and advice.