

# Submission on updating the regulatory settings for distribution networks

## Vector Metering

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## About Vector Metering

Vector Metering provides advanced metering solutions for a new energy future.

We provide a cost-effective end to end suite of energy metering, data and control services to energy retailers, distributors and customers.

Our solutions enable customers to manage energy more efficiently. We provide consistent, reliable data to retailers and network companies to allow them to operate their business effectively and to help their customers manage their energy needs.

Vector Metering's future proofed services provide advanced metering and digital infrastructure that is flexible enough to enable customisation to meet customers' future requirements.

See <https://vectormetering.com/nz/>.



*The benefits of advanced meters to industry participants and consumers are widely recognised.*

*Advanced metering benefits electricity retailers and consumers.*

- ✓ Accurate bills based on actual meter reads, resulting in fewer consumer complaints
- ✓ Timely meter reads, allowing more flexible billing options
- ✓ Reduction in retailers' operational costs through remote meter reads and remote services, removing the need for manual intervention
- ✓ Faster and easier retailer switching
- ✓ Reduced direct costs to consumers from reduced errors and theft
- ✓ Greater transparency for consumers, enabling them to make better energy decisions and providing them greater control over their energy costs, e.g. through apps that provide more timely information or information on usage patterns
- ✓ More customised services for consumers
- ✓ New and innovative services that enable consumers to participate in initiatives that benefit them (for example, in a demand response programme which gives them greater choice and control over their energy use and production) and allow them to participate in new energy markets
- ✓ More accurate trading positions to ensure market bids and offers reflect current demands.

## *Greater visibility of the LV network, enabled by advanced metering data, delivers benefits for electricity distributors and consumers.*

- ✓ More efficient network management, e.g. management of network assets, with lower network costs passed through to retailers/consumers
- ✓ More accurate forecasting and better network planning, avoiding new network investment or expansion
- ✓ Better identification of outages, resulting in improved ability to respond to emergency callouts and faster restoration of supply
- ✓ More accurate voltage management which improves the utilisation of hosting capacity
- ✓ Greater visibility and understanding of the LV network, leading to more efficient integration of distributed energy resources (DER)
- ✓ Increased capacity to host more renewable DER, contributing to decarbonisation
- ✓ Development of flexibility services that help avoid costly ‘poles and wires’ investment
- ✓ Enhanced network support for new services such as virtual power plants and dynamic export limits
- ✓ Innovative tariffs to manage peak demand
- ✓ Better data for policy makers, emergency service providers, energy researchers and other interested parties.



*Vector Metering is well placed to help customers and industry participants speed up data access and manage their modern energy challenges.*



- Vector Metering has established a service that provides consumption data to distributors, for any approving retailers, in a single consolidated delivery. This service has been socialised with most retailers.
- We have provided a service pack to electricity distributors defining a standardised process that provides greater clarity and consistency for data requests. This is expected to speed up data access.
- We are in active discussions with a number of distributors and assisting them in defining their data needs and meeting their goals using network operations data. This involves detailed discussions on contract development, service specifications, and software change/development specifications. We have committed resources to develop our new network operations data service – expected to commence in the first quarter of 2022.
- We would support incentives for distributors to procure data, for example, by providing them with allowances under the Commerce Act Part 4 regime. We need greater certainty to make the appropriate investments and develop the right services for distribution networks for the future.



## *Vector Metering is also adding functionalities to our advanced metering platform to deliver improved and more customised services.*

- **New load control functionality** - Vector Metering has ongoing work with distribution networks across the greater Canterbury region to implement new advanced meter functionality which extends the coverage of load control across their networks. We have designed and deployed this functionality to provide load control management, typically for hot water, to areas where traditional ripple networks could not reach or had not yet been installed.
- **Calendar control functions** – This capability is available in our advanced metering platform but has not been implemented as customers have yet to make the business case work. While the need for calendar control functions is not material enough to warrant investment at this time, these functions can provide distribution networks the option to defer expenditure for ripple injection plants for new network extensions.
- **Ripple control signal detection** – Our latest design for the New Zealand market allows for the advanced meter to detect and respond to ripple control signals in real time and provide the ability to change ripple channel selections “in the field”. This avoids visits to properties that disrupt customers and costly service technician visits.
- **Dynamic control** – As with the demand response programmes in Australia, we have deployed capability to the field that will be able to respond to on-demand requests for load control to targeted or mass locations.

*Vector Metering does not believe a central meter data store is necessary to address the information issues identified by the Electricity Authority.*

*Instead, we support the development of APIs that enable greater data access and authorised sharing, and interoperability between market participants.*

- Flexible arrangements, such as the use of Application Programming Interfaces (APIs), better enable innovation, rather than a centralised approach.
- A centralised meter data store is not conducive to future decentralised services, e.g. peer-to-peer trading, multiple trading relationships, distributed generation, standalone networks, Consumer Data Right.
- The development and day-to-day maintenance of a central meter data store or repository and associated compliance costs are likely to be very costly, with risks of over-building and asset stranding. Consumers could pay for what they do not need or desire.
- A highly centralised approach for data access was not supported by stakeholders in Australia (ACCC forum on data access models, March 2019).
- The proposed model for the energy Consumer Data Right in Australia has shifted from the “AEMO gateway model” towards a more decentralised peer-to-peer model (akin to Open Banking). This is driven by the need for more interoperability and extensibility of energy data within and across sectors.
- In general, we prefer that data standards be allowed to evolve and developed through industry-based approaches so as not to stifle innovation.

## *Vector Metering supports industry-based approaches to facilitate the development of flexibility services.*

- We encourage the Authority and other regulators to refrain from adopting highly prescriptive arrangements, including for data access and authorised sharing
- There is increasing active collaboration between industry participants to develop new services that could deliver substantial benefits to consumers - which should be encouraged. At this stage, we believe that the focus should be on the overarching principles that would guide the development of any future arrangements, rather than imposing new or more prescriptive regulation.
- For example, we do not agree with the mandatory implementation of specific data formats, transmission method, and timeframe for exchange, particularly for new and emerging services, which could limit further innovation.
- What we want to see encouraged is the use of common design principles, common design standards, and common security standards that enable data providers and access seekers (including smaller parties and new market entrants) to benefit from interoperability and efficiency gains without hampering innovation.
- We believe the appropriate role of regulators in relation to new or immature services is to provide an environment for innovation to flourish in a safe way, enabling commercial outcomes to be established. This will enable greater innovation with faster speed to market.
- Vector Metering is happy to discuss with any interested parties how we can best help them deliver new or improved services to their customers and navigate the transition to a digital and low-carbon energy future.



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