

Summary of submission: Enabling mass participation in electricity markets consultation paper

October 2017



Contents

1	Overview of	the consultation	1
2	General ther	nes in submissions received	1
3	Submission in response to consultation questions		2
4	Other comments		10
Appendix A		List of submitters	11

1 Overview of the consultation

- 1.1 On 30 May 2017, the Electricity Authority released a consultation paper entitled *Enabling mass participation in the electricity market*. The consultation paper sought views on changes to regulation that may be required for consumers to benefit from changes in technology and innovation happening in the electricity industry. The consultation paper posed 15 questions for submitters to respond to.
- 1.2 Submissions closed on 11 July 2017. The Authority received a total of 39 submissions.
- 1.3 A wide range of people and organisations responded to the paper. This is reflected in the submissions, which cover a range of topics and perspectives. Many submitters responded to each of the questions, while others only submitted on a few questions.
- 1.4 This document gives a high level summary of the submissions received, and identifies some of the key themes in the responses. It is organised according to the questions posed in the consultation paper. It is not intended to be comprehensive rather, it offers a general overview. Any submitters mentioned in this document are used by way of example and are not necessarily the only parties who made a certain point.

2 General themes in submissions received

- 2.1 There were a number of common themes in the submissions received.
- 2.2 One recurring theme across many of the submissions was the need for a "level playing field" in relation to entry into, and participation in, the electricity industry. For example, many submitters referred to the current division between network monopoly services and contestable services unbalances the level playing field in favour of distributors. A majority of retailers were also concerned with the arrangements to access emerging network support markets on distributors' networks (see submissions from Electricity Retailers' Association of New Zealand (ERANZ), Meridian and Contact).
- 2.3 Submissions from distributors reflected a different view. Distributors perceived themselves as a legitimate party to participate in emerging contestable markets. Distributors did not directly comment on whether existing arrangements provide a level playing field. Rather, a majority argued that existing arrangements are appropriate (see Vector's submission) or call for more collaboration within the industry to make the most of new technology opportunities (see PwC's submission on behalf of distributors).
- 2.4 A number of submissions emphasised that the Authority should work together with the Commerce Commission to ensure a consistent regulatory framework to support a level playing field and access to network support markets (see Aurora, emhTrade, ERANZ, and Genesis's and submissions)
- 2.5 Another common theme was that the Authority should focus its attention on projects currently in its current working programme such as distribution pricing reform and the multiple trading relationships project (see ENA's submission).
- 2.6 In relation to the increasing prevalence of parties seeking access to consumer data, a number of submitters stated that the process of consumer authorisation for releasing smart meter data to third parties needs to be clarified (see emhTrade and Genesis's submissions).

3 Submission in response to consultation questions

Question 1: What is your view of the potential competition, reliability and efficiency benefits of more participation?

- 3.1 The majority of submitters agreed with the idea of mass participation, and the potential for mass participation to increase competition and efficiency in the electricity industry.
- 3.2 There are some mixed views on the reliability benefits (see Sustainable Electricity Association New Zealand (SEANZ) and Trustpower's submissions, compared with submissions from Electricity Networks Association (ENA) and Energy Trusts of New Zealand (ETNZ)). Some submitters believe that reliability will increase (see City Financial, David Glass, and SEANZ's submissions). Other submitters were unsure how reliability will be managed given that new technologies may have an impact on the performance of the network (see ENA, ETNZ and Metrix's submissions).
- 3.3 Other submitters believe that reliability may become less important in the face of more participation and innovation that is, some consumers may be willing to accept decreased levels of reliability in exchange for lower costs (see Cortexo, Flick and Trustpower's submissions).

Question 2: What is your view of the opportunities to promote competition and more participation in the electricity industry?

- 3.4 Many submitters were of the view that the Authority should facilitate mass participation, rather than regulate for it (see Aurora, Contact, ENA, ETNZ, PwC, and Transpower's submissions). In some cases, this is because submitters believed that opportunities to promote competition and participation already exist without the need for regulation (see submissions from John Irving, City Financial, Metrix, Orion, PwC, Unison, and Wellington electricity (WEL),). In relation to how the Authority may facilitate mass participation, a collaborative approach between regulatory agencies was suggested (see ERANZ's and PwC's submissions) and the Authority was urged to focus on work that it has already started (see submissions from Meridian and Unison's).
- 3.5 A key theme in the responses to this question was that a "level playing field" will be required to promote competition and participation (see submissions from David Glass, ERANZ, Genesis and IEGA). A number of submitters referred to the ability of distributors to take advantage of their monopoly position (see ERANZ, ETNZ, Genesis, and Mercury's submissions). Those issues are outlined in more detail in Question 7. It was also submitted that creating a level playing field could require more cost-reflective pricing (see ENA and ETNZ's submissions), or a standardisation of market arrangements and connections to networks (see ETNZ and Flick's submissions).

Question 3: What other issues might inhibit efficient mass participation?

- 3.6 One of the key issues identified by submitters was a lack of access, or equal access, to consumer data (see ABB limited, Cortexo, David Glass, David McArthur, emhTrade, Flick, Mercury, Powerco, Saveawatt, Unison and Vector's submissions).
- 3.7 A number of submitters said that reconciliation systems and the prudential security requirements would need to change to allow further participation, because they are too onerous and expensive (see David Glass, Energy Link, Future Energy, and WEL's submissions). In addition, some submitters said that the industry's systems in general

are too complex to allow for mass participation (see John Irving, Pioneer, SEANZ, and Transpower's submissions). Other submitters noted that metering infrastructure and services may need to be updated (see Metrix, Genesis and Wayne Parker's submissions).

- 3.8 As referred to under Question 2, another key theme raised by submitters was the ability of distributors to take advantage of their monopoly position (see City Financial, Contact, David Glass, emhTrade, ERANZ, Genesis and Trustpower's submissions). This is discussed further in relation to Question 7.
- 3.9 Incumbent retailers' high market share was also identified as an indication of a competition issue (see submission from David Glass, Pioneer and Vector). High levels of vertical integration between generation and retailers was also identified as being problem for the liquidity in financial hedge markets (see Pioneer's submission) or competition in the wholesale market (see Vector's submission).
- 3.10 In light of the fact that the consultation paper proposes a greater level of involvement for consumers in the electricity industry, a number of submitters also indicated their view that the Authority will need to focus to educate consumers about any changes that will affect them, and involve them in the process (see Unison and Vector's submissions).
- 3.11 In the wider regulatory context, two regulatory schemes were seen to be causing issues. Firstly, it was submitted that the Save Protection Scheme has not protected new retailers from predatory market behaviours (see submissions from Future Energy and Pioneer). Secondly, three submitters (Meridian, Orion and Unison) said that the low-fixed charge (LFC) regulations prevent efficient distribution pricing reform and should be reviewed.

Question 4: What is your view of the opportunities for network businesses to obtain external help to provide aspects of the network service using competition or market mechanisms?

- 3.12 Most submitters considered that there are significant opportunities for third-parties to provide network support services to network businesses (see ABB limited, Contact, Cortexo, emhTrade, ERANZ, Metrix, Mercury, Meridian, Trustpower, Powerco, PwC, Transpower, Unison and Vector's submissions). For example, Transpower considered the opportunities for network business to obtain external help to provide aspects of the network service are good. Unison considered that there are emerging opportunities for network alternatives for rural customers.
- 3.13 Some submitters believe that network businesses are already utilising external help to provide aspects of the network service (see submissions from David Glass, ENA, ETNZ, Orion, Powerco, PwC, Transpower, Wayne Parker and WEL's submission). WEL and ETNZ also noted that network businesses are sufficiently incentivised to seek out for these opportunities.
- 3.14 Other submitters such as ABB limited considered that network operators in general need to embrace the idea that other parties can provide services to them. Meridian argued that distributors could transform to a platform based model to support the exchange of network support services. Contact would like to see the wider development of network demand response programmes. Trustpower noted that initially a bilateral contracting model can be used to contract for network support supported by a level playing field. Over time, a more market-based approach could be explored and adopted. SEANZ was of the opinion that using demand participation technologies can best be facilitated

through the introduction of local distribution markets which would provide competition to centralised generators and also deliver least cost solutions for distributors.

- 3.15 ERANZ believes that distributors should be able to realise the benefits of emerging technology through affiliates to allow for the development of a competitive market. PWC also argued that distributors are well placed to assess the benefits of new technologies, and that excluding distributors might impact network performance.
- 3.16 Some submitters believe that there are restrictions on the opportunities for network businesses to obtain external help because the Commerce Commission's regulations do not appropriately incentivise them (see Aurora, emhTrade and Unison's submissions). Cortexo also noted that retailers are acting as a blocker because of the difficulty to access consumer data.

Question 5: What do you think are the main challenges to be dealt with to increase the use of competition in supplying network services?

- 3.17 Many submitters believe that efficient distribution pricing is key to recruit resources for network support (see emhTrade, ENA, Flick and Unison's submissions). There were concerns that network pricing currently does not sufficiently reflect local network conditions (see Contact and emhTrade's submission). It was also submitted that network pricing is currently not cost-reflective (see submissions from Flick and ENA's submission). Concerns on whether retailers will pass-on distribution pricing signals were also echoed (see Allan Miller consulting's submission).
- 3.18 Unison noted that load management (eg, ripple control) and Transpower's demand management are contracted services that are indeed working well. It is not clear, therefore, what the Authority needs to change for this to be enabled, as the market is already delivering.
- 3.19 Meridian noted that network businesses might have concerns over the lack of control over reliability and price of the services when third-parties are used to deliver network support services. WEL raised the point that there is no guarantee that consumers who own or operate distributed energy resources will operate them to optimise network benefits. WEL also argued that establishing contracts for network support services can present major challenges. Unison noted that third-party providers of network support services will need to meet technical requirement to ensure the safe and reliable supply of electricity. MEUG considered that contracts for network support services should have terms and conditions equivalent to those set in competitive markets. In this context, WEL considered that a distribution system operator role might be required.
- 3.20 Trustpower was concerned about transactions costs when considering market opportunities for network support. Contact was worried that network controlled load tariffs are a barrier to the competitive procurement of network support services. Wayne Parker raised the point that competition for network support services might not develop in all regions.
- 3.21 As a general theme, a significant proportion of submitters noted that they are disadvantaged to compete with distributors to help providing the network business (see ERANZ and Meridian's submissions). Some retailers were particularly worried that distributors can include assets that provide network support services in the regulatory asset base (see submission from Contact, ERANZ and Genesis).

3.22 A majority of retailers were also worried that network businesses can favour their own related parties. Other submitters noted that there are sufficient regulatory safeguards to prevent anticompetitive behaviour by distributors, and that those businesses will engage external help when it is appropriate (see submissions from Orion, PwC, Vector, and WEL).

Question 6: What is your view on whether open access is required and what would be the elements for an effective open access framework?

- 3.23 Most submitters believed that open access is important to allow new entrants to participate on a level playing field (see submissions from ABB limited, Allan Miller consulting, Contact, John Irving, emhTrade and Mercury). A number of submitters noted that open access already exists (see submissions from ENA, Orion, Unison, and WEL). Other submitters, such as Transpower and Westpower,think that further work on the problem definition is needed before the need for more open access can be determined.
- 3.24 The elements commonly raised by submitters as being required for an effective open access framework are as follows:
 - (a) prevent assets that provide contestable services to be included in distributor's regulated asset bases (see submissions from City Financial, Contact, and Genesis)
 - (b) improved information disclosure requirements (see Contact's submissions)
 - (c) the introduction of ring-fencing mechanisms for distributor involvement in unregulated activities (see submissions from Contact, Genesis, Metrix, Mercury, Meridian and Trustpower). Excluding distributors from unregulated activities has not been proposed by any submitter as a requirement for an effective open access arrangements
 - (d) open processes for third party participants to tender for services (see David Glass, ERANZ, and Mercury's submissions)
 - (e) access and treatment of consumer data (see ERANZ, David Glass, Genesis and Meridian's submissions)
 - (f) standardisation in transmission and distribution agreements (see Allan Miller consulting, ERANZ, Meridian and MEUG's submissions).
- 3.25 Although ring-fencing mechanisms were proposed by a number of submitters, other submitters believe that there are already sufficient regulatory frameworks to prevent anticompetitive behaviour by distributors, namely Part 4 of the Commerce Act and Part 3 of the Electricity Industry Act (see ENA, PwC, Unison, Vector, and Westpower's submissions).

Question 7: How effective are the existing arrangements for open access? What are the problems?

3.26 There were a range of responses in relation to the effectiveness of existing arrangements for open access. A number of submitters said that the existing arrangements are not effective (see submissions from Contact, David McArthur, David Glass, Genesis, Mercury and SEANZ).

- 3.27 Other submitters believe that parts of the current arrangements are adequate, but that there are areas that can be improved (see ENA, Meridian, and Vector's submissions). Others believe that there are no issues with the current arrangements (see Orion, PwC, Unison, Wayne Parker and WEL's submissions).
- 3.28 The problems raised by submitters relate to the ability of distributors to take advantage of their monopoly positions. In particular:
 - (a) the ability to cross-subsidise involvement in unregulated activities through their regulated asset base (see Contact and Mercury's submissions)
 - (b) distributors are offering insufficient tendering opportunities for network services, and have incentives to favour related parties (see Contact, David Glass, ERANZ, emhTrade, Mercury, Meridian, and PwC's submissions)
 - (c) the ability of distributors to place restrictions on the use of certain technologies, or limit participation (see submission from Genesis and Metrix).
- 3.29 One problem identified that did not relate to distributors was that open access could be improved with greater accessibility to data (see Meridian, Powerco and Vector's submissions).

Question 8: What type of distributor behaviours and outcomes should the Authority focus on to understand whether changes are required to support open access?

- 3.30 A number of submitters want the Authority to focus on the issues relating to distributors as outlined in Question 7 (see submissions from City Financial, emhTrade, ERANZ, John Irving, Meridian, Mercury and Metrix). Other submitters want the Authority to focus on retailer behaviours, such as withholding installation control point (ICP) data, or locking in consumers to long-term contracts, as practices that prevent competition (see ENA and PwC's submissions).
- 3.31 Some submitters said that changes should only be made if and when any issues with open access arise (see submissions from ETNZ and Vector), and that the Authority should look for evidence of anticompetitive behaviour by distributors before making any changes (see submission from Orion).

Question 9: What changes to existing arrangements might be required to enable peer-to-peer electricity exchange?

- 3.32 A number of submitters said that peer-to-peer trading can already happen under existing arrangements (see David Glass, emhTrade, ENA, Mercury, Meridian, Trustpower, Unison and Vector's submissions). Some submitters said that financial peer-to-peer trading can already occur, but physical peer-to-peer trading is likely to be impossible (see ENA, Orion and Unison's submissions).
- 3.33 A majority of submitters said that the Authority should not make material changes to enable, or further enable, peer-to-peer trading, as there is likely to be a low uptake of the required technologies (see submissions from Mercury, Our Energy and Trustpower). Although some submitters suggested that changes could be made to the reconciliation process to facilitate peer-to-peer trading (see City Financial, David Glass and WEL's submissions).
- 3.34 The Authority's multiple trading relationships project is seen as a better avenue for determining future peer-to-peer arrangements (see Our Energy, Transpower and

Unison's submissions). For example, Transpower noted that peer-to-peer trading could be assisted with a consumer's right to allow third-party access to their metering data. Other submitters suggested that the existing arrangements should be changed to allow for multiple traders per ICP (see City Financial, Cortexo, ENA, Metrix and Vector's submissions).

3.35 Some submitters noted that peer-to-peer trading arrangements should allow consumers to trade electricity between themselves without interacting with a market participant, but that current arrangements require consumers to act through retailers (see Cortexo and Vector's submissions). However, Wayne Parker submitted that an intermediary to facilitate peer-to-peer trading will be a necessary element of any arrangements. This is similar to the point raised by Trustpower in relation to Question 11.

Question 10: What are the costs and the benefits of enabling peer-to-peer electricity exchange?

- 3.36 Most submitters seem to be opposed to further enabling peer-to-peer trading, or are at least wary of doing so. While some submitters (such as ABB limited, Allan Miller consulting, David Glass and ERANZ) view peer-to-peer trading as creating greater opportunities for consumers to participate, and having the potential to decrease network investment (see John Irving and WEL's submissions), other submitters said that the costs of enabling peer-to-peer trading are likely to outweigh the benefits (see Contact, Mercury, Meridian, Metrix and Unison's submissions). For example, some submitters said that there will be increased costs associated with enabling peer-to-peer trading that will be shared across all consumers (see Allan Miller consulting, Contact and Our Energy) while the benefits of peer-to-peer trading are likely to be limited to a very small group of consumers (see ERANZ, Meridian, Metrix and Our Energy).
- 3.37 It was suggested that a clearer problem definition is needed to determine the costs and benefits of peer-to-peer trading (see Aurora, Powerco and SEANZ's submissions). Submitters also emphasised that robust cost benefit analysis will be required before any regulatory change is attempted (see Meridian, Metrix and Trustpower).

Question 11: What is your view of the possibility for, and impact of, any current or future blurring of participant type?

- 3.38 Most submitters said that a blurring of participant types is likely, but they have different perspectives on the impacts that might have.
- 3.39 A number of participants mentioned that blurring of participant types is currently an issue (see City Financial, emhTrade, ERANZ, John Irving and WEL's submissions). Other submitters considered that the concept of participant types has limited utility in any case (see ETNZ and Vector). ENA and Orion also noted that disruption from emerging technologies is likely to come from players who are not participants.
- 3.40 A number of submitters noted that it is important that participants are classified correctly (see Flick and Mercury), and suggested that classifications within each participant type with varying levels of obligation might be necessary (see Metrix and Powerco). Utilities Disputes only submitted on Question 11. They noted that if parties who are replacing traditional distribution and retail services do not fall within a defined participant type, this may prevent consumer access to dispute resolution.

3.41 Some submitters also noted that it is important to avoid placing obligations on individual consumers, or inadvertently making them participants (see Cortexo, Mercury, PwC and Trustpower).

Question 12: What types of participation are or might be prevented because the party is not recognised as a participant? What are the potential impacts?

- 3.42 There were a variety of responses to this question. Some submitters did not think this is a material issue, or submitted that there is nothing currently preventing participation (see ENA, ERANZ and Orion's submissions). Other submitters mentioned that participation types will need to be reviewed (see Metrix, Vector, and Wayne Parker). Orion noted that participation may be prevented if formal participant status is required.
- 3.43 In their responses to this question, submitters also stated their views on issues that the Authority should consider, for example:
 - (a) Trustpower and Cortexo submitted that peer-to-peer providers will have to take on obligations for consumers, as it is likely that the requirements for reconciliation would be too onerous for individuals to comply with the requirements themselves
 - (b) the use of the "participant" definition as the boundary of the application of the Code is problematic, because households will use and purchase a range of services, rather than acting as distinct participants (see Flick's submissions)
 - (c) a new distribution level market will be required, as the existing wholesale market cannot support participation by individual consumers (see SEANZ's submission).

Question 13: What challenges might new forms of generation, such as virtual power plants or small and dispersed generators face in entering the market?

- 3.44 Submitters provided a variety of responses that inform future challenges for smaller players such as virtual power plants (VPPs). The following is a short summary list of these challenges:
 - (a) Behaviours from incumbents: City Financial noted that open access will be required because VPP aggregators might be prevented from accessing the grid if a distributor decides not to recognise them as aggregators. Similarly, John Irving said that incumbents might prevent new forms of generation into the market. Mercury considers that a lack of a playing field where networks can invest based on regulatory asset bases is a key challenge..
 - (b) Pricing: Contact considers the existence of cross-subsidies between technologies is something that needs to be addressed.
 - (c) Integration into the network: City Financial argues that integrating small and dispersed generators might require expanding security constrained dispatch arrangements to ensure real-time management of supply and demand. Molly Melhuish also notes that coordination of VPPs is complex. Contact argues that market setting should result in competitive neutrality between all forms of generation. Wayne Parker notes that the requirement for individuals to sell electricity through their retailer is an obvious issue. Similarly, ENA notes that the Authority should prioritise multiple trading relationships. Flick also considers that

information disadvantages can become a barrier and make it difficult for new firms to enter

- (d) Risk management: Contact considers that effective risk management for all participants will be a key challenge.
- (e) Inefficient interfaces: Flick notes inefficient interfaces with existing market players might prevent new forms of generation emerging.

Question 14: What changes might be required to the rule book to facilitate the emergence of virtual power plants or demand response?

- 3.45 Key changes that submitters identified to facilitate the emergence of VPPs were:
 - (a) City Financial noted that inefficient distribution pricing is preventing innovation
 - (b) Contact supports distribution level demand response programmes based on appropriate contractual arrangements
 - (c) emhTrade argued that the Code should stipulate what constitutes 'authorisation' by a consumer for a retailer to release consumption data
 - (d) Mercury noted that the Code should be technology neutral
 - (e) Metrix noted that it may be appropriate to have classification for each type of participant with appropriate levels of obligations.

Question 15: Would the functioning of the market for PBAs and the availability of finance be improved if there were greater transparency of long-term prices and greater standardisation of terms and conditions for long-term contracts?

- 3.46 A number of submitters agreed that with the principle that greater transparency of prices and standardisation of terms and conditions for long-term contracts would improve the functioning of these markets (see ABB limited, Allan Miller consulting, John Irving, Pioneer and Vector's submissions).
- 3.47 Some participants were of the view that regulatory changes are not required in this area to support smaller participants. For example, Mercury said that there are already hedge contracts on the ASX for many years ahead which increase in 0.1MW increments. Meridian noted that it is not clear how more price transparency for long term contracts could be achieved as ASX prices are already significantly transparent. Energylink goes even further and noted that attempts to increase price transparency or standardization in long-term contracts would be futile. Others like Aurora and Transpower think that a problem has not been established. MEUG believes that innovative forms of business models and contracting are already likely to develop without the Authority intervening.
- 3.48 Meridian also noted that greater standardisation of terms and conditions for long-term contracts may lead to lower transaction costs for smaller businesses. emhTrade noted that the basic pricing failure is that there is no long-term pricing signal for those considering demand response. This makes it difficult to understand what the value of demand response is and support the introduction of a cap product in the hedge market. Similarly, ETNZ believes that the creation of demand-side hedges could assist greater participation.

4 Other comments

- 4.1 There were three key themes within the "other comments" section firstly, that the Authority needs to produce a clearer problem definition (see submissions from Aurora, David Glass and Vector).
- 4.2 Secondly, that the roles of the Authority and the Commerce Commission should be more clearly delineated (see submissions from Aurora, Orion, and PowerCo). In relation to this, the submissions of ENA, Aurora, and Vector noted that the issues raised in the consultation paper have already been considered as part of the Commerce Commission's input methodologies review.
- 4.3 Finally, a common theme that was seen throughout the submissions is that there should be co-ordination across regulatory agencies to enable mass participation (see Aurora, Contact, ENA, ERANZ, Genesis and Orion's submissions).

Appendix A List of submitters

A.1 Description of submitters

Submitter	Description of submitter
ABB Limited	Engineering company that manufactures products for electrification, robotics, industrial automation, and power grids.
Allan Miller Consulting	Dr Allan Miller is the director of the EPECentre and the Green Grid Project at the University of Canterbury. He is also a member of a number of engineering associations, including the Electricity Engineers Association (EEA).
Alpine Energy	Distributor operating in South Canterbury.
Aurora Energy	Distributor operating in Dunedin and Central Otago.
City Financial Investment Company	Global hedge fund manager that specialises in wholesale electricity and gas markets.
Contact Energy	Electricity generator, natural gas wholesaler, an electricity, natural gas, and LPG retailer.
Cortexo	New Zealand software company that has developed a cloud-based software platform that provides demand response and customer engagement services for electricity consumers.
Dave McArthur	Member of the public.
David Glass	Independent electrical engineer/student.
emhTrade	Electricity retailer that operates P2 Power.
Electricity Networks Association (ENA)	Industry membership body that represents the 29 local distributors.
Energy Link	Energy consultants for consumers, generators, and retailers.
Electricity Retailers' Association of New Zealand (ERANZ)	Represents electricity retailers.
Energy Trusts of New Zealand Inc. (ETNZ)	The national organisation for 22 energy trusts.
Flick Electric Co	Electricity retailer.
Future Energy	Retailer trading as energyclubnz.
Genesis Energy	Electricity generation and electricity, natural gas, and LPG retailing company.
Independent Electricity Generators Association (IEGA)	Association of members who are associated with small scale power schemes connected local networks for the purpose of commercial electricity production.
John Irving	Licensed distributed generator.
Mercury Energy	Electricity generator and retailer.
Meridian Energy	Electricity generator and retailer.
Metrix	Part of Mercury Energy, and provides advanced metering infrastructure and services.
Major Electricity Users' Group (MEUG)	Trade association working across all regulatory regimes, with parties in the supply chain and all consumers.
Molly Melhuish	Member of the public.

Submitter	Description of submitter
Orion New Zealand Limited	Distributor operating in Christchurch and central Canterbury.
Our Energy	Start-up venture that is creating software to enable people to buy and sell local energy within their communities.
Pioneer Energy	Energy generator.
Powerco	Distributor.
PricewaterhouseCoopers (PwC)	Auditing and consulting firm that prepared its submission on behalf of 16 distributors.
Saveawatt	Energy consultancy and brokerage firm for businesses and residential households.
Sustainable Electricity Association New Zealand (SEANZ)	Independent association that represents organisations who want to drive the group of renewable electricity.
Transpower	Owner and operator of the national grid.
Trustpower	Electricity generator and retailer.
Unison	Distributor operating in the Hawke's Bay, Rotorua, and Taupo.
Utilities Disputes	Provides dispute resolution service for electricity and gas complaints.
Vector	Distributor operating in the Auckland region.
Wayne Parker	Member of the public.
Wellington Electricity Lines Limited (WEL)	Distributor operating in the Wellington region.
Westpower	Distributor operating on the West Coast of the South Island.