



Contact Energy Submission

Issues Paper: Updating the Regulatory Settings for Distribution Networks

28 February 2023

Introduction and Summary

1. Thank you for the opportunity to provide our views on the Electricity Authority's (the Authority) Issues Paper: Updating the Regulatory Settings for Distribution Networks.
2. Through Simply Energy we have one of the most sophisticated demand response capabilities in New Zealand. This market is ready to grow, and can provide a valuable service to reduce peak capacity constraints for both generation and distribution networks, while also providing value to customers.
3. As was shown in the IPAG work, the time is right for the industry to accelerate the development flexibility markets. Enough evidence has been gathered, enough analysis has been completed, it is now time to act.
4. The use of distributed energy resources (DER) would be accelerated by:
 - a. Implementing arms-length rules; this will "set the ground rules" and focus distributors on the important transition to a distributed system operator role.
 - b. Ensuring the right incentives are in place and supporting networks on the transition.
5. The Authority should also consider DER that can help reduce the cost of connection assets. This will be critical to the next phase of decarbonisation for larger customers on distribution networks.
6. Following the short submission below we provide answers to the consultation questions as an appendix.

A seven-year itch

7. The barriers faced by third parties wishing to provide DER services has been churning through regulatory discussions for at least the last seven years. In the meantime the market has stalled, nothing has progressed.
 - a. We initially raised DER market failures in the 2016 IM review, where we noted the challenges to distributor participation in competitive emerging markets, and proposed that these activities should only be undertaken by ring-fenced affiliates (arms-length rules). We also provided details on how the application of the rules to ripple control has meant consumers are not properly compensated for the service they offer to distributors.¹

¹ https://comcom.govt.nz/_data/assets/pdf_file/0018/61128/Contact-Energy-Submission-on-IM-review-draft-decision-4-August-2016.pdf

- b. The Commission considered this issue outside of its remit, and suggested it should be considered by the EA.²
 - c. The EA then picked up the baton in the 2017 'Enabling Mass Participation' paper, where the Authority noted a 'lack of confidence in existing open or equal access arrangements', and referred the matter to the Innovation and Participation Advisory Group (IPAG)³
 - d. IPAG then considered network access over several years. We provided a presentation to that group in March 2018 where we took a customer centric perspective and showed that the market is not delivering on what customers need. We also updated our analysis of the poor deal customers are getting from ripple control.⁴
 - e. In 2019 IPAG concluded that: "industry participants – in particular distributors – and regulators will need to respond with a sense of urgency, starting in 2019". They went on to note that "[i]f distributors provide flexibility services, this should be done at arms-length from their core business and under the same terms as other flexibility traders".
 - f. Following the review of Transpower's Demand Response programme IPAG updated its advice in 2021 where they noted that "[a]ll of the implementation dates proposed by IPAG have now passed with no changes".⁵ Little has changed by 2023.
 - g. The EA is now running the next leg in this seven-year journey with another consultation paper.
 - h. Throughout the past 7 years only a handful of RFP processes have been run by distributors, the majority of which have resulted in a traditional network solution.
8. Throughout this process our message has been consistent. We have the technology and capability to provide significantly more DER, but markets are not developing which enable business and residential consumers to provide valuable grid support. All the monitoring and reviews over the last seven years continue to support that story, we don't need more information, we need to act.

² https://comcom.govt.nz/_data/assets/pdf_file/0020/60536/Input-methodologies-review-decisions-Topic-paper-3-The-future-impact-of-emerging-technologies-in-the-energy-sector-20-December-2016.pdf, p70

³ <https://www.ea.govt.nz/assets/dms-assets/22/22785EMP-next-steps-decisions-paper.pdf>

⁴ <https://www.ea.govt.nz/assets/dms-assets/23/2346101E-Contact-Energy-presentation-on-equal-access.PDF>

⁵ <https://www.ea.govt.nz/assets/dms-assets/30/IPAG-final-advice-on-Equal-Access-Updated-2021.pdf>

There is a clear-cut market failure

9. The Authority has robustly defined a significant problem with DER uptake, demonstrating that distributors in general:
 - a. Prefer network investments over non-network solutions
 - b. Prefer self-supply of DER, rather than third party solutions
 - c. May be able to secure a competitive advantage by leveraging monopoly assets.
10. In summary, this can be seen as a refusal to supply an input. As noted in the Commerce Commission's draft guidance on the misuse of market power, refusal to supply an input can hinder competition, and may breach the new s36 of the Commerce Act 1982.
11. Ultimately these problems demonstrate why it is ill advised to include inherently competitive assets within an ex-ante price regulatory regime like Part 4. While theoretically the incentives should result in an efficient use of DER as distributors look to reduce costs, we know that this is not how it has eventuated in practice.
12. As noted in the Commerce Commission's current input methodologies review:

Expenditure by EDBs and Transpower (including investment to meet demand) has increased significantly since 2008. It has nearly doubled in nominal terms. ...

average electricity distribution revenues and prices have still grown faster than inflation, driven by rising expenditure. This increase in price has also been higher than the increase in some of the main drivers of network growth (ie, growth in customers, energy and power supplied).

*The quality of service we currently measure (reliability) delivered to consumers of electricity has seen little change.*⁶
13. The Authority also considered the effect on competitive markets at para 5.108. While the Authority is right that this effect is neutralised for regulated revenue, this is not the case for non-regulated revenue, such as the reserves market revenue that distributors have gained from ripple control.

⁶ https://comcom.govt.nz/_data/assets/pdf_file/0031/283864/Part-4-Input-Methodologies-Review-2023-Process-and-Issues-paper-20-May-2022.pdf pp50-51

There are few risks, and many benefits to implementing arm's-length rules

14. Arm's length rules for DER are an obvious and necessary step. These are clearly competitive services and have no right being part of a regulated monopoly business.
15. Throughout the last seven years, distributors have conflated arm's length rules with strict line of business restrictions. This has allowed them to raise objections that are simply not applicable. Unfortunately, these appear to have become the centrepiece of the Authority's hesitance of implementing arm's length rules.
16. The Authority raises two reasons to be hesitant to implementing arm's length rules:
 - a. It would lock distributors out of the DER market and there may be no one else available to offer the service, reducing efficiency.
 - b. It would prevent distributors from taking advantage of any economies of scope or scale, again reducing efficiency.
17. Neither of these concerns would be a feature of an arm's length regime. Under these rules a distributor's parent company could still own and operate a separate DER business, and that business could sell services to the distribution arm. The arm's length rules would simply require each entity to act independently and demonstrate that there is a fair transfer price, consistent with the Commerce Commission's related party transaction rules.
18. As noted by the Commission in their 2017 update of the related party transaction rules

We are not looking to prevent regulated suppliers from using related parties to provide services, as they can be efficient, giving economies of scale and scope. But there is an onus on a regulated supplier to show that the cost of the underlying service is consistent with the input price that it would have otherwise paid in a transaction on arm's-length terms.⁷
19. Implementing arms-length rules will give potential third party DER providers the confidence to invest in the market and develop solutions. The current "murkiness" is unquestionably a barrier to market development. WEL Networks 35MW battery is an example. Was the battery funded as a regulated network asset? What distribution network support is it providing? What process was run, including with potential third party providers, to determine whether the battery is the most economic way of providing that network support? What process was run to determine the WEL owned battery supplier was the most economic option? If the

⁷ https://comcom.govt.nz/_data/assets/pdf_file/0029/59591/Related-party-transactions-Input-Methodologies-review-Final-decision-and-determinations-guidance-21-December-2017.pdf, para X5.

battery is part or all a regulated asset, what impact will it have on competitive markets such as the wholesale energy or reserve markets? These questions have important implications for the development of DER markets.

20. When there is so much to gain, and so little to lose the case for intervention is as clear as you'll ever see it. The Authority now has the power to impose arms-length rules to solve problems like these. This power needs to be utilised.

Getting the right incentives in place to support DER uptake is essential

21. We recognise the transition from a primarily asset management focused business to one that also manages system operations requires a quantum shift in culture, skills and technology. In this section we highlight some of the key changes that should be considered to provide distributors the right incentives in this shift.

22. Some of the key changes that we recommend the Authority consider as part of their work programme are:

- a. **Re-examining the role of ripple-control in a post-RCPD world.** This should place consumers at the centre, and gain the full value for offering this flexibility into the market, ie value stacking across avoided distribution, energy markets, and reserve markets.
- b. **Development of a standardised DSO function across Transpower and all distribution flexibility markets.** This is essential to reduce barriers to entry and support participation in flexibility markets. Simply made a significant investment building the systems required to automate participation in Transpower's DR program, and we could not justify that investment for multiple distribution flexibility markets. Given the size of NZ, we also believe there needs to be an evaluation on whether the cost and complexity of developing multiple DSOs and interfaces with the TSO (Transpower) is justified, or whether one combined TSO-DSO will best serve the interests of consumers.
- c. **Funding for pilot DER programs.** This is required not only for distributors, but to enable flexibility traders and other service providers to justify the time and investment required to participate in trials. Contact has participated in distributor flexibility trials in the past, which were resource and capital intensive. In our view pilot funding should be structured as a competitive process which enables distributors, flexibility traders and other participants to partner as required and apply for funding.

- d. **Encouraging more peak price tariffs for C&I customers.** The Authority has actively encouraged peak distribution pricing for residential customers, and we are starting to see these grow in the market. However, currently most EDBs charge C&I customers on an 'anytime' rate, missing a significant opportunity.
23. Some other changes relate to the Commerce Commission's ongoing input methodologies review, but we raise them here for completeness.
- a. Removing the 67th percentile WACC, which inevitably results in distributors favouring capex over opex.
 - b. Flexibility for distributor to utilise capex or opex to achieve networks outcomes is essential. Equalising the incentive regimes on capex and opex is also essential.
 - c. Providing adequate funding for distributors to develop the network visibility (through LV monitoring etc) required to understand constraints and be in a position to consider and manage third party DER as an alternative to traditional network upgrades
 - d. Distributors also need adequate funding to develop the Distributed System Operator (DSO) platform required to manage services provided from DER providers.

DER must also be encouraged to reduce the cost of connection assets

24. Contact Energy is committed to leading New Zealand's decarbonisation. This means growing our renewable capacity, as well as working with customers to electrify. The number one barrier to electrification projects is the cost of connecting to the distribution networks.
25. Smart DER capability can significantly reduce the costs of a connection by acting as a substitute to network redundancy. For example, a manufacturer that currently gets their energy from a coal or gas boiler could electrify with a 'non-firmed' connection. The boiler would remain in place, but on standby most of the time, and when there is a network outage it could be turned on to ensure continued power. Longer term we see batteries, or other types of renewable electricity filling this gap.
26. However, we have found some distributors unwilling to enter into these sort of commercial arrangements, or only do so on unreasonable terms. Addressing this issue should be a top priority for this project, but the current proposals would have limited impact on connection asset DER.
27. The nature of the problem for connection assets is different than for interconnection assets. We think this is largely driven by an over-cautious

approach from some distributors who are unsure of the implications on their quality requirements. It may also be that distributors are unwilling to undertake the extra work needed in implementing a novel approach, particularly where there are minimal benefits to the distributor.

28. Given the different nature of the problem, a different set of solutions is required. Options include:

- a. Developing regulated terms for connection of non-firm load. This could build on the existing distribution pricing principles, with reference to Part 6 of the Code.
- b. An enhanced monitoring regime to assess responses to requests for non-firm load, including assessment of price and non-price terms.
- c. Open access requirements where distributors must allow third parties to connect directly to their network under certain conditions.

29. We consider options a and b would be appropriate in the first instance, with option c considered at a later date, informed by the monitoring regime.

Attachment: Answers to consultation questions

Consultation Question	Contact Energy Response
1. Do you see value in commissioning two separate reviews to look into the merit and practicalities of implementing the recommendations of the UK's Energy Data Taskforce around unlocking the value of customer actions and assets and delivering interoperability in a New Zealand setting?	.
2. Does this capture the key data needs for distributors to make informed business decisions that will unlock the potential of distributed energy resources (DER) for the long-term benefit of consumers? If not, what data is missing and what would it be used for?	.
3. Do you agree with the prioritisation of the key data needs for distributors? If not, why not and how would you suggest the priority is changed?	Distributors already have access to quality consumption data via the default distributor agreement. We are unsure what problem the Authority is aiming to solve. Limited resource is likely better spent elsewhere.
4. Does this capture the key data needs for flexibility traders to make informed business decisions that will unlock the potential of DER for the long-term benefit of consumers? If not, what is missing and what would the data be used for?	Yes
5. Do you agree with the prioritisation of the key data needs for flexibility traders? If not, why not?	Yes
6. Do you agree that the Authority should amend the Data Template to address the above issues to improve its workability? If not, why not?	<p>We support the adoption of the ERANZ/ENA template.</p> <p>We are also comfortable with providing monthly data. This is something we already do.</p> <p>We disagree that MEPs should be required to provide data directly to the distributors. Customers reasonably expect that we manage their data in their interests. Customers have no</p>

Consultation Question	Contact Energy Response
	relationship with the MEP, it is inappropriate to disenfranchise customers in this way.
7. Are there other changes to the Data Template that would improve it and assist it to be a useful mechanism for open access to data?	
8. Do you agree that this is an issue? If not, why not?	<p>This is not an issue. We have entered into a number of these agreements, and do not consider them to be onerous.</p> <p>We are concerned that EDBs may be overplaying the significance of this issue. Dealing with a large number of counterparties (eg 29 EDBs) is a feature across the industry. It is not clear that this is the most pressing transaction cost the industry is facing.</p> <p>The Authority must carefully consider whether this issue justifies limited staff time.</p>
9. Should the Authority amend the Code to clarify that MEPs can contract directly and provide both ICP data to distributors (and flexibility traders) for permitted purposes? If not, why not?	No. As above we consider it inappropriate for a party that has no relationship with consumers to be sharing their data by default.
10. Should the DDA Data Template be updated to include Power Quality Data? If not, why not?	We do not consider power quality data to be personal information. We are happy for this information to be provided directly from the MEP to the distributor.
11. Do you think that the transaction costs associated with negotiating access to MEPs is a problem that the Authority should prioritise? If no, why not? If yes, do you think there is merit in developing a template to develop a default template to help reduce transaction costs?	<p>As above, we consider the transaction costs of reaching agreement with a retailer to access consumption data is very low.</p> <p>We have no comment on the transaction costs of agreements with the MEP.</p>
12. Do you agree that MEP pricing for ICP Data (including Power Quality Data) and related data services is not unreasonable at this stage? If not, why not?	<p>We have two concerns about MEP pricing:</p> <ol style="list-style-type: none"> 1. EDBs free riding. We pay a significant fee to MEPs to receive data on our customers. This cost should be shared with EDBs or other parties where they also get value from the data.

Consultation Question	Contact Energy Response
	<p>2. Double dipping. MEPs may in some cases be charging for the same job of producing the data twice.</p> <p>We consider that pricing should be based on the cost of producing the data, and shared equally amongst all parties that have access.</p>
<p>13. Do you agree that MEP pricing for the provision of ICP Data to distributors (and other parties) could be more transparent? If not, why not?</p>	<p>Yes we agree. As above there may be cases of free riding, or double dipping.</p>
<p>14. To support the transparency of pricing, standardisation, and equal access to data, do you think that the Authority should consider further implementing IPAG’s Input Services recommendation that MEPs publish standard ‘pay-as-you-go’ terms open to all parties? If yes, why and what do you think this could cover? If not, why not?</p>	<p>Yes, this is worth further investigation. These terms should also include the fees to retailers as well as EDBs and flexibility traders.</p>
<p>15. Do you agree that distributors’ visibility of the location, size, and functionality of DER needs to be improved within the next 3–7 years to support network planning? If not, why not?</p>	<p>.</p>
<p>16. Do you have any views on the type and size of DER that needs more visibility?</p>	<p>.</p>
<p>17. The Authority acknowledges that definitions of ‘real-time’ vary, please explain what real-time data means to you.</p>	<p>We consider real-time data receiving 1 minute reads every 1 minute. This is required to support offers and ensure available controllable load aligns with dispatch in the wholesale market. 1 minute reads may not be required for non-network solutions depending on distributor requirements for providing flexibility services.</p>
<p>18. Do you agree that access to ‘real-time’ consumption and Power Quality Data won’t be needed for at least five years?</p>	<p>.</p>
<p>19. Do you agree that flexibility traders’ access to ICP data must be improved so they have the same level of access as distributors (and retailers), with whom they might be competing</p>	<p>Yes</p>

Consultation Question	Contact Energy Response
to provide contestable services? If not, why not?	
20. Do you think the Authority should prioritise modifying the Data Template, so that flexibility traders can use it, or should the Authority prioritise amending the Code to clarify that MEPs must provide ICP data directly to flexibility traders and distributors for a set of permitted purposes without the need for retailer permission? If neither, please explain why.	We consider it important that we manage the use of our customers power consumption data in line with the Privacy Act and that any sharing of customer data is linked to specific permitted use purposes.
21. Do you agree that flexibility traders need access to granular current and likely future Congestion Data on distribution networks within the next 1–3 years?	Yes we agree. This will likely be important data to allow flexibility services to flourish.
22. Are there any other issues preventing distributors from providing granular current and likely future congestion data?	.
23. Do you agree that visibility of the location, size, and functionality of larger DER needs to be improved within the next 3–7 years to help understand the drivers of network congestion, what DER is ‘controllable’, and what services could be offered to owners of DER? If not, why not?	Yes we agree. This will likely be important data to allow flexibility services to flourish.
24. Do you have any views on the type and size of DER that flexibility needs to have improved visibility?	.
25. Do you think that the Authority, instead of a DER registry, should consider amending the registry data fields and / or requirements to improve DER visibility?	.
26. Do you agree that the Authority should prioritise work on addressing the other issues outlined in this paper?	The other not prioritised issues appear to be low value.
27. Do you agree that flexibility trader access to real-time congestion and ICP data won’t be needed for at least five years?	Yes we agree. The residential flexibility market is still in its early days.

Consultation Question	Contact Energy Response
28. Do you agree that model privacy disclosure terms are appropriate?	We don't oppose this, but we are not sure it should be a priority.
29. Do you agree that model privacy disclosure terms would facilitate data access?	.
30. Do you see any practical issues with this proposal?	.
31. Should the Authority create model terms for distributors and MEPs as well given the range of data being collected through smart meters? If not, why not?	.
Q32. Would the industry find it helpful for the Authority to conduct workshops on privacy preserving/minimisation techniques?	Yes, we believe that this could provide clarity to the industry, and expectations of security standards, etc. These workshops must demonstrate support for a customers right to data privacy.
31. What are your views on the three options presented above, to deal with Issue 1 (that distributors might prefer network investments to NNS)? What alternative option/s would you favour, if any?	<p>Option 1: Education – we agree with the Authority at para 5.36, we do not consider education as a major issue.</p> <p>Option 2: funding trials – This is essential, but funding must be provided to both the distributor and the flexibility trader. There will be significant expense for the traders, and no guarantee that the trial will scale, or continue longer term.</p> <p>Option 3: Require distributors to show they have explored NNS – we strongly support this option. It is consistent with an arms-length approach.</p>
32. Do you agree with the tentatively preferred intervention to deal with Issue 2 (Option 3: encourage standing offers) and the collection and monitoring of information proposed under Option 4? If not, what alternative option/s would you favour, if any?	<p>Any option short of establishing arm's-length rules will continue to see DER markets stagnate. We cover this in the body of our submission.</p> <p>Option 1: Education – we do not consider that this will make a material difference.</p> <p>Option 2: MTR – We support the Ara Ake trial and await the evaluation.</p> <p>Option 3: Standing offers – We tentatively support this option, but it is likely significantly</p>

Consultation Question	Contact Energy Response
	<p>less efficient than more dynamic targeted NNS / demand response programs, that can be achieved through arm’s-length rules. We note that ACOT is in effect a ‘standing offer’ and the Authority is removing this provision because of its inflexibility. The same argument applies to DER.</p> <p>Option 4: Monitoring – While we do not oppose further monitoring, we do not consider it necessary to justify arm’s-length rules, there is already sufficient evidence that they are necessary.</p> <p>Option 5: Arms-length Rules- We strongly support this option. While a strict prohibition on distributors offering DER may not be appropriate, forcing these services into a separate arm’s-length entity will create much greater transparency, focus distributors on being a neutral platform / distributed system operator, create a more even playing field for competition, and give potential NNS providers the confidence to invest.</p>
<p>33. Do you think there are circumstances in which the Authority should extend the arm’s length rules? If not, why not?</p>	<p>As above we consider arm’s-length rules should apply in all circumstances.</p>
<p>34. Do you agree with the Authority that Option 1 should be implemented, and that Option 2 could be considered in the event of allegations of, or instances of anti-competitive harm in contestable markets (Issue 3)? If not, what alternative option/s would you favour, if any?</p>	<p>Option 1: Monitoring – we support increased monitoring, but consider this to be complement to arm’s length rules rather than a substitute.</p> <p>Option 2: Arm’s length rules – As noted above the Authority has mis-understood the Part 4 regime at para 5.108. Where profits are gained in unregulated markets like the reserves market there is significant scope for exploiting monopoly assets in competitive markets. We have long suspected that this is the case for ripple control assets in the reserves market, and even the risk that this is occurring should be of great concern to the Authority. This is just another reason why arm’s length rules should be implemented immediately.</p>

Consultation Question	Contact Energy Response
35. What do you think of the Authority’s option of using the education option proposed elsewhere in this paper, to include some guidance on how distributors should collaborate in future?	We are unconvinced that education would have much impact. Parties with the appropriate incentives will quickly educate themselves.
36. Do you think it would be helpful for the Authority to encourage the use of joint ventures between distributors to increase their integration of DERs and their procurement of NNS projects? And should this be combined with the first option?	<p>We consider that combining distributors resources for critical activities like forming a distribution service operator (DSO) is essential. However, small scale joint ventures would likely lead to too much fragmentation.</p> <p>We encourage the Authority to consider ways to develop a nationwide DSO. This would provide a consistent platform to facilitate the growth in the DER market.</p>
37. Do you agree with the proposed approach to monitor progress between Transpower and distributors in developing standard offer forms for procuring NNS, and monitor whether issues associated with operating agreements for flexibility services are developing, and prioritise resource to progressing the other chapters? If not, why not?	Yes we agree with this approach. However we do not consider this to be a priority issue compared to establishing arm’s length rules and a combined DSO.
38. Do you have any views on the best way the Authority can monitor whether issues associated with operating agreements for flexibility services are developing?	.
39. Do you have any suggestions for how the Authority can support industry-led work on providing guidance on best practice and templates for operating agreements?	.
40. What are your thoughts on the proposed scope for the Part 6 review? What, if anything, would you include or exclude, and why?	<p>We consider that Part 6 should also consider DER that supports connection assets. As noted in the body of this submission, regulated terms for non-firmed connections could accelerate electrification projects.</p> <p>Otherwise we are happy with the proposed scope of the review.</p>
41. In order, what are the three most important issues that should be addressed as part of a Part 6 review, and why?	As above

Consultation Question	Contact Energy Response
42. What are your thoughts on amending Part 6 of the Code to explicitly include DER, and what do you think are the key issues to be considered?	We agree with explicitly including DER in Part 6.
43. What are your thoughts on increasing the size threshold for Part 1 DG applications, including the benefits and drawbacks?	.
44. If the threshold were to change, what do you think the new threshold should be and why?	.
45. What are your thoughts on adjusting the ten-business day timeframe in Part 1A?	.
46. What are your thoughts on maintaining the current approval timeframes in Part 1 (comprehensive) and Part 2?	.
47. If you seek a change to approval timeframes, what evidence can you give to support this?	.
48. What are your thoughts on adding a new DG application process for large-scale DG to Part 6? Please provide examples in support of why you think change is or is not necessary.	.
49. If you think a new application process should be added, where should the threshold be and why?	.
50. What are your thoughts on reviewing the priority of applications clause in Part 6 of the Code?	.
51. Should the AS/NZS 4777.2:2020 Standard be mandated for inverters in New Zealand? If so, how should this be accomplished?	.
52. What are your thoughts on the Authority reviewing the prescribed maximum fees in Part 6 of the Code?	.