Kāinga Ora Submission to Electricity Authority

Re: issues paper: Updating the Regulatory Settings for Distribution Networks

28 February 2023

Kāinga Ora – Homes and Communities appreciates the opportunity to comment on the Electricity Authority issues Paper: updating the Regulatory Settings for Distribution Networks. Kāinga Ora has a keen interest in the issues described within the paper as they relate to the aspirations of our Renewable Energy programme work, in particular a proposed Kāinga Ora 'financial peer-to-peer pilot' that is discussed within Section 5 of the Issues Paper.

This submission focusses on the proposed Kāinga Ora pilot. Other comments are made in the context of experience working with the Authority and others in an attempt to establish this pilot.

Background

Kāinga Ora – Homes and Communities

Kāinga Ora has two key roles:

- being a world-class public housing landlord; and
- partnering with the development community, Māori, local and central government, and others on urban development projects of all sizes.

Kāinga Ora manages over 70,000 properties nationwide, providing tenancy services, maintaining and developing public housing stock and providing home ownership products and other services. Kāinga Ora prioritises the wellbeing of its customers, striving to provide them with good quality, warm, dry and healthy homes.

Kāinga Ora is working to deliver new quality urban developments that connect homes with jobs, transport, open spaces and facilities. This includes accelerating the availability of build-ready land, and building a mix of housing including public housing, affordable housing, and homes for first home buyers and market housing of different types, sizes and tenures.

Kāinga Ora aims to integrate sustainable practices into the way we plan our urban development areas, build homes and do business. Kāinga Ora improves environmental wellbeing through our construction and urban development activities, which also seek to catalyse positive change across the broader New Zealand industry. We are committed to ensuring an equitable and fair transition for our customers.

For more information on Kāinga Ora, please visit our website https://kaingaora.govt.nz/

Kāinga Ora Renewable Energy Programme and proposed pilot

The key goals of the Kāinga Ora Renewable Energy Programme (the programme) are reducing energy hardship for Kāinga Ora customers while supporting decarbonisation through the integration of renewable energy resources into public housing infrastructure. This work is enabled by the Government's Māori and Public Housing Renewable Energy Fund[1].

[1] Māori and Public Housing Renewable Energy Fund | Ministry of Business, Innovation & Employment (mbie.govt.nz)

The programme is installing solar PV (photovoltaic) systems on Kāinga Ora rooftops, targeting roofs that are most suited for solar installation and maximising the generation of electricity from each home to provide the greatest possible benefit to the customer. This will reduce energy hardship for customers in these homes by providing them with solar electricity during sunshine hours.

The next step for the programme is to pilot a method to monetise the solar export[2] from homes with solar systems and use that financial contribution to relieve energy hardship for customers in homes that do not have solar fitted to the roof. Kāinga Ora is working in partnership with Ara Ake to establish this 'financial peer-to-peer' pilot. This model can be regarded as a simplified version of MTR (multiple trader relationships), which is also separately being piloted by Ara Ake.

Vision and Support for Innovation

The issues paper provides a vision for distribution networks in paragraph 2.7:

> *Our vision for distribution networks is to support innovation, promote competition and consumer choice in contestable markets such as flexibility services, and maintain reliability and security of supply*.

However, the paper doesn't outline a strategy to move towards this vision for distribution networks. The paper provides proposed mitigations to issues identified by the Authority's Innovation and Participation Advisory Group (IPAG) and through previous consultations. The reason given for this reticence is that the flexibility services market is still emerging and that developing prescriptive commercial and regulatory frameworks too early would "*constrain market growth*" (paragraph 2.58). The paper, therefore, has a limited scope, with leadership in this area being left to other industry groups (the work of the Flexforum, South Island Distribution Group, Electricity Networks Association and Transpower is acknowledged in paragraph 2.30).

The paper states that the Authority aspires to encourage innovation. Paragraph 2.59 states:

> *The Authority would prefer to move at the speed of the fastest adopters, not the slowest, and be able to pick up pace as the market matures. Therefore, regulatory flexibility is needed to allow participants to test and develop new services without regulatory restrictions that impede their progress.*

Kāinga Ora has been in conversation with the Authority regarding a 'financial peer-to-peer' pilot for almost a year[3]. This has not been a timely process, has risked pushing the pilot outside the available

[2] The exported generation net of consumption

[3] Kāinga Ora and Ara Ake first approached the Electricity Authority (the Authority) in April 2022 to discuss setting up a 'financial peer-to-peer' pilot. A workshop was held in Wellington on 7 July 2022 to gain clarity on a path ahead for the pilot, especially with regard to regulatory uncertainty and information that the Authority needed to move forward.

A detailed written proposal for a "regulatory sandbox" to enable the pilot was provided to the Electricity Authority Chief Executive on 18 October 2022, followed up with a meeting with Chief Executives on 21 November 2022. The Authority's initial response to this request received on 22 December 2022, recommended that Ara Ake and Kāinga Ora seek exemptions for specific clauses in the Code rather than a "regulatory sandbox." This letter also indicated that Board approval for exemptions would not be sought until late 2023 or early 2024, a timeframe that would take the pilot outside the available funding window. This concern has been raised, and Kāinga Ora and Ara Ake are encouraged that the Authority has agreed to present applications for regulatory exemptions (required for each industry participant in the trial) to its Board as soon as they are received, aiming to progress approval faster.

funding window for the Kāinga Ora Renewable Energy Programme and has been challenging to navigate. This fails the aspirations stated in this paper. However, recent conversations with the Authority have been more encouraging.

The paper also refers to the concept of a "regulatory sandbox" in paragraph 2.59, which states that:

> *There has also been some suggestion that the Authority ought to make a "regulatory sandbox" available to encourage innovation.*

The existence of a clear pathway or structure (such as a regulatory sandbox) may have eased the journey for Kāinga Ora in attempting to establish a pilot that breaks certain Code provisions. We understand that the Electricity Industry Amendment Bill 2022 should make it easier for the Authority to agree to Code exemptions with clear conditions in the future, providing a more accessible environment for innovators to trial new products.

Description of the Kāinga Ora –'financial peer-to-peer' trading concept (Box 3)

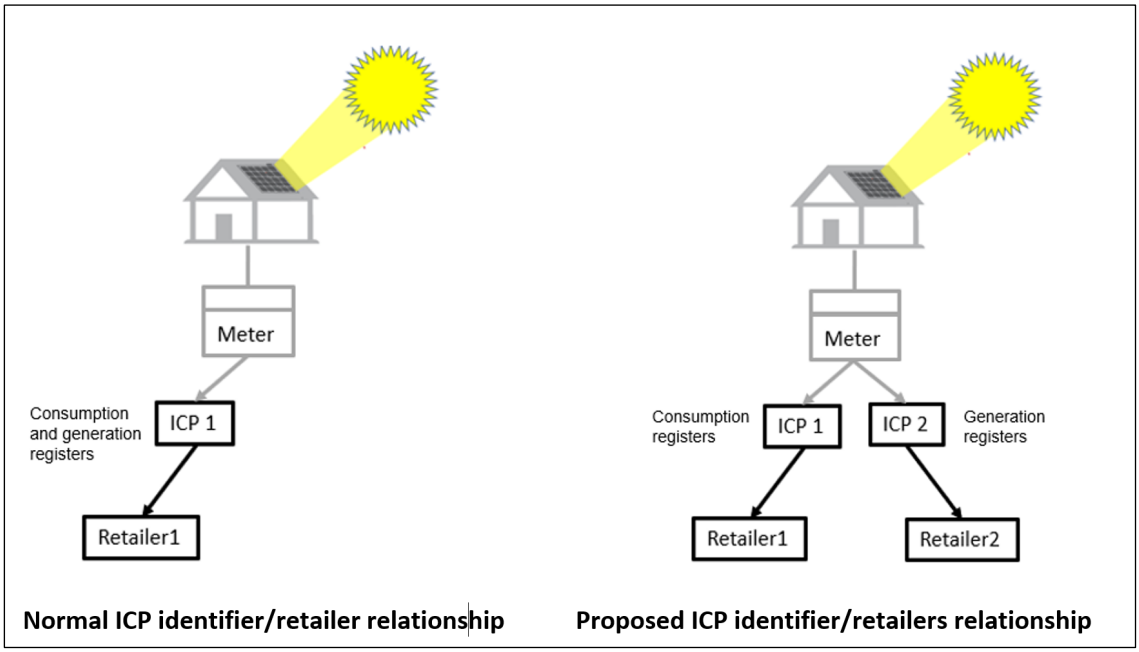
The description of the Kāinga Ora –'financial peer-to-peer' concept provided in Box 3 (page 57) and paragraph 5.68 is not accurate. The Kāinga Ora concept does not involve "sharing the excess solar electricity generated on certain rooftops with other units".

The proposed concept is the separation of the management of the import and export registers at selected ICPs (where solar PV exists on public housing) so that Kāinga Ora can monetise the exported electricity and then use these funds to benefit other customers in energy hardship.

An important consideration is that the Kāinga Ora customer with solar PV on their roof can buy their electricity from the retailer of their choice (retaining their consumer rights), while the exported electricity is managed by a retailer contracted to Kāinga Ora. Contracting with one retailer to purchase all the exported electricity will allow Kāinga Ora to seek the best market price, maximising the benefit of its investment in solar PV.

The peer-to-peer trading proposal (illustrated below) is to:

- Create duplicate ICP identifiers at ICPs for the houses that are fitted with solar PV within the pilot. The existing ICP identifier containing consumption information, the new ICP identifier containing generation information.
- Arrange for the MEP (Metering Equipment Provider) to separate the consumption and generation meter registers within the point of connection meter and attribute the consumption to the existing ICP identifier, and the generation to the new ICP identifier.
- Separate the consumption and generation meter registers at an ICP into two flows of data, each will be managed by a separate retailer.



Normal ICP identifier/retailer relationship **Proposed ICP identifier/retailers relationship**

The methodology will not disturb existing trading relationships, retailer processes, or have an impact on the settlement integrity of the electricity market.

Such an arrangement is not currently permitted in the Code, as each ICP must be registered to just one retailer. Code exemptions are needed to allow the distribution network operator and MEP to participate in the pilot without breaking the Code.

MTR as an option to address a distribution market issue

The Authority Issues Paper refers to Multiple Trading Relationships (MTR), and by extension the Kāinga Ora pilot[4], as an option to address Distribution Market Issue 2 (Chapter 5, Issue 2, page 55), namely that:

> *Distributors prefer to self-supply NNS (non-network solutions) rather than use competitive procurement*.

This framing takes a narrow view of the benefits of MTR and the Kāinga Ora pilot proposal. The key benefits sought by Kāinga Ora and Ara Ake do not specifically address or resolve Issue 2. It is disappointing that the Kāinga Ora proposal is being presented as an option to a weakly correlated issue.

The Kāinga Ora and Ara Ake pilots seek to address a fundamental barrier to competition in the market, namely the fact that existing arrangements prevent aggregators and energy services companies from offering customers alternative services while using existing market systems and processes.

The Kāinga Ora proposal allows more parties to provide services to customers, increasing competition and customer choice in the market. It is unfortunate that the proposal is being

[4] The 'financial peer-to-peer' model that Kāinga Ora wishes to pilot can be regarded as a simplified version of MTR, or 'MTR lite'

presented against a narrowly defined issue and, as such, not a preferred option, without acknowledgement of the wider benefits that these changes could enable.

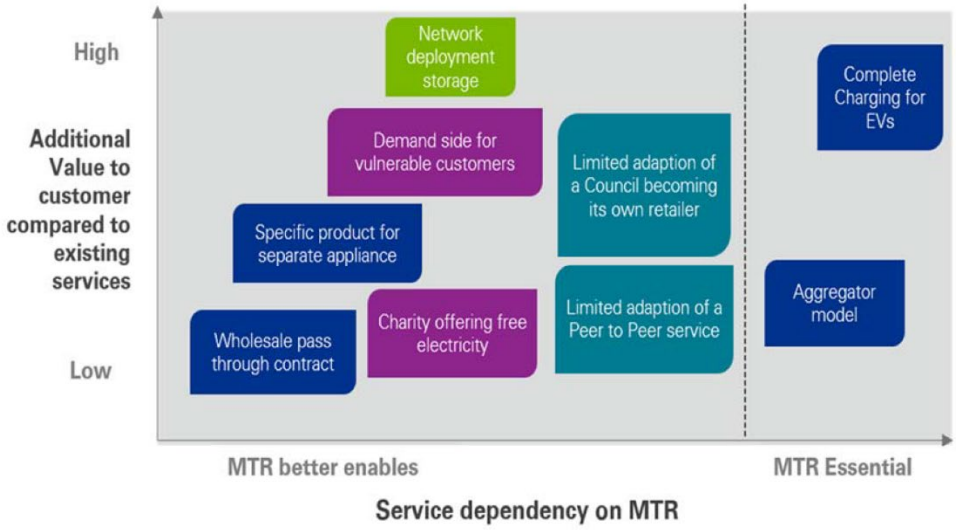
The case for the proposed Kāinga Ora pilot

The key benefit sought by this pilot is to enable Kāinga Ora, as an owner of distributed solar PV assets, to maximise the value of its investment by maximising the value of the exported electricity, and to then pass that benefit on to customers in energy hardship.

The consumer benefits of this concept, if implemented, can extend beyond Kāinga Ora. The 'financial peer-to-peer' model would allow any customer that exports electricity to sell that electricity independently to another retailer than it buys electricity from, or to gift that electricity to a community battery or retailer that can provide a social retailing service. This would enable retailers to receive surplus solar electricity sold or donated by individuals or commercial organisations. Social retailers, Māori housing providers, local councils, schools, framers and owners of electric vehicle fleets could all benefit from this type of solution.

This view is supported by a KPMG report produced for the Australian Energy Market Commission[5], which maps nine services which are enabled or supported by MTR (illustrated in Figure 1 from the report, below). The KPMG paper also concludes that MTR is essential for the adoption of an aggregator model and provides high additional value for demand side interventions for vulnerable customers.

Figure 1: Dependency of the service on MTR compared to the additional value for customers



The issues paper states that the benefits of MTR/ 'financial peer-to-peer' trading may not be achieved. Paragraphs 5.71-2:

> *There is a risk that if consumer uptake is slow, the benefits might not materialise or could be outweighed by the implementation costs, which would be recovered from consumers.*

[5] New Energy Services and Multiple Trading Relationships, KPMG for Australian Energy Market Commission, July 2015

While more competition should drive down the costs of flexibility services being offered to distributors (and other buyers of flexibility), the impact on monthly consumer electricity bills of having more than one retailer is not yet clear.

However, we believe that a draft cost benefit analysis carried out by the Authority, within the ACCES (Additional Consumer Choice of Electricity Services) work stream in 2018, showed an expected positive net economic benefit for MTR and financial peer-to-peer[6] options. The financial peer-to-peer option was identified as the preferred model to trial or implement, as it requires only moderate changes to the Code and central Registry system.

This work also posited that the status quo was unlikely to result in competition and efficiency benefits as there is little incentive for retailers to facilitate new entrants at ICPs they control, even if this is to the ultimate benefit of consumers.

[6] Referred to as multi-channel trading in the analysis