From: energymarkets@mbie.govt.nz

To: <u>Energy Markets</u>

Subject: Electricity Price Review submission

Date: Friday, 22 March 2019 11:29:56 a.m.

Name (full)

Dr Andrew Crossland

Company (if applicable)

Email

9(2)(a)

Contact number

9(2)(a)

Region

Wellington

Category

Individuals, Researchers and Academics

Do you accept these terms & conditions?

Yes

A1. Establish a consumer advisory council

Although we support the overall objective of the strengthening the community voice, we would be concerned if this this adds yet another layer of cost to the sector and this should be supported out of general Government led wellbeing initiatives rather than a levy on the industry.

It is important that relevant expertise to support analytics and identification of barriers to entry are considered in the term of reference for this council. There are inherently interdisciplinary topics, for example understanding of the energy sectors and new technologies, as well as an understanding of networks is important for reliability, cost and value propositions.

Traditionally we understand that a number of representatives for these types of organisations are Senior Executives for organisations and there is a need to consider representatives with a good understanding of the social and technical environment to ensure collaboration at the right level.

Specifically, we would like to see that this council has:

- Leadership and that ensures adequate analytical insight to support wider understanding of issues raised to the council.
- A linking in with representative organisations with social enterprise, commercial as well as technical or academic experience and thus support the linking in with CEN and similar organisations to ensure social balancing with outcomes.
- A linking in with a commercial relationship with a technical organisation or organisations who can undertake independent analysis of various scenarios to support the work of the council and understanding of council members.
- A drive into clear projects to support outcomes for the consumers.

It is our experience that either of the measures identified above are important for such a council to have measurable impact on the issues that it identifies.

A2. Ensure regulators listen to consumers

We are in favour of reducing energy hardship and agreement with establishing this

group although we do consider that this and the consumer advisory group should be closely coupled to be of best benefit to the consumers.

In addition we consider the requirements relating to B2 to B8 become part of the remit of the Energy Hardship Group establishment rather than necessarily being defined seperate to that group establishment.

Again the makeup of this group needs to be carefully thought through to ensure maximum benefit to consumers in energy hardship. While there is a need to consider linking closely with industry participants in terms of ability to support initiatives impacting on energy hardship. We think the makeup of this group needs to be carefully considered along with the mandate to get on with some practical initiatives to benefit those in energy hardship.

As such this group needs to have some there is a need to consider representatives with a good understanding of social and some sound technical expertise in new technologies otherwise it risks being another talk fest without gaining traction to provide best benefit.

- B1. Establish a cross-sector energy hardship group
- **B2.** Define energy hardship
- **B3.** Establish a network of community-level support services to help consumers in energy hardship
- **B4.** Set up a fund to help households in energy hardship become more energy efficient
- **B5.** Offer extra financial support for households in energy hardship
- **B6.** Set mandatory minimum standards to protect vulnerable and medically dependent consumers
- B7. Prohibit prompt payment discounts but allow reasonable late payment fees
- B8. Seek bulk deals for social housing and/or Work and Income clients

We agree in principal with this and think it should be tied in with the energy hardship group outcomes to ensure best impact. Technology is expected to play an increasing role in reducing the cost, price shock impacts and security of electricity for consumers. However, the upfront price of such technologies can provide a significant barrier to entry, particularly for those on low incomes. This conflicts with the fact that this socio-demographic is most likely to see the highest impact benefit. An exploration of bulk deals must also include technology since bulk buying and scaling projects:

Has a dramatic impact on cost. The unit cost of solar PV can be more than halved by moving from buying, managing and installing a single PV array on a home, to installing more than ten homes at a time

Bulk deals opens up no up-front financed projects such as PPAs which promote price stability and have a lower exposure to credit risk for investors.

We consider that there is the opportunity for a social enterprise initiative in this space.

C1. Make it easier for consumers to shop around

Generally we concur with the position of the review team.

However we are have our reservations that the current energy market framework with the current separation of generation, retail and distribution service within NZ (which is now a 30 year old model) will be able to provide any of the perceived benefits. Many of the items raised are probably only dealing with the fringes of

what we perceive to be an industry structural issue.

It is not possible within the scope of this document to address what we consider to be all the issues inherent with the current electricity industry structure where consumers have little choice on who provides the infrastructure and currently have minimal potential to influence economies associated with use of new technologies.

We also consider that some of the regulatory and structural issues with the industry are a distraction from the focus the industry needs to have on driving cost effective outcomes to consumers. As such we would support more innovation to reduce network costs and make grid alternative technologies more available - particularly to the fuel poor.

C2. Include information on power bills to help consumers switch retailer or resolve billing disputes

Information on technology, and the benefits of it, are easy to calculate by industry but also easy to missell to consumers. This is particularly true for domestic customers. In the UK, work is being undertaken at a national level to standardise returns calculations on technology investments - through the Microgeneration Certification Scheme. We would like to see a project for this to be transferred to New Zealand to protect consumers, and ensure they have access to fair returns/savings calculations on new technology.

C3. Make it easier to access electricity usage data

Increased access to data is undoubtedly a good thing, however, we would caution that this information needs to be clearly and carefully communicated to consumers in order to make it relevant. Specifically, we see opportunities for electricity usage data to provide informed decisions on the benefits of:

- a) Changing electricity suppliers
- b) Reducing electricity demand
- c) Making informed decisions around low carbon electricity

Points b and c are pertinent given that electricity usage data is presently passed to consumers by their supplier who has little commercial incentive to encourage behaviours which reduce electricity demand or encourage grid alternative technologies like solar and battery energy storage.

As a result, we think it is critical for the council A1 to have industry, charitable and governmental experts from all sectors to be able to help translate electricity data into ways which allow informed decisions on new and old ways of doing energy.

- C4. Make distributors offer retailers standard terms for network access
- C5. Prohibit win-backs
- C6. Help non-switching consumers find better deals
- C7. Introduce retail price caps
- D1. Toughen rules on disclosing wholesale market information
- D2. Introduce mandatory market-making obligations

Wholesale market competition is important for driving down costs where there is a degree of flexibility amongst generators. However, we would caution that solar and wind investments are best encouraged when long term and stable production contracts are offered with Government backed guarantees. For such capital intensive projects, wind and solar need this price security to encourage participants. Failure to do so could leave stranded assets and negative pricing which would leave the industry being highly volatile and potentially uninvestable.

Therefore, we would support competition, but for wind and solar we would like to see some long term fixed price mechanism which encourages investment from a variety of companies.

D3. Make generator-retailers release information about the profitability of their retailing activities

- D4. Monitor contract prices and generation costs more closely
- D5. Prohibit vertically integrated companies
- E1. Issue a government policy statement on transmission pricing

We would support this measure, but want to see this include a statement encouraging new technology to reduce pricing.

E2. Issue a government policy statement on distribution pricing

We would support this measure, but want to see this include a statement encouraging new technology to reduce pricing.

E3. Regulate distribution cost allocation principles

E4. Limit price shocks from distribution price increases

A major threat to distribution prices is the growth of solar PV. Analysis has shown that the impact through lost distribution revenue from solar could be of the order of hundreds of millions of dollars in today's money. Without a mechanism of control it is highly likely that distribution price shocks will be seen by consumers across New Zealand to keep distribution networks viable.

A sensible alternative would be to ensure a glide path on which solar investment is matched by the switching of distribution pricing. This should be carefully planned so as to ensure sufficient solar growth and stable distribution networks. As such, we believe this requires experts who can see solar pricing, solar returns and network pricing impacts as combined issues.

Similarly, we also note that solar PV can cause investment requirements for network operators to maintain power quality levels. As such, we would want to encourage, through innovation, funds to allow distribution companies to trial different and new technologies for managing solar PV in a more cost effective manner - i.e. using no-wire solutions. Distribution companies have to be risk averse to maintain assets. Innovation funding has been proven worldwide as providing the regulatory and technical sandbox required to encourage them to think differently.

- E5. Phase out low fixed charge tariff regulations
- E6. Ensure access to smart meter data on reasonable terms
- E7. Strengthen the Commerce Commission's powers to regulate distributors' performance
- E8. Require smaller distributors to amalgamate
- E9. Lower Transpower and distributors' asset values and rates of return
- F1. Give the Electricity Authority clearer, more flexible powers to regulate network access for distributed energy services
- F2. Transfer the Electricity Authority's transmission and distribution-related regulatory functions to the Commerce Commission
- F3. Give regulators environmental and fairness goals
- F4. Allow Electricity Authority decisions to be appealed on their merits
- F5. Update the Electricity Authority's compliance framework and strengthen its information-gathering powers
- F6. Establish an electricity and gas regulator
- G1. Set up a fund to encourage more innovation

We would support such a fund. We have identified projects which use solar and storage to provide more reliable distribution networks, and networks which would be resilient in the event of a natural disaster. These are competitive against traditional network investment. Network companies can be nervous about new technology. Innovation funding to support such projects would allow a proof of concept to provide more certainty to network operators.

G2. Examine security and resilience of electricity supply

We feel that this scope should also include examining the technoeconomics of new technology, particularly demand response, distributed generation and energy storage for resilience and security in the New Zealand context.

G3. Encourage more co-ordination among agencies

G4. Improve the energy efficiency of new and existing buildings

Energy efficiency can be a key measure for reducing the cost and environmental impact of energy - when it is done correctly. However, we would caution that a regulatory position needs to be taken on whether solar PV is an energy saving technology (as it is recognised in other countries). Inclusion of solar in this category, such as enforcing solar PV installations on all new homes, could have huge impacts on electricity bill reduction in homes. It is worth noting that in Scotland, it is mandatory that all new homes have solar PV.