SubmEPROptions, draft

A1 Establish a consumer advisory council

A consumer advisory council is needed, to monitor power prices and advise on ways to protect mass-market consumers from excessive pricing, and to find the best ways to offset the harm done to low-income and vulnerable consumers. That is not enough.

Distributed energy sources (solar, small-scale wind and hydro, and clean wood burning) and energy efficiency investments all reduce demand for purchased electricity. They are essentially carbon-zero, and many of them have lower costs over the long term than new electricity supply. They need to be enabled to compete on a level playing field with centralised electricity supply and distribution.

Electricity pricing today is designed to guarantee revenues and support asset values of the centralised electricity businesses in the face of falling demand. Industry support for increasing the fixed charge is an attempt to limit the ability of consumers to invest in energy efficiency and distributed energy. That is simply wrong.

Many overseas electricity markets incorporate "prosumer" investments and actions to reduce costs including CO2 costs. In NZ, market rules and industry practices to promote these are being opposed by many or most electricity companies.

A separate "sustainability advisory council" is therefore needed, to work with electricity regulators to overcome the many market barriers to a low carbon future. This would enable a launch of a new era of consumer choice and technology adoption.

1. **A2 Ensure regulators listen to consumers**

Mass-market consumers – residential and small-business – need regulatory protection, as do businesses that offer distributed energy and energy efficiency. Many large consumers are Market Participants, and most others have sufficient market power to look after themselves. Currently, only the Market Participants have the resources to participate in the consultation programmes run by the Electricity Authority. Mass-market electricity consumers do not have the resources to have a voice or effective influence on policy processes run by the EA. No such consumer groups are represented on the EA committees; the EA has no effective input from them. It is therefore unsurprising that domestic electricity prices have increased. Yes, we need regulators to be required to listen to consumers. The question that needs answering is how can consumers and distributed-energy businesses be given an effective voice in the EA policy-making processes.

B Reducing Energy Hardship

1. **B1 Establish a cross-sector energy hardship group**

yes

2. **B2 Define energy hardship**

Agree. A definition needs to recognise that many or most financially constrained households prioritise the power bill over budget items such as food and medical expenses [comment from Salvation Army at the conference]. Quality of housing could have more impact on quality of life than either the power bill or the family income. Adequate housing is a human right, and electricity pricing impacts on that. In many cases hardship can be reduced by own-sourcing of non-electric fuel – wood heating and solar energy stand out. However if you can't cut back the trees that shade the house or roof, or split your kindling, you can get into hardship. So energy hardship must be precisely but broadly enough defined.

B3 Establish a network of community-level support services to help consumers in energy hardship

Agree strongly. Over and above that, community energy organisations are increasing the resilience of a region's energy supply, and providing meaningful employment, especially in low-carbon energy options.

3. **B4 Set up a fund to help households in energy hardship become more energy efficient**

This assumes it is mainly Government's job to alleviate energy hardship. A stronger focus on energy efficiency would often lead to lower power bills at a lower cost to the economy and the taxpayer. Consumers in hardship may be in debt, facing massive interest rates, can invest nothing, and/or cannot shift the timing of their electricity use. Many are in rental accommodation. Energy efficiency is beyond the reach of these people. A hardship fund is one requirement to address these issues – community support is also required.

4. **B5 Offer extra financial support for households in energy hardship**

Yes, for the reasons above. . "Equal access to capital" would be a great principle for an energy efficiency fund. Rolling funds such as the Crown Energy Loans Scheme could address this inequity.

5. **B6 Set mandatory minimum standards to protect vulnerable and medically dependent consumers**

Yes, standards are an essential regulatory tool.

6. **B7 Prohibit prompt payment discounts but allow reasonable late payment fees**

Yes

7. **B8 Explore bulk deals for social housing and/or Work and Income clients**

Yes

Increasing Retail Competion

1. **C1 Make it easier for consumers to shop around**

Few if any individual consumers enjoy having to "shop around" for retailers as they change prices to undercut rivals. Competing pricing offers must add a lot to the cost of retailing, a cost that ends up on every power bill. Instead, we want fair power prices, and tariffs that offer choices that include: different levels of convenience, access to finance for big-ticket investment, and/or ability to save money by shifting demand. Powerswitch displays only the lowest power price at the moment. It may require a different site to display offers for price-responsive customers in each region, or to display financing offers available to those who could invest to reduce their demand.

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

Yes.

3. **C3 Make it easier to access electricity usage data**

Yes indeed! Access to data is mission-critical to a more efficient and fair power system that enables new technology. A cleaner, cheaper, smarter power system requires full access to data by consumers and competitive distributed energy suppliers.

4. **C4 Make distributors offer retailers standard terms for network access**

Probably essential.

5. **C5 Prohibit win-backs**

yes

6. **C6 Help non-switching consumers find better deals**

yes

7. **C7 Introduce retail price caps**

Only if appropriate market rule changes fail.

Reinforcing Wholesale Competition

1. **D1 Toughen rules on disclosing wholesale market information**

Yes, this is critical. Real-time pricing is usual in overseas electricity markets; the RTP project of the Electricity Authority has dragged on for almost as long as Transmission Pricing Methodology ☺. Withholding gas-fired generation has for years driven brief, or long, periods of high spot prices.

2. **D2 Introduce mandatory market-making obligations**

Yes. Right now, the hedge market is largely run on a 'handshake agreement' that assumes the gentailers will create a fair market for the other retailers. The hedge market does not really exist in practice. It is illiquid. A liquid market is a fundamental prerequisite for an effective wholesale market. In the words of the panel the hedge market is 'fragile' and unsteady (which is what we saw last year). In practice the hedge market simply is not working, as demonstrated by the small-retailer complaint on the "Unacceptable" Trading Situation of last spring.

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

Yes, but where's the requirement to release information about profitability of wholesaling activities? The long-term forward price in mid-winter 2018 stood at about 7.5c/kWh; it has risen steadily since, and now stands at 10c/kWh. What profits have resulted? Does it mean retail prices will eventually settle at 2.5c/kWh higher than they are now?

D4 Monitor contract prices and generation costs more closely

The current market and system of regulation provide incentives for generators to limit production in order to create shortages of supply. Scarcity is profitable! The recent UTS investigation on the September-October high spot prices has reiterated the need for better disclosure of fuel information and improved tools to support liquidity in the market. Market manipulation, insider trading, misleading trading, and predatory pricing, are all not proscribed by the Electricity Code.

4. **D5 Prohibit vertically integrated companies**

This should be a backstop in case the electricity market does not widen to accommodate distributed energy and demand management as genuine competitors to centralised electricity supply.

Improving Transmission and Distribution

1. **E1 Issue a government policy statement on transmission pricing**

Yes, a compact statement, as an immediate first step before strong regulation.

2. **E2 Issue a government policy statement on distribution pricing**

Yes, a compact statement, as an immediate first step before strong regulation.

3. **E3 Regulate distribution cost allocation principles**

To enable consumers to reduce distribution costs, and benefit from that in their power bills, distributors should publicise their asset management plans detailing which of their planned expenditures could be deferred through demand management – a "statement of opportunities" for consumers to invest or change behaviour. There's about $750m per year at stake – a huge opportunity for consumers to benefit from reducing network costs. Distributed Energy Resource investment is happening in NZ, but at a slower pace than other

countries - the DER market has to be allowed to develop. Key network information is not collected and/or made available to DER providers. A distribution policy statement needs to set clear frameworks that can encourage the development of DER. It is too easy for lines companies to invest in new infrastructure and not look at the benefits of new technologies.

4. **E4 Limit price shocks from distribution price increases**

Yes, distribution prices especially for small users of electricity could change sharply.

5. **E5 Phase out low fixed charge tariff regulations**

Disagree. "Fixed charges drive higher costs for everyone. Network tariff design is critical for both the efficient short-term usage and long-term evolution of the grid. It sets the prices consumers pay for their use of the network infrastructure and influences their consumption and investment choices. . . . Fixed charges take the power of choice out of consumers' hands. Because they are unavoidable they undermine economic efficiency, in both the short and long run. " http://www.raponline.org/wp-content/uploads/2018/01/rap-ck-mh-aj-network-tariff-design-for-smart-future_2018-jan-19.pdf

The majority of New Zealand consumers now have annual demands that qualify them for low fixed charges. Removing the regulations would increase their power bill. More important, the accompanying reduction in unit charges would make any investment intended to reduce their demand take longer to pay back. The industry now claims that low fixed charges make low-income high-use consumers subsidise rich consumers who can afford solar and house retrofits. This claim is rejected by most consumers – we require clear evidence of it.

6. **E6 Ensure access to smart meter data on reasonable terms**

This is essential to enable mass-market participation in network (also energy) investment and operation. Mass-market participation is more than a "benefit"– its absence creates a false market, like one hand clapping. It requires real-time pricing that rewards either or both investment and behaviour change. Access to data is the route to a cheaper, cleaner, smarter power system. Barriers to data access must be removed – the gains in efficiency will be large as they always are when data are made readily available.

E7 Strengthen the Commerce Commission's powers to regulate distributors' performance

7. **E8 Require small distributors to amalgamate**

This should not be necessary so long as electricity pricing and market rules are appropriately regulated.

8. **E9 Lower Transpower and distributors' asset values and rates of return**

Network businesses must be encouraged and even compelled to support the application of new technologies that will provide substantial efficiencies in the power system. .

Improving the regulatory system

1. **F1 Give the Electricity Authority clearer, more flexible powers to regulate network access for distributed energy services**

This is a critical issue for enabling new technology and increasing innovation in the power system.

2. **F2 Transfer the Electricity Authority's transmission and distribution-related regulatory functions to the Commerce Commission**

Probably not - the Commerce Commission does not have the focus or resources required to design or implement electricity market rules. However their control of overall revenue levels is still essential.

3. **F3 Give regulators environmental and fairness goals**

Yes. It's the job of a regulator to balance competing objectives. Environmental sustainability, fairness and energy efficiency should be made key objectives for the Electricity Authority, and every other agency with has a role in regulating electricity pricing and planning. The "energy efficiency first" principle has been embraced in principle by the European Parliament. It is bizarre that the electricity regulators do not have climate change objectives when their regulatory efforts are central to New Zealand achieving a zero-carbon economy.

4. **F4 Allow Electricity Authority decisions to be appealed on their merits**

Disagree. Merits appeals incur huge legal costs - residential and other small consumers could not pay for that. Legal decisions set the outcomes into concrete – as shown by the 1990s decision that confirmed that, in effect, rights to monopoly profits override common law rights to an essential service at reasonable price.

5. **F5 Update the Electricity Authority's compliance framework and strengthen its information-gathering powers**

Yes, effective competition of distributed energy against centralised electricity requires the former to have full information on what the electricity market is doing – spot prices, reserves prices, futures prices at different times-ahead. Probably also information on contracts. This needs to be interpreted by experts to form a sound decision base for small players in the electricity market. Evidence of market power needs to be analysed and reported on by experts independent of today's electricity Market Participants.

6. **F6 Establish an electricity and gas regulator**

This may be necessary but the priority now is to amend the Electricity Act and reform the approach of the EA to genuinely involve consumers in policy development. Electricity pricing needs to implement the goals: 1. economic efficiency in the long term, 2. sustainability, and 3. access to electricity supply for all consumers including low-income and vulnerable.

G: PREPARING FOR A LOW-CARBON FUTURE

1. **G1 Set up a fund to encourage more innovation**

The innovation most needed to decarbonise home, institutional and industrial heating is the introduction of truly clean wood burning. One such appliance was demonstrated in 2002 to the Canterbury Regional Council – a staff member described the inventor to me as "a crank". Council staff ensured their wood burner air quality standards could not test it – yet the demonstration had shown particulate levels a hundredth of what was required.. This downdraft burner is now set up to be manufactured in Kaitaia, but to be sold into urban markets it still needs to pass a wood burner air quality test costing $40,000. Another $80,000 could enable a number of appliances to be put into several markets both urban and rural, including The Lines Company network area which has some of New Zealand's most deprived customers and coldest temperatures. Current criteria for Green Growth and Provincial Growth Fund applications have too many hoops for the small/ tiny businesses now developing innovative clean wood burning to jump through. An environment-friendly new fund just might make the difference.

2. **G2 Examine security and resilience of electricity supply**

Again this shows the electricity-centric nature of current regulation – and of this Review. Secure and resilient electricity supply is most important for low-income and vulnerable residential consumers; other consumers are more able to create their own resilience through alternative energy systems. Using the right spread of technologies, whole communities can become far more resilient to the challenges of climate change.

3. **G3 Encourage more co-ordination among agencies**

For a low-carbon future, the Electricity Authority needs to coordinate with the new Climate Commission, to change pricing signals and investment capability to reflect the newly recognised urgency of climate change. A sustainability advisory council, with professional support and access to the data and monitoring resources of the Authority, needs to oversee that. To address the needs of low-income and vulnerable consumers, there needs to be coordination between the Authority and WINZ, Ministries of Health and Housing, Whanau Ora or other Maori organisation and local community energy agencies.

4. **G4 Improve the energy efficiency of new and existing buildings**

Probably the most cost-effective means of reducing carbon emissions from the electricity sector is through investment in buildings' energy efficiency, solar energy and clean wood burning. New buildings have the potential to sequester significant carbon, but their main contribution would be use of solar and/ or wood energy as appropriate. The 600,000 or so houses that are poorly insulated urgently need to be retrofitted, to reduce both energy poverty and carbon emissions**.**