The Sustainable Energy Forum Inc.

The Sustainable Energy Forum Inc
PO Box 11 152
Wellington, 6042

1 October 2019

Electricity Authority
PO Box 10 041
Wellington, 6143

Via: submissions@ea.govt.nz

Submission from: The Sustainable Energy Forum Inc.

TRANSITION PRICING METHODOLOGY: 2019 ISSUES PAPER

The Sustainable Energy Forum Inc (SEF) is an organisation of about 150 members dedicated to advancing, promoting and supporting the use of sustainable energy technologies and mechanisms as appropriate for New Zealand.

OUR SUBMISSION

SEF contends that **the proposed transmission pricing methodology is anti-competitive.**

This proposed Transmission Pricing Methodology[1] ("the proposal") is the electricity industry's response to the continuing flat-lining of electricity demand since about 2007, despite growth of both GDP and population.

The proposal aims to ensure consumers will not curtail their electricity use, except in rare cases of actual congestion of transmission lines.

The proposal would largely remove today's pricing incentives for consumers to reduce peak loads, and replace it with a flatter charging structure that is hard to avoid. Transmission prices would depend mainly on a customer's location rather than how much they use, or whether or not at peak times.

The proposal's executive summary claims peak prices would fall by 38%.[2] That would cause peak demands to rise, so more peaking power plants would be built. Consumers would benefit, they say, by using more electricity whenever they want. Buying batteries to avoid the peak prices (!) would cost more than building new peakers.

[1] https://www.ea.govt.nz/dmsdocument/25466-consultation-paper-transmission-pricing-methodology2019-issues-paper-full-document
[2] ibid, page vii

This is nonsense.

The stated intention is to ensure consumers invest "for the right reasons, not to avoid and shift transmission charges."[3] Transmission represents only a tenth of the residential power bill. SEF contends that the real aim is to promote electricity demand, especially peak demands.

The proposal's "fixed-like charges" would be passed on to residential consumers as daily fixed charges of approximately $2/day, protecting electricity revenues from declining household demand. The proposal would allow for permanent, not temporary, discounts for trade-exposed industries.

The lines companies are campaigning to repeal the Low Fixed Charge regulations, to allow this high daily fixed charge. They say large householders' power bills are subsidising rich people who invested in energy efficiency and solar energy. Wrong. All residential power bills are now subsidising cheap industrial power; this proposal would increase this subsidy.

The proposed pricing methodology is anti-competitive

The Electricity Authority describes the proposed new pricing structure as "fixed-like" charges.[4] They expect local lines companies to respond by increasing their fixed charges to all consumers.

The Electricity Network Association is campaigning to repeal the Low Fixed Charge Regulations[5], so low-use customers could be charged around $2 per day. This would allow the unit price to be reduced by typically 6c/kWh, which would make consumer investment in solar (and also energy efficiency) less economic.

In other jurisdictions, this pricing strategy could be challenged as "predatory pricing" – lowering the price specifically to keep competing businesses out of the electricity market. But New Zealand's "economically pure" electricity market is sheltered from that challenge by a 2002 decision by the Commerce Commission on the meaning of "competition" in the electricity market.

The Sustainable Energy Forum[6] had previously submitted that distributed energy such as solar, and also energy efficiency, do in practice compete with bulk electricity supply. We said "a relevant market for this determination is the market for energy services at the retail level."

The Commerce Commission decision was that the electricity market boundaries should be narrow, as proposed by the industry, but said "there can be special features in individual markets, such as the impact of distributed resources on the retail market, which may need to be recognised."

SEF contends that the Commerce Commission should change the market definition to **"provide the clearest picture of the relevant competitive process for each case in the light of commercial reality and the purposes of the law."**

---

[3] https://ea.govt.nz/dmsdocument/25477-tpm-briefing-23-july-2019 slide 4

[4] Ibid., slides 5 and 6

[5] https://www.ena.org.nz/dmsdocument/492

[6] https://comcom.govt.nz/__data/assets/pdf_file/0025/66535/comcom-egblfinaldetermination.pdf See sections 208-213

In commercial reality, energy efficiency competes with electricity sales. It has always been cheaper – typically half the price – of new generation.[7] Residential demand per consumer began falling exactly when the Warm Up NZ programme began in 2009. So far, energy efficiency has proved more disruptive to the bulk electricity business models than the so-called new-disruptive-technologies. But it is the spectre of proliferating solar rooftops plus batteries that has finally sparked the present pricing initiatives by industry.

The "purpose" of electricity regulation now shelters the corporatised bulk electricity sector from having to compete fairly with local provision of energy services.

The Electricity Authority interprets the purpose of electricity regulation in the 2010 Electricity Industry Act – "the "long-term benefit of consumers"[8] to mean that increasing monopoly profits benefits consumers in the long run, because that allows the industry to expand, thus increasing economic growth. They say consumers may prefer lower prices, but the benefits to economic growth from monopoly profits outweighs consumers' preferences.

Shareholders' demands for growth of revenue/profits is now driving electricity regulation.

We conclude that competition law must now recognise this proposed pricing methodology as anti-competitive to local energy options.

Climate change objectives

SEF also contends that this TPM proposal is incompatible with Government's climate-change objectives. The proposal relies on building new peaking stations which are gas- or diesel-fired. And it counts increasing electricity demand as a benefit to consumers.

The pricing proposal supports Transpower' audacious vision, "Te Mauri Hiko"[9], which would provide 100% renewable electricity by doubling the present generating capacity. The enormous capital requirement for this must come mainly from residential consumers, because the proposal would increase the discounts available to trade-exposed industries, whose demand well exceeds residential demand.

The "100% renewable electricity" proposal was a pure political play, it was part of the current Government coalition agreement. Technically, the sensible goal is to move rapidly to 100% carbon-zero energy, which would mean reducing peak loads supplied by fossil fuel generation. New geothermal power generation, which emits significant CO_2, should be discouraged.

The unsolved problem in Te Mauri Hiko, and other scenarios of future energy demand including that of the Interim Climate Change Committee, is how to provide winter peaks and

[7] https://www.eeca.govt.nz/assets/Resources-EECA/research-publications-resources/EECA-Energy-Efficiency-First-Technical-Report.pdf
[8] https://ea.govt.nz/dmsdocument/9494-interpretation-of-the-authoritys-statutory-objective-february-2011 sections A5 to A7
[9] https://www.transpower.co.nz/resources/te-mauri-hiko-energy-futures

/ or dry year energy. The ICCC estimated that prices might be up to 39% higher if the full 100% renewable target were met.[10]

All the official scenario work ignores the renewable energy resource that is easily stored - biomass energy. Firewood "stores itself" by growing until it is needed. Industrial wood burning can use green wood, and a domestic-size wood burner prototype is doing the same.

Pricing to encourage local energy

Climate-friendly energy regulation would promote technical efficiency, not "economic efficiency". It would maximise the available energy at the end-consumer's site – energy efficiency first. It would minimise the use of bulk electricity sent through long power lines, not only reducing losses but also increasing resilience in the case of storm, flood, or other damage to key power facilities.

Local energy has many, many spinoff benefits. It employs more people than bulk supply methods, people throughout New Zealand instead of in limited energy-rich locations. It provides resilience in case of failure of transmission or distribution infrastructure, with storms and floods ever more frequent and severe. It can focus community effort into providing energy services for its most vulnerable people. Most important is the health benefit of insulating and heating houses, which will improve labour productivity of the whole New Zealand economy. Energy efficient housing is essential infrastructure.

Overseas electricity regulation is rapidly changing to embrace all the benefits of local energy[11]. Mini-grids allow customers to trade supply and demand, and local energy storage to smooth peak demands. Even where power supply is privatised, especially in the U.S., reliability is subject to regulation, [12] and pricing is constrained to meeting all reasonable costs. Profiteering is not allowed.

The transmission pricing methodology in place today, emphasises reduction of peak loads, to reduce the need for new transmission and distribution lines. Many submissions to the previous iteration of transmission pricing consultation, including Transpower's, called for the present transmission pricing to be retained.

SEF agrees with Transpower. The Authority should retain the present transmission pricing methodology. It should also continue its work on real-time pricing, peer-to-peer trading, and mass-market participation in electricity markets. But its pricing methodologies must promote all consumer investments that improve energy efficiency.

Governance must be changed

Politics today has changed drastically from the days of the pure-market economy of the mid-80s. Well-being is now promoted above simple economic growth - but the electricity sector bucked the trend. The 2010 Electricity Industry Act, which set up the Electricity Authority, removed all public-interest components of the Government Policy Statements which had guided the earlier Electricity Commission. The Authority is pure industry self-regulation, as

[10] https://www.stuff.co.nz/business/113730079/experts-warn-100-renewable-electricity-target-will-hurt-new-zealands-wider-climate-goals
[11] https://energyinnovation.org/wp-content/uploads/2019/06/Wholesale-Electricity-Market-Design-For-Rapid-Decarbonization-A-Decentralized-Markets-Approach.pdf
[12] http://www.raponline.org/wp-content/uploads/2016/05/rap-lazar-gonzalez-smart-rate-design-july2015.pd

consultation on its planning cycle is in practice confined to Market Participants, which effectively exclude residential consumers. The Statutory Objective Interpretation specifically excludes carbon impacts.[13]

The present analysis framework is wrong. It relies on scenarios developed by and for the electricity sector. Its cost-benefit analyses underpin its decision-making – and these count monopoly profits as a consumer benefit.

A return to normal scientific and engineering analysis of a transition towards a zero-carbon economy therefore requires a change in governance. Vector proposes a new Ministry of Energy, with zero carbon at the heart of its purpose. SEF agrees.

The implications for this proposed transmission pricing methodology are simple. The proposal with its fixed-like charging is designed to secure the revenues for the present bulk electricity sector. Instead, we need pricing that rewards consumers who reduce the costs of energy supply overall. Energy efficiency must be the first choice.

Governance of a specialist energy regulator must make zero-carbon energy its primary aim. It must equally represent distributed energy and energy efficiency, alongside bulk energy supply. Prices must reflect actual costs, and not be shifted to residential consumers who are least able to avoid them. Above all, it must be accountable to Parliament, not to an appointed Board of "industry experts".

Submitted on behalf of the executive of Sustainable Forum Inc.

Name Ian Shearer, Executive Member

For further information, please contact Molly Melhuish, melhuish@xtra.co.nz

[13] https://ea.govt.nz/dmsdocument/9494-interpretation-of-the-authoritys-statutory-objective-february-2011 section 2.4.1(b)