ELECTRICITY PRICE REVIEW

SUBMISSION FORM

How to have your say

We are seeking submissions from the public and industry on our First Report into the state of the electricity sector. The report contains a series of questions, which are listed in this form in the order in which they appear. You are free to answer some or all of them.

Where possible, please include evidence (such as facts, figures or relevant examples) to support your views. Please be sure to focus on the question asked and keep each answer short. There are also boxes for you to summarise your key points on Parts three, four and five of the report – we will use these when publishing a summary of responses. There are also boxes to briefly set out potential solutions to issues and concerns raised in the report, and one box at the end for you to include additional information not covered by the other questions.

We would prefer if you completed this form electronically. (The answer boxes will expand as you write.) You can print the form and write your responses. (In that case, expand the boxes before printing. If you still run out of room, continue your responses on an attached piece of paper, but be sure to label it so we know which question it relates to.)

We may contact you if we need to clarify any aspect of your submission.

Email your submission to energymarkets@mbie.govt.nz or post it to:

Electricity Price Review

Secretariat, Ministry of Business, Innovation and Employment

15 Stout Street

PO Box 1473Wellington 6140

Contact details

Name	**Nick Wilson, Manager Regulatory and Government Affairs**
Organisation	**Mercury NZ Ltd**
Email address or physical address	**nick.wilson@mercury.co.nz**

Use of information

We will use your feedback to help us prepare a report to the Government. This second report will recommend improvements to the structure and conduct of the sector, including to the regulatory framework.

We will publish all submissions in PDF form on the website of the Ministry of Business, Innovation and Employment (MBIE), except any material you identify as confidential or that we consider may be defamatory. By making a submission, we consider you have agreed to publication of your submission unless you clearly specify otherwise.

Release of information

Please indicate on the front of your submission whether it contains confidential information and mark the text accordingly. If your submission includes confidential information, please send us a separate public version of the submission.

Please be aware that all information in submissions is subject to the Official Information Act 1982. If we receive an official information request to release confidential parts of a submission, we will contact the submitter when responding to the request.

Private information

The Privacy Act 1993 establishes certain principles regarding the collection, use and disclosure of information about individuals by various agencies, including MBIE. Any personal information in your submission will be used solely to help develop policy advice for this review. Please clearly indicate in your submission whether you want your name to be excluded from any summary of submissions we may publish.

Permission to reproduce

Executive Summary

Energy, along with water, food and shelter, is critical to any society and economy. To succeed, it must satisfy three key criteria: **reliability, price and renewability.** None of these factors can be considered alone. We agree with the EPR panel that consumers are increasingly motivated by renewability, though reliability and price remain superior drivers[1]. Renewability is a key focus for the government's Interim Climate Change Committee.

Mercury welcomes the EPR panel's analysis which supports the International Energy Agency's 2017 assessment that New Zealand is a ***"…world leading example of a well-functioning electricity market, which continues to work effectively."***[2] Since the panel released its report, New Zealand has moved up one place in international rankings to 8th out of 130 countries in the world for its performance in achieving balance in the trilemma of energy security, energy equity and environmental sustainability[3]. New Zealand, the only non-European country to be in the top 10, would be potentially be higher were it not for its heavy reliance on fossil fuel imports.

Delivering energy infrastructure involves long-term and highly complex investment decisions from private capital. New Zealand's market framework has been fundamentally similar since the mid-1990s, a path that was set in train when an influential Treasury report provided evidence that the distortions to the economy from over-spend on hydro generation projects was unsustainable for New Zealand[4]. Other countries are seeking to replicate New Zealand's performance. However some, like Australia and the United Kingdom, are struggling as attempts to promote renewability have led to detrimental consequences for reliability and consumer prices. It is very difficult to achieve the trilemma performance of New Zealand.

Electricity market competition in New Zealand has delivered for the vast majority of consumers. This has been underpinned by investments by vertically integrated companies that have enabled the substantial innovation and competition in our retail and generation markets that we now take for granted. This includes the roll-out of smart metering infrastructure funded by large retailers and liquidity in the futures and financial transmission rights market provided by large generators. Substantial upgrades to our transmission system have also reduced retail risk enabling greater competition to occur.

However, markets are not perfect. At the edges, they can struggle to deliver, though that doesn't mean that the market model is wrong. Rather it requires careful and impartial analysis of the issues to identify the highest value measures to complement the market and ensure it continues to be sustainable into the future.

The need to focus on affordability, not price

There appears to be confusion in the New Zealand narrative as to the difference between **price** ("electricity is expensive") and **affordability** ("can't afford energy needs").

[1] For example, the value of lost load used for cost benefit analyses by the Electricity Authority is $10,000/MWh which is more than 100x the typical electricity wholesale price

[2] International Energy Agency Review of New Zealand (2017) https://www.iea.org/countries/membercountries/newzealand/

[3] World Energy Trilemma index 2018 https://www.worldenergy.org/

[4] New Zealand Treasury (1984) Report to the Minister of Finance - Review of Electricity Planning and Electricity Generation Costs

New Zealand's electricity prices are ranked 12th lowest in the OECD. The competitive components have declined in real terms by 4% over the past five years. **Electricity in New Zealand, largely renewable, is also the equivalent of 30 cents per litre compared to a pre-tax price of petrol at circa $1.50.** In other countries, renewable electricity has had to be subsidised with significant upward impacts on electricity bills – not so in New Zealand. This makes New Zealand's relative retail price position, in a small islanded market without access to large continental transmission grids and with a very sub-scale set of distribution companies, all the more remarkable.

The key issue is affordability. Affordability is determined by the **income level** of a household and the **costs that household faces** to meet its energy needs (e.g. for space heating, hot water, cooking and lighting). The costs that a household faces are determined primarily by the price **and the** quantity of electricity consumed. Price has been covered above.

To heat a poorly insulated home to an acceptable temperature requires a lot of energy, irrespective of the fuel source used. In stark contrast to our low electricity prices **New Zealand has the 6th highest household consumption in the OECD.** As the EPR First Report notes, **55% of households in New Zealand lack adequate insulation.**

The second key issue for affordability is the excessive seasonal variability of electricity bills, due largely again to heating of poorly insulated homes. A household's income typically does not change seasonally. While higher electricity usage means a higher bill, such **bills are higher than they need to be due to excessive variabilisation of distribution lines charges** (i.e. lines charges in New Zealand are mostly charged on a per kilowatt hour basis, so the more electricity you use, the more lines charges you pay). This puts huge seasonal pressure on household budgets and sends poor signals which have been estimated could cost consumers **$1.8 billion over the next 20 years** leading to inefficient investment in new technologies that will unfairly shift costs to the most vulnerable consumers.

A third key issue for affordability is household incomes. New Zealand's wage levels are **10th lowest in the OECD,** well below the average and that of Australia and the UK. This has implications for the most vulnerable consumers in affording energy services (and any other essentials such as housing, food and transport). The Electricity Pricing Review panel's evidence suggests the **social welfare payments have not kept pace with the costs for low income households.**

Pricing analysis can be misleading

It is essential to maintaining New Zealand's balanced trilemma rating that statements regarding the sector and its performance reflect the above key issues and facts. Significant and often deliberate mis-information regarding the causes of price increases in both Australia and UK have resulted in **serious challenges for long-term investment and capital attraction.**

As an example, one of the first statements in the EPR First Report was that since 1990 electricity prices have increased 79% above the rate of inflation. This led to perceptions that somehow consumers have been "ripped off". However, **basing pricing analysis from 1990 is misleading** given the significant changes in the structure, regulation and market design of the industry since that period from a structure that, frankly, was unsustainable.

Price increases above inflation since 1990 reflect the fact that **residential consumers paid practically nothing for the costs of the distribution network** prior to this period. They were beneficiaries of a significant cross subsidy which was also unfair.

The positive outlook for energy costs

Looking forward, material household **energy** (as opposed to just electricity) cost savings will be enabled by future investment in renewable generation required to meet New Zealand's climate change targets, through a transition to electric vehicles and renewable process heat. Electricity is currently **five times less expensive** than the pre-tax price of petrol.

The electricity market will deliver the $20 billion required generation investment if we continue with stable policy settings and avoid subsidies which have driven up costs and had very damaging unintended consequences overseas.

Mercury supports the EPR panel's concern that targeting 100% renewable electricity would be expensive and make the transition to electric vehicles and renewable process heat harder. We do not believe achieving 100% renewable electricity is viable, given the ongoing requirement for deep energy storage which **batteries cannot and will not solve, ever.** It is theoretically feasible though would require either expanding lake storage by at least 50% and/or retaining back-up thermal generation[5]. For this reason, Mercury has consistently **called for bi-partisan support for a national low carbon energy rather than a renewable electricity target**, given the increasing substitution between electricity and fossil fuels for households, industry and transport.

Towards targeted solutions for vulnerable consumers

Some consumers, particularly the most vulnerable, may be missing out on the benefits of competition and struggle to meet their energy needs affordably. **Mercury agrees more must be done to assist the most vulnerable consumers.**

The solutions for the specific households that are vulnerable (not just on electricity) **can only** be achieved by government, regulators and the industry working together on targeted measures that make a real difference for vulnerable consumers.

We agree with the findings of the recent Australian electricity pricing review that **increased funding of energy literacy advice for budgeting agencies would be of value** to ensure all consumers can get access to the benefits of competition. The Electricity Authority is the most credible entity to support this.

Price capping as proposed in Australia and the UK **is not commensurate with the problem definition in New Zealand**. We must avoid highly interventionist approaches which will undermine New Zealand's world leading performance and incentives for the efficient operation of, and ongoing investment in, the retail and wholesale markets.

The three most significant factors identified by the EPR[6] First Report affecting consumer electricity prices include the **number of people in a household, level of insulation and network costs.** None of these relate to or are controlled by the competitive elements of the electricity market.

The government is already doing an excellent job in funding and addressing household insulation through targeted subsidies based on expert advice. However, the current **Winter Energy Payment is not targeted to**

[5] Having large flexible load which can be reduced for circa 1-3 months is another feasible possibility but not likely reliably viable. Sectors could include hydrogen or ammonia exports.
[6] See Figure 12 EPR First Report

the most vulnerable. Targeting concessions to improve affordability was a key finding the ACCC review of the electricity sector in Australia.

The current government funding for the Winter Energy Payment (WEP) is **$347m p.a.** If this were targeted to the 100,000 households identified by the EPR First Report as vulnerable, this would **completely fund** the annual electricity bills for those consumers as well as fund some more efficient appliances (heat pumps, LED lighting, insulation). Instead, many people such as some superannuitants, receive the WEP and do not need it.

Further, targeted WEPs should be paid directly to the energy accounts of vulnerable consumers in order to ensure that the WEP is used for the purpose for which it is provided, to ensure vulnerable consumers are able to heat their homes in winter. Retailers can assist here.

Mercury urges the EPR panel to objectively analyse further **the ability of pre-pay products to address the issues raised in the paper** and significantly reduce the overall costs vulnerable consumers face. Mercury's GLOBUG pre-pay product for example:

- Offers **complete flexibility** for customers to pay small amounts when they want rather than get a large monthly bill
- Is **inclusive of Prompt Payment Discounts** (PPDs) and in fact is priced at ~2% below Mercury post-pay headline prices, including a fully achieved 10% PPD, essentially building the discount into base pricing
- **Does not charge any fees** for disconnection and reconnection
- Has **cost-reflective** top-up fees that are **less than** those for post-paid products
- Allows customers to **repay any debt without incurring interest or fees** and avoid negative impacts on their credit rating

GLOBUG customers **typically benefit by around $400 per annum**[7] by retaining value they had previously lost to repeated missed post-pay PPDs, physical disconnection / reconnection visit costs and debt management fees. As a result, for the same total cost, these customers can purchase approximately **1,400kWh of additional energy (enough to run a 2kW heater for 7 hours a day on every day of winter).**

Importantly, **pre-pay customers do not miss out on PPDs** which the EPR First Report raised as a potential issue for vulnerable consumers. While pre-pay fees for balance top-ups have been mentioned, these apply also for over the counter transactions for consumers on post-paid products (and are lower for GLOBUG). Retaining PPDs offsets the impacts of top-up fees but **the EPR analysis to date has not assessed the value to pre-pay customers from avoiding disconnection and reconnection fees which is likely to be a substantial and real benefit for customers who move to pre-pay.**[8]

There is scope to significantly increase pre-pay as a valuable payment option given the material cost savings particularly for the most vulnerable consumers. In the UK, for example, 16% of customers are on pre-pay compared to 1.3% of the market currently in New Zealand.[9] **Pre-pay is not an option available to vulnerable consumers in Australia due to highly restrictive hardship regulation and a lack of smart metering infrastructure.** This has reduced retail innovation and driven up costs of hardship programmes

[7] Based on Mercury analysis of 300 customers on post-pay products. Analysis was provided to the EPR Chair and secretariat on 20 July 2018.
[8] Disconnection and reconnection fees range from around $30 to $150
[9] See further detail in response to Question 8.

which have become concentrated to the larger retailers and had a significant impact on retail costs to serve, ironically exacerbating the affordability problem.

PPDs should not be banned but should be cost-reflective. Banning them outright would lead to retailers having to charge late payment fees and increasing credit checking activity, rejecting those customers (likely vulnerable) who are a higher risk of non-payment. This would have the effect of restricting competition being available to all and mean that the most vulnerable would the definitely miss out on the benefits of competition.

This is consistent with comments from Meridian CEO Neal Barclay who, having removed PPDs, stated he expected Meridian to be **"a bit firmer with new customers coming in"**[10]. Without incentives for prompt payment, vulnerable consumers will be in more risk of mounting unsustainable debt and increase their exposure to predatory lenders. It is quite possible that Meridian's position will do more harm than good for the genuinely vulnerable.

However, we agree there is evidence that **PPDs are not always cost-reflective**. A similar issue was identified in the recent Australian review. Importantly, such discounting was not banned in Australia but the recommendation was to ensure they were set only at the reasonable savings that a retailer expects it will make if a consumer satisfies the conditions attached to the discount. **Mercury supports PPDs being cost-reflective.**

Many vulnerable consumers face significant challenges in terms of managing daily expenses. It is not uncommon for such consumers to be **living in a simple cash economy** where they may not have a functioning bank account let alone access to a credit card.

There is evidence that vulnerable consumers struggle to get to access to offers from all retailers who are excluding them through the payment options they accept. Flick, for example, requires either a credit card or bank account details for weekly automatic deductions which can fluctuate. **This is not a feasible arrangement for many vulnerable consumers.** Flick is effectively shutting truly vulnerable customers out of its offering and cherry-picking more affluent parts of the market.

Energy retailers should not be able to refuse supply to a customer. Mercury does not support the concept of a "retailer of last resort" for supply. **All retailers** should be responsible for ensuring consumers are provided access and are directed to the most appropriate product or service for their needs. Increased competition is leading to a double-edged sword in that retailers, particularly new entrants, in a bid to increase profitability, are screening out vulnerable consumers through restrictive credit checking and limited payment options practices.

All retailers should be required to make an offer to supply electricity to any customer who requests it. This could take the form of a standardised offering or a pre-pay offer. If a retailer is unable to offer pre-pay then they should manage that customer's application to another retailer that can.

Toward better network solutions

Mercury agrees with the assessment in the EPR First Report that driving greater efficiency in our distribution and transmission networks will be essential to **ensure costs for consumers are kept as low as possible in the future.**

[10] https://www.nzherald.co.nz/business/news/article.cfm?c_id=3&objectid=12125424

There is considerable industry consensus that the Low Fixed Charge Tariff (LFCT) regulations should be removed. Mercury supports a phased transition over a five-year period to ensure this is manageable for consumers. **The LFCT does not need replacing** so long as **distribution pricing reform is progressed** and there is **better targeting of the Winter Energy Payment** to ensure vulnerable consumers are protected.

The excessive variabilisation of lines charges needs to be addressed to deal with higher bills in winter. Consumers favour **simplicity over complexity** and the evidence suggests a significant proportion of the benefits from cost-reflective pricing come from simple pricing structures. We support **progressively increasing fixed distribution charges** (in line with LFCT phase out) and introducing **limited and most likely static peak signalling** to encourage efficient consumer behaviour.

A default cost-reflective structure should be introduced. This will deal with the regressive issue of current network charges and send efficient signals for solar investment and electric vehicle charging which will also avoid the need for unnecessary and damaging network control of such technologies.

The Commerce Commission should investigate further any network pricing inefficiencies affecting residential consumers. If reallocation is justified, it should be phased in over time. To address vulnerability, network areas with the highest deprivation scores should be targeted first.

Price quality regulation should be introduced across all networks and greater cost sharing among distributors should be encouraged. The Commerce Commission should review the feasibility and benefits of extending regulation to community trust-owned networks. As the EPR analysis indicates, **50% of our networks could be considered sub-scale** and face challenges in terms of managing costs and delivering innovation. The review should also consider impacts of the Optimised Deprival Value methodology as a basis for determining fair and reasonable charges in the electricity sector.

Restrictions should be reintroduced on distributor retailing. With world leading retail competition now evident in New Zealand, the concerns that led to the removal of the restrictions on distributors in the past no longer apply. This would also **greatly assist in resolving the current tensions between retailers and distributors regarding the efficient sharing of consumption data**. Such data has significant commercial value in competitive retail markets and retailers currently have little assurance that distribution companies are using such data only for network planning purposes. This stifles competition and innovation at a time when that should be receiving strong investment.

Mercury and the wider competitive retail sector has also **consistently advocated for effective ring fencing of distributor investments in new technologies** to ensure a level playing field for investment. We continue to support this position or measures that would materially achieve the same intent such as redefining the lines service to exclude the home.

The Transmission Pricing Methodology needs to be resolved as it is creating significant uncertainty. Mercury supports a **prospective application of any beneficiary pays approach** to avoid significant impacts on consumers, particularly for areas of the country with a higher proportion of vulnerable consumers.

Towards more efficient wholesale arrangements

Mercury welcomes the recognition in the EPR First Report that the **wholesale market arrangements are highly efficient** and that there is **no evidence to suggest generation costs are excessive.**

We agree with the EPR panel that **efficient hedge market arrangements are important.** However, even the most liquid markets in the world experience material reductions in liquidity during times of significant

stress as was demonstrated in global financial markets in 2008. Market participants should be hedging risks far in advance. **It is unreasonable to expect that during times of crisis sufficient liquidity will be available**, in the same way it would be unreasonable to assume an insurance provider would offer someone insurance when their house is on fire.

The Electricity Authority is currently working proactively with market makers to implement an effective transition from the current voluntary arrangements to commercial terms which should address the issues identified in the EPR First Report. This should include options to expand market making requirements for all generators and retailers in proportion to their generation and load and consider multiple market making settings for managing such requirements in stress situations, as opposed to simply on or off.

In conclusion, Mercury strongly encourages the EPR panel to give more prominence in its next paper to areas that it considers are working well for consumers and ensure a balanced view of the facts, particularly around **the factors that impact on affordability**. This includes not using 1990 as starting point for the pricing analysis, at this provides a misleading picture of the performance of New Zealand's world leading and sustainable electricity market. We look forward to working with the panel to focus on improving outcomes for the most vulnerable consumers.

Summary of questions

Part three: Consumers and prices

Consumer interests

1. What are your views on the assessment of consumers' priorities?

Energy, along with water, food and shelter, is critical to any society and economy. To be successful, it must satisfy three key criteria: reliability, price and renewability. None of these criteria can be considered alone.

New Zealand's energy sector performs exceptionally well in all these aspects. New Zealand has climbed from 10th in 2016 to 8th of 130 countries in the latest World Energy Council (WEC) Trilemma Index and is consistently the only non- European Union country in the top ten.

We agree that consumers are increasingly showing a keen interest in environmental issues. New Zealand is well placed to deliver this with our high percentage of renewable electricity generation as well as future development opportunities which will deliver material cost savings for consumers as electrification of transport and process heat occurs.

However, Mercury considers that overall consumers are still motivated more by price and reliability. The latter is significant as the costs and inconvenience of supply outages have a material economic impact on households and business[11]. The costs to Auckland from the April 2018 storm outages for example was estimated at $72m.

Consumers today enjoy more choice than ever in terms of products and services to meet their needs. Delivery of innovative products and services has been supported by a consistent regulatory focus on enabling competition without stifling innovation. It is crucial that these competition related consumer benefits are not undermined by regulatory changes with unintended consequences.

2. What are your views on whether consumers have an effective voice in the electricity sector?

Mercury notes there is already significant consumer advocacy in the sector. As the Electricity Pricing Review (EPR) First Report notes, Utilities Disputes Limited (UDL) already plays an important advocacy role. The experience in Australia and the United Kingdom suggests that consumer advocacy bodies may not have been highly effective in curtailing price increases though it may not be possible to reach firm conclusions given the short timeframes such bodies have been in existence[12].

Potential targeted areas that could be considered for greater advocacy support could include funding specialist expertise in network planning and asset management to assist the Commerce Commission to work with a consumer panel on forthcoming regulatory resets for those network businesses facing price quality regulation. Such consumer panels have been used overseas and could have merit.

We would also support additional funding for energy literacy advice which could be provided to budgeting agencies to support vulnerable consumers. This was a key recommendation from the recent Australian

[11] The value of lost load used by the Electricity Authority is $10,000/MWh which is more than 100x the typical electricity wholesale price

[12] See for example Energy Consumers Australia http://energyconsumersaustralia.com.au/

Competition and Consumer Commission (ACCC) review which recommended $43m in government funding be allocated for this purpose. The Electricity Authority is the most credible entity to support this.

3. What are your views on whether consumers trust the electricity sector to look after their interests?

We agree that consumers have a higher degree of trust in the New Zealand electricity sector than in Australia and the United Kingdom. This has been driven by New Zealand's highly pro-competitive and pro-market approach which has delivered real benefits for consumers including least cost renewable generation, reliable supply and world leading renewability.

By contrast, in the United Kingdom and Australia, renewables subsidies and constant (albeit well intentioned) regulatory interventions in the market have had the impact of raising prices. Regulated standing offers (which are not a feature of the New Zealand market) have also acted as a barrier to innovation and competition in the United Kingdom and Australia with a focus simply on discounting from these rates and while continuing poor service standards. This has exacerbated consumer mistrust.

As noted by the EPR First Report, there is no evidence to suggest there are excessive profits in the sector. Even in Australia and the United Kingdom where significant regulatory intervention has been proposed the margins being earned by retailers were not excessive: *"In Australia the average margin is in the order of 8 per cent, or of a similar level to what would be allowed under a reasonable regulated price, while in Great Britain supplier margins may be as low as 3 per cent".*[13]

Looking forward, it is important that consumers have confidence that investment in new technologies is undertaken in consumers' best interests. Mercury welcomes the progress that the Commerce Commission has been making to better understanding how the costs of such investments are being treated by electricity distributors. We discuss this matter further in the distribution section below.

Prices

4. *What are your views on the assessment of the make-up of recent price changes?*

Mercury's main concern with the assessment is the timeframe used. Since 1990, there have been significant changes in the structure, regulation and market design of the industry. The arrangements at this time were unsustainable which makes drawing meaningful pricing conclusions challenging.

One of the main headlines from the analysis has been that residential electricity prices have risen 79% since 1990 over and above the costs of inflation. This promotes the perception that residential consumers have somehow been "ripped off". However, as the paper notes, prior to 1990 residential consumers typically paid very little (likely almost nothing) for the costs of the distribution network. Consumers were paying lower electricity prices in 1990 but likely higher relative prices for goods and services provided by businesses using electricity.

Rebalancing of these costs toward households was inevitable given residential consumers place the highest demand on networks at peak periods, which is the primary driver of distribution costs. Residential consumers were therefore significant beneficiaries of cross subsidisation prior to 1990 and cheap electricity

[13] International Review of electricity retail markets, Newgrange consulting,pg21.

may well have been a contributing factor to the now well-known problem of poor insulation standards in New Zealand's housing stock.

The rebalancing of distribution charges towards residential customers since 1990 has inevitably had a significant impact on electricity prices and is the major reason overall prices have risen faster than inflation.

However, analysis by ERANZ shows that in the last 5 years (in real terms) the energy component (competitive) has **decreased** by 4% whereas the lines component (regulated monopoly) has increased by 12%. The IEA report also found that energy component of retail prices had remained flat since 2010.[14] This shows competition is working to ensure that prices, at least of the components affected by competition, are controlled.

Mercury supports greater analysis of the materiality of the rebalancing issue by the Commerce Commission and suggests that if reallocation is found to be justified, it be phased in over time and in order to address vulnerability, that network areas with the highest deprivation scores are targeted first. However, addressing this issue will not reduce electricity prices overall but simply reallocate charges, therefore creating winners and losers. New Zealand's experience with the transmission pricing reform illustrates that such reallocations can be very challenging to implement, and will no doubt be controversial. We also note that reforms to transmission pricing have the potential to negate any benefits to residential consumers from distribution pricing reallocation (see our comments under Transmission in section 4).

5. *What are your views on the assessment of how electricity prices compare internationally?*

As the EPR's analysis show's New Zealand's electricity prices are close to the bottom third of prices, ranked **12th lowest in the OECD**[15]. This is particularly positive given the challenges New Zealand faces in being an islanded network with no interconnection to larger continental grids, as is the case in many countries overseas. It should be noted that as the Ministry of Business Innovation and Employment (MBIE) data used for the EPR First Report is from 2015-2016, any significant price rises experienced in the past two years are not reflected. Mercury understands that both Australia and the United Kingdom have experienced significant cost increases over this period and have increased, or will be increasing, retail prices to adequately cover these increases.[16]

It is also positive given New Zealand's high level of renewables in the generation mix that prices have remained low for consumers. This data along with the WEC ranking of 8th in 2018 (up from 10th two years ago) indicates a consistent improvement and a positive energy outlook for New Zealand.

6. What are your views on the outlook for electricity prices?

Mercury is strongly of the view that the outlook is for significant reductions in total household **energy** expenditure[17]. The shift toward electric vehicles will mean households (including the most vulnerable over time) will make material energy savings. Electricity is currently **five times less expensive** at the equivalent of 30 cents per litre compared to a pre-tax price of petrol at circa $1.50. Households will use more

[14] ERANZ submission to the Commerce Commission dated 22 December 2017 "Commerce Commission's Priorities for Electricity Distribution Sector" at page 3-4 available at https://www.eranz.org.nz/fileadmin/user_upload/18i._ERANZ_letter_to_comcom_on_open_letter_for_distribution_sector_priorities_17Dec17.pdf

[15] Electricity Price Review – First Report for Discussion 30 August 2018. See Figure 9.

[16] See for example https://www.bbc.com/news/business-45095030

[17] Energy here refers to the entirety of energy sources a household uses to provide services like petrol

renewable electricity but this increase in volume will be more than offset by significant savings in total household energy costs.

The factors affecting electricity prices are more complex and interrelated than implied in this section of the EPR First Report. Mercury made a detailed submission to the Productivity Commission Low Emissions Economy review which outlined its views on achieving the government's climate change commitments[18]. In summary Mercury estimates that around $20 billion in new renewable electricity investment will be required by 2050. Ensuring this investment occurs at least cost for consumers requires three main factors:

Long term stability in policy settings for the electricity market and carbon pricing

Australia provides a highly relevant and cautionary example regarding the importance of providing policy certainty. Despite high wholesale prices, generation investment is not occurring. This is because of a lack of bi-partisan support for climate change policy and constant market interventions, the latest of which is price caps, which have served to chill investment and the ability to raise capital for the sector. The lack of investment and slow progress on decarbonisation had forced the government to intervene further via a National Energy Guarantee which has now foundered, meaning significant uncertainty continues.

Mercury agrees with EPR First Report that making significant changes to the existing market model would be a material step and would undermine investment certainty going forward. We refute the claims from some parties that there are excess profits in the wholesale market.

Sufficient sources of least-cost flexible generation

This is required to provide the deep energy storage needed to cope with dry years where New Zealand does not have enough rain inflows into its hydro systems. Energy futures modelling indicates that even under the most aggressive scenario New Zealand still requires thermal generation for dry year risk management.[19]

Overbuilding renewables to achieve the flexibility provided currently by thermal generation will be cost prohibitive and could result in a doubling of wholesale market prices under some estimates.[20]

New technologies like solar and battery storage are not suited to address dry year risk. Mercury provided evidence to the Productivity Commission which showed that even if battery costs fell to 5% of current costs, an investment of $142 billion would be required to cover current dry year deep storage needs. This would obviously have an unacceptable impact on consumer prices.[21]

New Zealand's electricity generation is already 85% from renewable sources and climbing. Mercury has long advocated that targeting 100% renewable electricity should instead be replaced by a focus on establishing a renewable low carbon **energy** target to drive greater substitution of fossil fuels in our transport and process heat sectors and realise the significant energy cost savings for households outlined above. The Productivity Commission makes the same point as the EPR First Report notes in later sections:

[18] Mercury submission to Productivity Commission Transitioning to a Low-Emissions Economy Draft Report (8 June 2018).
[19] New Zealand Productivity Commission Final Report 'Low-emissions economy', August 2018, pg121.
[20] Ibid.
[21] https://www.productivity.govt.nz/sites/default/files/sub-low-emissions-49-mercury-221Kb.pdf

'If reducing emissions from electricity generation significantly increases the cost of electricity, this could delay the electrification of other sectors where the reductions are potentially larger. The cost of reducing electricity emissions is therefore material not only for the effects on electricity consumers, but also for the effects on the overall efficiency of emissions reductions across the economy.'[22]

New Zealand continuing to avoid subsidies for specific generation technologies

Subsidies have had a significant negative impact on household electricity prices in Australia[23] and the UK: *"…the ROCs and FiTs and low-carbon CfDs have left legacy costs on a very large scale, already comprising around 20% of electricity bills"*[24]. New Zealand has avoided such subsidies and has a world class wholesale market that sends highly efficient signals for investment and retirement of generation as the EPR First Report notes.

In summary, some uplift in wholesale electricity prices would be expected in the period to 2050 as the best and lowest cost renewable generation options are first built and we move up the cost curve. It is impossible to estimate with any certainty what this impact will be on consumer pricing given the inherent uncertainty as to the extent and rate of change in electricity demand and any cost reductions in generation technologies.

However, Mercury's view is that any impact to consumers will be more than offset by the substantial cost savings to total household energy bills from substitution to electric vehicles. The most important policy goal is to ensure that electricity prices remain least cost through stable policy settings.

Affordability

7. What are your views on the assessment of the size of the affordability problem?

PWC analysis for the Electricity Retailers' Association of New Zealand (ERANZ) found that the 10% of household expenditure threshold used in the EPR First Report was limited in providing an accurate picture of the extent of the most vulnerable households. Their analysis found that around 44,500 households could be considered high priority energy vulnerable households when the following risk factors were taken into account:[25]

- Spend more than twice the median proportion of After Housing Costs (AHC) income on energy;
- Spend more than 15% of AHC income on energy;
- Have older houses – more than the national average proportion of houses older than 1970;
- Have more younger children – at least 10% above the national median proportion of population under 10 years old;
- Have more older residents – at least 10% above the national median proportion of population over 65 years old.

The above illustrates that we do not have a common and consistent definition of vulnerability. As discussed later in this section, Mercury supports consideration of how targeted assistance can be provided to

[22] New Zealand Productivity Commission Report 'Low-emissions economy' August 2018, pg385.
[23] International Review of electricity retail markets, Newgrange consulting,pg53
[24] Cost of Energy, 2017, D Helm, page 77
[25] PWC "Definition of Energy Vulnerability in New Zealand" (October 2018).

vulnerable households rather than more interventionist measures such as price capping that may distort efficient price signals in the wider market and deter capital investment.

8. What are your views of the assessment of the causes of the affordability problem?

There appears to be confusion in the New Zealand narrative as to the difference between price ("electricity is expensive") and affordability ("cannot afford energy needs") and the outcome of electricity use.

In Mercury's view, the key issue that the EPR panel should focus on is affordability and measures to address this. Electricity prices in New Zealand are low by international standards and the market is delivering world leading efficiency and innovation. The key focus must be on understanding the **how housing quality, the excessive variabilisation of network charges and incomes, are impacting on affordability** and focus on measures to address these issues as the priority. We expand on these comments below.

Drivers of affordability

Households that have trouble in affording energy services are likely to be experiencing general hardship rather than just energy hardship, as energy will be one of many expenses such households will have difficulty meeting. One of the main causes of the affordability problem therefore is not related to the price of electricity but rather the level of income for many households (and their higher than average consumption due to poor insulation standards[26]). New Zealand's **wage levels are 10th lowest out of 35 OEDC countries, well below the average and those of Australia and the United Kingdom**[27]. As the EPR First Report notes, the social welfare system appears to not have kept pace adequately with the costs low income households experience.

The EPR First Report demonstrates that against numerous international benchmarks, New Zealand performs well in terms of energy affordability. **Electricity prices are 12th lowest in the OECD**[28] and in 2018 **New Zealand ranked 8th of 130 countries in the world in terms of energy security, energy equity and sustainability**[29]. Further, competition has been working to keep the competitive elements of the retail bill static for the past five years in contrast to other countries like Australia and the United Kingdom[30].

Despite electricity on average remaining consistently at under 4% of average household expenditure since records began in 1998, and currently being below 3%[31] on average, there is a perception that electricity in New Zealand is expensive.

This stems partly from the fact that while the per unit rate we pay for electricity (in cents per kilowatt hour) is low compared to other developed countries we use more electricity than the average developed country household (see following page).

This is driven to a large extent by the age and poor insulation in New Zealand's housing stock. The BRANZ survey of housing found that 53 per cent of NZ houses have no or suboptimal insulation in the roof space

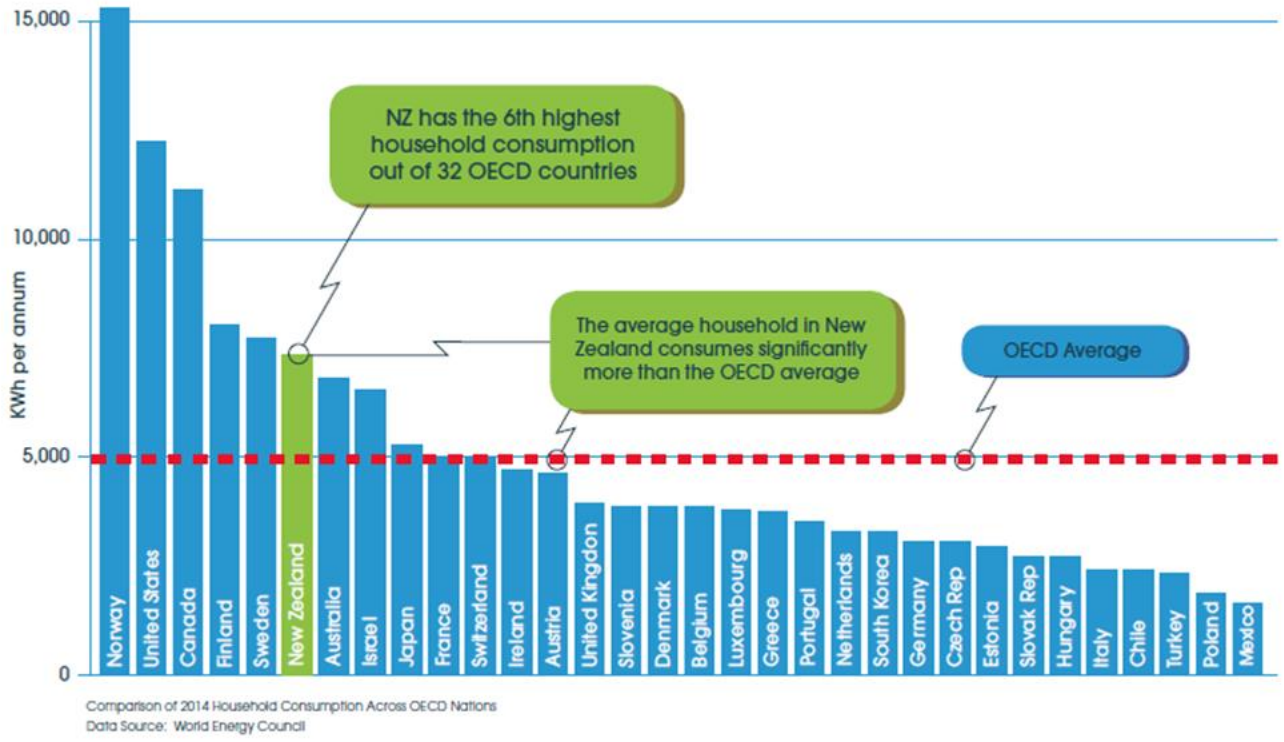
[26] As noted in in section four vulnerable consumers are more likely to live in households with poor insulation
[27] https://data.oecd.org/earnwage/wage-levels.htm#indicator-chart
[28] EPR First Report, fig 7.
[29] World Energy Trilemma index 2018
[30] nSee the IEA report 2017 on New Zealand
[31] Statistics NZ 2016

and/or subfloor[32]. Addressing this issue has been the subject of targeted government funding for insulation for some years.

New Zealand's high average electricity consumption also reflects that many other countries use far more gas directly for space and water heating. Data from ERANZ (see following page) At an ICP connection level, New Zealand has approximately 16%, Australia 55% and the United Kingdom 82% of electricity connections which can also connect to gas.[33]

Unlike many other products, electricity also appears expensive because it is invoiced after it is consumed, normally over a period of one month, although in places such as Australia and the United Kingdom with lower penetrations of smart metering, electricity is often billed quarterly.

Electricity bills also vary across the year although incomes typically do not. Households use more electricity in winter which leads to higher bills and perceptions that electricity is expensive. The affordability issue is exacerbated by excessive variabilisation of distribution prices which puts huge seasonal pressure on household budgets and sends poor usage and investment signals.



Comparison of 2014 Household Consumption Across OECD Nations
Data Source: World Energy Council

These factors make electricity costs particularly challenging for vulnerable consumers, many of whom may be on fixed incomes and/or benefits and are require greater flexibility to match their income to variability in their electricity costs. Prepay and smooth pay products are examples here of innovations which have emerged to assist vulnerable consumers and should be expanded as we discuss further in later sections.

[32] BRANZ Study Report, 'Warm, dry, healthy? Insights from the 2015 House Condition Survey on insulation, ventilation, heating and mould in New Zealand houses, Vicki White and Mark Jones SR372[2017] pg1.
[33] MBIE, AEMO, OFGEM annual energy assessments

Based on the EPR panel's own analysis (Figure 12), the key factors impacting on affordability of electricity for vulnerable households include "the size of the household, whether the household is in a cheap or expensive network area, and the level of home insulation."

Many of these factors were also highlighted by PWC, particularly network charges, with PWC finding that "high-priority energy vulnerable households are twice as likely to face high lines charges as the general population"[34]

The EPR First Report identified a number of issues with the scale of distribution sector entities and the pricing of networks. Mercury agrees there are material issues to be addressed which we discuss in further detail in section four below.

Notably none of the factors identified by the EPR First Report as affecting price are directly controllable by retailers. The factor that has received the most attention to date, (whether vulnerable consumers are able to get access to prompt payment discounts (PPDs)) has among the lowest financial impact among all the price factors for consumers. Mercury notes that consumers who pay late and are eventually disconnected are likely to face greater costs associated with disconnection and reconnection than the loss of prompt payment discounts (see figures in Section 4).

Prompt Payment Discounts

Mercury's view is that cost-reflective PPDs are a valuable positive incentive to reward customers who pay on time. Mercury works with its customers to notify them if they may have inadvertently missed out on PPDs to ensure they are not disadvantaged and will recommend they go on a direct debit if needed[35]. Customers respond very positively to such incentives. Many of Meridian's customers raised concerns about their recent actions to remove PPDs.[36]

Prompt payment is of significant value to retailers who, as the last participant in the supply chain, have significant costs that must be recovered in a timely manner to pay electricity generators, electricity and gas distributors, metering equipment providers, the costs of the regulator and other system operation functions. This makes the electricity sector quite different from other sectors.

The significant majority of electricity distributors in particular have no direct billing relationship with consumers as retailers recover costs on their behalf. Distributors as a result are insulated from any credit risks due to non-payment as retailers are still required to pay the network even if their consumers do not pay.

Mercury considers it is fair and reasonable that consumers who are able and agree to pay on time should be rewarded for their behaviour. It is ultimately a matter of consumer choice if such a product is likely to benefit them or not. Recognising this, over two years ago Mercury changed the pricing of its pre-pay product GLOBUG to be cheaper than Mercury's post-pay prices inclusive of any PPD. GLOBUG customers currently pay 1.9% less than Mercury post-paid customers, getting a notional full PPD regardless of payment behaviour, because we build it into the base price. Pre-pay products are particularly well suited

[34] PWC Energy Vulnerability Report page 8.
[35] https://www.stuff.co.nz/business/money/104670822/Claims-that-electricity-prompt-payment-discounts-are-a-late-payment-system-punishing-the-poor
[36] https://www.newstalkzb.co.nz/on-air/andrew-dickens-afternoons/audio/callers-outraged-after-meridian-cuts-prompt-payment-discounts/

for consumers who may be on fixed incomes and experience higher rates of disconnection as (in GLOBUG's case) there are no fees for disconnection and reconnection.

We do not consider banning PPDs would result in better outcomes for vulnerable consumers. This is because **the costs of non-payment and bad debt have significant implications for affordability**. The ACCC review highlighted that the costs of bad debt represented nearly a quarter or 22% of a retailers' cost to serve or $20 per customer in the National Electricity Market.[37] In New Zealand, the total debt write-offs of the five largest publicly listed electricity retailers puts the total figure at $26m or around $15 per household[38]. Bad debt as a result has a significant impact on prices as it raises costs across all consumers, including the most vulnerable.

Banning PPDs would lead to retailers having to charge late payment fees and increasing credit checking activity, rejecting those customers (likely vulnerable) who are a higher risk of non-payment. This would restrict the availability and benefits of competition to the widest audience, particularly the most vulnerable.

This is consistent with comments from Meridian CEO Neal Barclay who, having removed PPDs stated he expected Meridian to be "a bit firmer with new customers coming in."[39] Without incentives for prompt-payment vulnerable consumers will be in increasing risk of mounting unsustainable debt and increase their exposure to predatory lenders. It is quite possible that Meridian's position will do more harm than good for the genuinely vulnerable, reflecting a real misunderstanding of this part of the market.

The analysis by the ACCC led them to conclude: "Given the significance of these costs, it is critical that efforts be made to reduce the extent of bad debt costs in the interests of overall affordability."[40] Notably this did not include banning PPDs. Instead they recommended (emphasis added):

> "That state and territory governments restructure concession schemes to ensure that [they are] **targeted at those most in need**. This will place downward pressure on concession customers' bills and should flow through to reduce the cost of bad debt."
> suggest delete as not relevant
>
> "**government funding of a grant scheme for consumer and community organisations to provide targeted support to vulnerable consumers to improve energy literacy**. Improved energy literacy will enable vulnerable consumers to choose competitive offers that suit their circumstances, and identify any relevant financial assistance schemes, such as concessions and medical rebates. Enabling consumers to identify and switch to better offers, as well as accessing the financial support that is available to them, will further assist in reducing the bad debt costs of retailers."

Mercury considers such recommendations are highly relevant to New Zealand. The government is already doing an excellent job in funding and addressing household insulation through targeted subsidies based on expert advice.

[37] ACCC Retail Price enquiry, pg225
[38] Based on figures reported in the most recent annual reports of Mercury, Contact, Meridian, Genesis and Trustpower
[39] https://www.nzherald.co.nz/business/news/article.cfm?c_id=3&objectid=12125424
[40] ACCC Retail Price Inquiry, pg 225

However, the current **Winter Energy Payment (WEP) is not targeted to the most vulnerable**. The current government funding for the WEP is **$347m p.a.** If this were targeted to the 100,000 households identified by the EPR First Report as vulnerable, this would **completely fund** the annual electricity bills for those consumers as well as fund some more efficient appliances (heat pumps, LED lighting, insulation). Instead, many people such as many superannuitants, receive the WEP but do not need it.

Further, targeted WEPs should be paid directly to the energy accounts of vulnerable consumers in order to ensure that the WEP is used for the purpose for which it is provided, to ensure vulnerable consumers are able to heat their homes in winter. Retailers can assist here.

Like the EPR First Report, the ACCC noted that there was a wide range of discounting for prompt payment at significant levels which did not reflect the underlying costs to retailers. Mercury agrees with this assessment and recommends that PPDs and any other discounts should be cost-reflective and relate only to the reasonable savings that a retailer expects it will make if a consumer satisfies the conditions attached to the discount.

We also recommend that retailers should not be able to refuse to supply a customer based on credit history or any other criteria. The ACCC review found that smaller retailers have been paying off the bad debt of customers on the condition they switch to another retailer who is able to put them onto its hardship scheme[41].

Mercury agrees more can be done to assist the most vulnerable consumers. Mercury is concerned that some retailers are effectively segmenting their customer base and excluding vulnerable customers by tightening their offer criteria. This means many vulnerable customers are missing out on the benefits of competition.

Flick, for example, requires either a credit card or bank account details for weekly automatic deductions which can fluctuate significantly. This is not a feasible arrangement for many vulnerable consumers. As referred to in later sections, Mercury's pre-pay customers on GLOBUG predominantly operate on a cash economy basis and often don't have access to payment channels such as credit cards or flexible overdrafts. Flick is effectively shutting truly vulnerable customers out of its offering and cherry-picking more affluent parts of the market.

Mercury would support a recommendation that vulnerable consumers must have access to all retailers and not be disadvantaged by retailers not providing call centre services, or limiting on-boarding of new customers based on payment methods, or where customers do not have access to the technology required to sign up or manage an account.

Energy retailers should not be able to refuse supply to a customer. Mercury does not support a retailer of last resort for supply. **All retailers** should be responsible for ensuring consumers are provided with access to electricity and are directed to the most appropriate product or service for their needs. This could take the form of a standardised offering or a pre-pay offer. If a retailer is unable to offer pre-pay then they should be obliged to manage that customer's application to another retailer who can.

We note in Australia and the United Kingdom the presence of regulated standing offer tariffs fills this role. This is not a feature in New Zealand and given the concerns such tariffs have raised for limiting competition and innovation, Mercury does not support their application here.

[41] ACCC Retail Price Inquiry, pg 308

9. What are your views of the assessment of the outlook for the affordability problem?

Housing stock needs to be a priority

One of the areas where the EPR First Report suggests improvements could be made is housing. Mercury agrees that improving the quality of New Zealand's housing stock is important and that it is an area that industry, regulators and government could tackle together.

Housing quality is an area where New Zealand lags behind many other countries. For too long we have failed to acknowledge or quantify the problem, making addressing the issue in a targeted way more challenging. We now have the results of the 2015 BRANZ house condition survey that compares house condition by tenure. The results highlight the inadequacies of our housing stock.[42]

The government through Housing New Zealand owns a small, but in the context of vulnerable consumers, significant portion of our housing stock. In addition, government is responsible for housing build standards and has the power to regulate for energy efficiency labelling and to ban inefficient products. We believe government could make more use its regulatory levers along with its position as an owner of housing stock to show leadership in improving housing quality and energy efficient appliance provision.

Mercury supports the ERANZ submission on Healthy Homes Standards[43]. We recommend that the Energy Efficiency and Conservation Authority (EECA) looks at the benefits associated with phasing out incandescent light bulbs, as this could help smooth out demand peaks on distribution networks reducing future costs as well as immediate bills for consumers.

[42] BRANZ Study Report SR370 (2017) BRANZ 2015 House Condition Survey: Comparison of house condition by tenure, BRANZ Study Report SR372 Warm, Dry, Healthy? Insights from the 2015 House Condition Survey on insulation, ventilation, heating and mould in New Zealand houses and BRANZ House Condition Survey 2015/16 Analysis of energy efficiency data, report prepared for EECA.

[43] ERANZ submission to the Ministry of Housing and Urban Development on Healthy Homes Standards, Oct 2018.

Distribution Pricing

Mercury agrees there is a need to reform distribution pricing as the excessive variabilisation (i.e. lines charges in New Zealand are mostly charged on a per kilowatt hour basis, so the more electricity you use, the more lines charges you pay) of lines charges is contributing to higher bills in winter than is necessary and again driving perceptions that electricity is expensive. We also agree with the EPRs problem definition that current flat pricing is sending inefficient signals for investment in new technologies which will have regressive impacts. Please refer to our detailed comments in Sector Four on Distribution Pricing which expand on these points further.

The ACCC also recommended that distribution pricing be reformed but that additional transitional support including targeted financial support be offered to vulnerable consumers to compensate them for increased costs where they are unable to respond to price signals[44]. This further strengthens the case for better targeting of the government's current Winter Energy Payment and ensuring the payments are used to offset retail costs. Mercury also advocates that once targeted, such payments should be paid directly to retailers to offset vulnerable customer's energy bills and avoid risk of non-payment which can result in significant additional costs to consumers.

Summary of feedback on Part Three

10. Please summarise your key points on Part three.

- The New Zealand electricity market is world leading and performs exceptionally well against reliability, environmental sustainability and energy equity as indicated in our consistently improving WEC Trilemma Rankings
- Prices are just outside the lower third of developed countries but there is a perception electricity is expensive
- This is because there is confusion between difference between price ("electricity is expensive") and affordability ("can't afford energy needs") and the outcome of electricity use.
- The real issue is affordability, not price, which is driven by New Zealand's low incomes, higher than average consumption due to poor housing quality and the excessive variabilisation of network charges. We must focus on targeted measures to address these issues.
- Basing pricing analysis from 1990 is misleading given the significant changes in the structure, regulation and market design of the industry since that period
- Residential electricity price increases above the rate of inflation since 1990 reflect the fact that residential consumers paid very little for the costs of the distribution network prior to 1990 and were beneficiaries of a significant cross subsidy
- The experience with transmission pricing reform illustrates that network cost reallocations are controversial and that reforms to transmission pricing have the potential to negate any benefits to residential consumers from distribution pricing reallocation.
- Competition is working, with the competitive energy component of the retail bill decreasing by 4% in real terms over the past five years whereas the lines component has increased by 12%
- $20 billion in new generation investment will be required by 2050 to meet the government's climate change targets with increased demand from electric vehicles and process heat substitution

[44] ACCC Retail Price Inquiry, pg 214

- Ensuring such investment occurs at least cost for consumers requires long term stable policy settings, sufficient sources of flexible generation and avoiding costly technology subsidies
- Price capping as proposed in Australia and the UK is not commensurate to the problem definition in New Zealand
- We must avoid highly interventionist approaches which will undermine New Zealand's world leading performance and incentives for efficient operation of the retail and wholesale markets.
- Households (including the most vulnerable in time) will be a significant beneficiary of cost savings from new technologies, for example electricity as a transport fuel is currently 5 times cheaper than the petrol.
- The most significant factors identified by the EPR First Report as affecting consumer bills (number of people in a household, level of insulation, network area) are not directly controllable by the competitive sector.
- Prompt payment is of significant value to retailer who are the last participant in the supply chain and must recover costs for all other industry participants. Distributors for example carry not credit risks as retailers must pay network charges even if their customers do not pay them.
- Banning prompt payment discounts will not assist the most vulnerable consumers but will increase credit checking activity, reduce the ability of such consumers to find a supplier and increase risk of mounting unsustainable debt and exacerbating predatory lending
- The ACCC review found the cost of bad debt due to non-payment has significant implications for affordability as it drives up retail costs to serve, impacting prices for all consumers including the most vulnerable.
- The ACCC found bad debt is 22% of the retail cost to serve or $20 per customer in the National Electricity Market. Estimates in among New Zealand retailers show a similar level of impact.
- The ACCC supported targeting concessions and improving energy literacy to address the affordability issues from bad debt and improve the situation for the most vulnerable
- The current WEP is not targeted to the most vulnerable.
- If the WEP (currently costing $374m p.a.) were targeted to the 100,000 households identified as vulnerable this would completely fund the annual electricity bills for those consumers as well as fund some more efficient appliances (heat pumps, LED lighting, insulation). Instead, many people such as many superannuitants, receive the WEP but do not need it.
- Further, targeted WEPs should be paid directly to the energy accounts of vulnerable consumers in order to ensure that the WEP is used for the purpose for which it is provided, to ensure vulnerable consumers are able to heat their homes in winter. Retailers can assist here.
- The ACCC also recommended any retailer discounting should be cost-reflective
- Increased competition is leading to a double-edged sword in that retailers, particularly new entrants, in a bid to increase profitability, are screening out vulnerable consumers through restrictive credit checking and limited payment options practices.
- Flick, for example, requires either a credit card or bank account details for weekly automatic deductions which can fluctuate. This is not a feasible arrangement for many vulnerable consumers. Flick is effectively shutting truly vulnerable customers out of its offering and cherry-picking more affluent parts of the market.
- We agree with the EPR analysis that New Zealand's housing stock is a priority area
- Poor insulation performance is a major contributing factor to New Zealand's higher consumption rates which exacerbates the affordability issue and perceptions that electricity is expensive, which it is not.

- We also agree priority areas is distribution pricing as the excessive variabilisation of lines charges is contributing to higher bills in winter than is necessary and again driving perceptions that electricity is expensive. Please see our detailed comments in section four on distribution pricing reform.

Solutions to issues and concerns raised in Part three

11. Please briefly describe any potential solutions to the issues and concerns raised in Part three

- The Commerce Commission should investigate further any network pricing inefficiencies for residential consumers. If reallocation is able to be justified, it should be phased in over time. In order to address vulnerability, network areas with the highest deprivation scores should be targeted first.
- Mercury supports the following recommendations from the ACCC and considers they should be implemented to address the same issues in New Zealand:
    - Better target the WEP along the lines of the current insulation grant (i.e. To CSC holders and areas identified as lower income). This will also help to offset any impacts to potential vulnerable consumers from removing the Electricity (Low Fixed Charge Tariff option for Domestic Consumers) Regulations 2004 (LFCT Regulations) and moving toward more cost-reflective network pricing. In order to address energy affordability, WEPs should be paid directly to the energy account of the consumer. Retailers can assist here.
    - Fund budgeting agencies to provide better energy literacy services to ensure vulnerable consumers get access to advice and support to ensure they realise the full benefit of retail competition.
- Regulate to require PPDs and any other discounts to be cost-reflective, relating only to the reasonable savings that a retailer expects it will make if a consumer satisfies the conditions attached to the discount.
- Energy retailers should not be able to refuse supply to a customer.
- All retailers should be required to offer supply to any customer who requests it. This could take the form of a standardised offering or a pre-pay offer. If a retailer is unable to offer pre-pay then they should manage that customer's application to another retailer that can.
- The EPR panel should undertake further analysis on the role that pre-pay products can play in addressing affordability. We discuss pre-pay in further detail in section four.
- We recommend that EECA looks at the benefits associated with phasing out incandescent light bulbs, as this could help smooth out demand peaks on distribution networks reducing future costs as well as immediate bills for consumers.

Part four: Industry

Generation

12. *What are your views on the assessment of generation sector performance?*

Delivering energy infrastructure involves long-term and highly complex investment decisions from private capital. New Zealand's market framework has been fundamentally similar since the mid-1990s, a path that was set in train when an influential Treasury report provided evidence that the distortions to the economy from over-spend on hydro generation projects were unsustainable for New Zealand[45]. Other countries are seeking to replicate New Zealand's performance. However, some, like Australia and the United Kingdom, are struggling as attempts to promote renewability have led to detrimental consequences for reliability and consumer prices. It is very difficult for them to achieve the trilemma performance of New Zealand.

Mercury agrees with the EPR panel's assessment. We welcome the recognition that the wholesale market has operated highly efficiently ensuring the most cost-effective generation has been built and that competition has been effective in disciplining costs and restraining prices. The market has also delivered very efficient retirement of excess capacity (largely thermal generation) over the past decade which has contributed to reducing overall emissions from the electricity sector.

The EPR First Report raises a question as to whether market power is an issue in the generation market in New Zealand. Minor levels of transient market power are a well-known and accepted feature of energy-only markets such as New Zealand's. As all investment signals are provided via prices in energy-only markets, transient market power is necessary to ensure the long run costs of generation investment, particularly generation required to meet peak demand, are recovered. This avoids the so-called "missing money" problem common in energy-only market design[46]. The key issue is ensuring such market power is not able to be sustained for extended periods. There is no evidence in New Zealand to suggest this is the case.

The Electricity Authority introduced market manipulation rules to promote a high standard of trading conduct in 2015 and these continue to evolve and be strengthened via current consultation with the Electricity Authority's Market Development Advisory Group[47]. Mercury supports this work and considers the EPR panel should also endorse this process.

[45] New Zealand Treasury (1984) Report to the Minister of Finance - Review of Electricity Planning and Electricity Generation Costs

[46] See for example https://www.sciencedirect.com/science/article/pii/S0301421515301555

[47] https://www.ea.govt.nz/development/advisory-technical-groups/mdag/meeting-papers/2018/26-june-2018/ and https://www.ea.govt.nz/about-us/what-we-do/our-history/archive/dev-archive/work-programmes/market-wholesale-and-retail-work/efficiency-of-prices-in-pivotal-supplier-situations/development/the-board-approved-an-amendment-to-the-code/

13. *What are your views of the assessment of barriers to competition in the generation sector?*

Mercury agrees that barriers to generation competition in New Zealand are low. Building generation as efficiently as possible is crucial to keeping costs to consumers as low as possible, particularly given the significant renewable generation requirements forecast to be needed to meet New Zealand's climate change targets. To make the substantial investment necessary to build power stations at least cost, it is desirable to leverage scale economies, have a strong balance sheet and have considerable market experience and expertise. New Zealand's generation market is well placed to deliver such investment.

Virtual Asset Swap Contracts

Mercury notes that the markets for Financial Transmission Rights and the ASX Futures are now sufficiently liquid (noting our comments on measures to address current market making below) to enable market participants to hedge the risks the VAS contracts were designed to address. Mercury supports these contracts phasing out over the period to 2025.

14. *What are your views on whether current arrangements will ensure sufficient new generation to meet demand?*

We agree with the assessment that current market and industry arrangements can meet the projected increases in demand for electricity.

However, as outlined in Question 6, whether this occurs at least cost will be highly dependent on policy settings. We agree with the EPR panel's analysis and linkage to the Productivity Commission's report highlighting that targeting 100% renewable electricity could raise consumer prices. This is why Mercury has consistently supported the implementation of a low carbon rather than a renewable electricity target to achieve a least-cost outcome.

The other important factor is whether sufficient flexible generation will be available in the system to compensate for the deep energy storage required during a dry year. The government's oil and gas exploration ban and commitment to phase out coal for electricity generation by 2030 all raise significant questions around future electricity costs. The current market situation with significant gas outages highlights the impact reduced thermal flexibility can have on wholesale pricing.

The EPR panel's view that decreases in wind and solar costs may lead to falls in wholesale prices in the longer term ignores the fact that such sources of generation are intermittent and therefore cannot compensate for deep energy storage requirements. The analysis we provided in Question 6 illustrates clearly that batteries will never be able to cost-effectively provide this deep energy storage role. We would direct the EPR panel to our submission to the Productivity Commission on this issue.[48]

[48] Mercury submission to the Productivity Commission Inquiry into Transitioning to a Low-Emissions Economy Draft Report, (8 June 2018).

We would caution against any interventions designed to pick technology winners. Both the United Kingdom and Australia, with far less renewable electricity generation than New Zealand, have attempted to redress the imbalance by introducing subsidies for renewables. These have driven up costs to consumers[49]. Mercury supports the New Zealand Emissions Trading Scheme (NZ ETS) as the most appropriate measure to introduce price signals for emissions reduction into investment decision making across the economy.

We agree that it is worth examining existing regulatory frameworks to see if they are fit for purpose given New Zealand's need for more investment in renewable generation. For example, the National Policy Statement for Renewable Electricity Generation (NPS REG) could be clarified to provide greater guidance to local authorities as we suggested in our submission to the Productivity Commission.[50]

Mercury considers the existing market arrangements will deliver sufficient incentives to retain back-up generation plant. We do not support measures such as introducing capacity markets. Improvements to the hedge market will assist (discussed below) and there are examples of existing hedging arrangements (such as swaptions) that illustrate the market is working to manage such risks.

[49] Op cit, recommendation 13.1, p399. Helm, Cost of Energy Review, (Oct 2017) p113 and Australian Competition and Consumer Commission 'Restoring electricity affordability and Australia's competitive advantage: Retail Price Inquiry – Final Report, (June 2018).

[50] Mercury submission to the Productivity Commission Inquiry into Transitioning to a Low-Emissions Economy Draft Report, (8 June 2018).

Retailing

15. *What are your views on the assessment of retail sector performance?*

Mercury agrees that consumers are benefiting from retail competition and that there is significant innovation occurring in retail products and services, though many propositions remain niche and their ability to scale remains to be seen. Currently New Zealand has 35 registered retailers compared to 33 in the Australian market and to 64 in the United Kingdom[51]. Given New Zealand's relatively much smaller population, the number of retailers and level of competition is noteworthy.

Consumer switching

The EPR First Report raises questions as to whether consumers are active enough in seeking market offers and whether all consumers, including those that have not switched for some time and the most vulnerable, are benefitting from competition. The report estimates savings in the order of $200 p.a. could be possible between the lowest and highest priced tariffs on the market. This is much lower than the potential savings available in the Australia and the United Kingdom[52].

Mercury notes that similar concerns have consistently been raised in other jurisdictions such as Australia and the United Kingdom where significant price rises have been experienced. Despite electricity prices often being front page news and intensely political in the United Kingdom and Australia, switching rates in these countries remain around the same level annually as in New Zealand[53].

Part of the explanation may lie in the fact, as the EPR First Report notes, that the potential savings on offer are not set at incentive levels for most consumers. When compared to the potential $200 savings identified by the EPR:

> "Customer research indicates that many customers require a significant saving to switch. Just 8 per cent of respondents said the minimum amount they would need to save annually on their bill in order to seriously consider changing their company or plan was $100 or less. Some 51 per cent said they would consider switching only if the savings were $250 or less, and a further 30 per cent would change if savings were $250 or more."[54]

Consumer inertia may in fact be a significant and potentially insurmountable barrier in electricity. Research for Treasury into the banking sector in 2015 found switching rates for mortgages to be "relatively competitive" at 10%.[55] Given potential savings equating to hundreds of thousands of dollars over the life of a 30-year mortgage, it is surprising that switching activity is so low, or perhaps

[51] International Review of electricity retail markets, Newgrange consulting,pg25
[52] Ibid pg33-36
[53] Ibid table 1
[54] Ibid pg33
[55] https://treasury.govt.nz/sites/default/files/2017-11/oia-20150371.pdf pg9

conversely that it is so high in the electricity market where potential savings are orders of magnitude lower.

Another potential explanation for the inertia among some consumers may be that New Zealand has a much greater focus on customer service and rewarding customer loyalty.

In both the United Kingdom and Australia, regulated standing offer tariffs have proven a focal point for competition and a significant detriment to innovation and customer service. Most competition has focused simply on offering larger and larger discounts off these regulated prices. This has led to significant fines in the United Kingdom for poor performance of retailers which in the past 5 years exceeded £200m.[56] Heavy regulation in both the United Kingdom[57] and Australia has also limited product innovation and reduced consumer benefits. This includes a restrictive regulatory approach which effectively bans pre-pay products in Australia.[58]

By comparison in New Zealand, where such regulated tariffs have never existed, there has been much more focus on customer service and innovation as well as, increasingly, rewarding customer loyalty as the costs of customers switching away are significant for retailers.

Mercury for example over the past two years **has provided $7.2m in direct benefits to customers** through incentives such free power days and offering Airpoints on purchases. Mercury also provides free energy monitoring tools via its Good Energy Monitor service which provides customers with an estimate of their projected monthly spend and tips for reducing energy consumption. Mercury has also recently launched its own customer loyalty programme which enables its customers to earn Mercury dollars which can be shared with others or used to offset the costs of their energy bills.

Trust in electricity retailers is much higher in New Zealand compared to Australia and the United Kingdom and, New Zealand has much lower levels of complaints[59]. In addition, the panels analysis notes a high degree of customer satisfaction with retailers in New Zealand compared to Australia and the United Kingdom.

The evidence therefore indicates that relative to Australia and the UK, and in addition to having lower electricity prices overall, New Zealand's retail market performs extremely well in terms of rewarding customer loyalty, providing higher levels of customer service, trust and satisfaction and much lower levels of complaints and fines. Coupled with the relatively low savings on offer from switching, below stated incentive levels for most consumers, this is likely to explain why many customers choose to stay with their existing retailer.

Given the strong performance of the retail sector, in Mercury's view significant intervention is not required. However, we would support retailers being required to provide information to their customers periodically making sure they are aware they can switch and providing links to relevant resources such as Consumer Powerswitch where they can compare whether they are on the best

[56] Cost of Energy Review, 2017, D Helm, pg149
[57] International Review of electricity retail markets, Newgrange consulting,pg30
[58] International Review of electricity retail markets, Newgrange consulting,pg50
[59] Electricity price review, pg20

deal for them. This could occur, for example, when customers roll off fixed term pricing deals or acquisition rates.

Mercury agrees with the assessment that vulnerable consumers may struggle to understand how to best engage with the market and ensure they are getting the best deals and finding the right product (such as pre-pay) which will lower their overall costs (see section below) rather than a narrow focus simply on the lowest price. As noted in Section 3, Mercury agrees with the ACCC recommendation that this is best addressed through targeted funding for energy literacy and advice services for vulnerable consumers.

Door knocking

One area where there may be a need for greater consideration of consumer protections is around retailer door knocking practices. In comparison to other sales channels like telephone sales, there is limited ability to check what was advised verbally to the customer through the door knocking process. Mercury anecdotally is aware of some retailers making misleading representations in the pre-pay space which is more likely to impact on vulnerable consumers.

Mercury notes that in Australia a number of retailers have stopped door knocking however the ACCC observed recently:

"….. through misrepresenting their offers and employing high pressure selling tactics. In addition to hurting consumers, this type of behaviour hurts rival firms. In response to this conduct, rival firms can endeavour to protect their market share by improving the quality of their sales techniques or by employing the same questionable sales tactics to 'level the playing field'.[60]

"We observed this 'race to the bottom' in door to door selling by electricity retailers. The leading retailers knew it was resulting in bad behaviour but refused to address it for fear of losing out to their competitors."

Mercury considers without intervention to ban the door knocking the practice will likely not be voluntarily ceased by the market due to competitive pressures. Genesis for example, returned to door knocking after publicly announcing it would cease the practice.

Price dispersion

The updated analysis of retailer billing data in Figure 4[61] shows a clustering mostly around the average with, as would be expected in any market, some deviations on either side with a very small percentages of consumers paying either above or below the average. Mercury notes the analysis: "focused… on the extent to which there is variance in the power charge component of prices paid by consumers - i.e. excluding effects such as one-off marketing credits, payment-related charges or discounts, or people being on the 'wrong' low-fixed charge option for their usage."

[60] https://www.accc.gov.au/speech/companies-behaving-badly
[61] Initial analysis of retail billing data, MBIE, Oct 2018, pg13

One-off marketing credits, for example, can be material with retailers frequently offering signing up credits of between $100 and $400 particularly if consumers are willing to contract for a fixed period which the EPR analysis shows can be of considerable value (up to $100 savings per annum) for such consumers.

Mercury notes that fixed term pricing has been one of the simplest and yet most successful product offerings it has made with over 40% of Mercury's customer base on a fixed term product. The EPR analysis shows that fixed pricing is significantly value adding for consumers and is consistent with Mercury's view that consumers value price certainty over highly variable pricing.

Marketing credits and other discounts customers may receive mean any price dispersion impacts are unlikely to be material in New Zealand. Analysis has found price dispersion is much lower in New Zealand than in Australia and the United Kingdom.[62]

The revised data released by the EPR panel found little evidence to suggest there was material variance in pricing between incumbents and new entrant retailers, noting the average of $45 p.a.:

"…varies materially by network area, depending on which retailer is the incumbent. In some areas, incumbent pricing is similar to other retailers' pricing, whereas there are marked differences on other networks. This observation is also supported by analysis of public tariffs published in Powerswitch."[63]

Mercury urges that considerable caution be exercised among policy makers in considering interventions to address price dispersion, which does not appear to be a material factor in New Zealand. The United Kingdom's implementation of non-discrimination rules had the unintended consequence of raising retailer margins and was replaced with further regulation to limit tariff offerings which reduced innovation and customer choice and also had to be removed. Both the United Kingdom and Australia's focus on price caps is unlikely to lead to long term benefits for consumers.[64]

Pre-pay

Given the EPR First Report's focus on solutions to addressing affordability, particularly for the most vulnerable consumers, Mercury strongly encourages the EPR panel to provide further detail on the role pre-pay products play in supporting vulnerable consumers.

While the EPR panel is concerned with understanding the factors that influence the prices consumers pay, what is also important - particularly for vulnerable consumers - is understanding the total costs consumers face from non-price related factors of their energy supply. These additional costs can sometimes exceed the benefits of a seemingly low post-paid rate.

GLOBUG, owned by Mercury, provides prepay electricity to 26,700 customers. Rather than a monthly bill, customers pay in advance by topping-up at convenience retailers, supermarkets, via mobile app or online. Customers generally choose to top-up frequently in small increments to suit their income cycle or cash availability.

[62] International Review of electricity retail markets, Newgrange consulting,pg37
[63] Initial analysis of retail billing data, MBIE, Oct 2018, pg17
[64] International Review of electricity retail markets, Newgrange consulting,pg54-58

Customer meters are read overnight every night, charges are calculated and a traffic light indicator is sent to the customer to let them know if they are likely to reach a zero balance in the next two days. Customers who reach a zero balance are disconnected at midday and can then reconnect with a minimum $20 top-up. Around 97% of disconnected customers reconnect before midnight on the same day as disconnection, with the remaining customers receiving a call from GLOBUG to check their wellbeing and assess any hardship situation the next morning.

GLOBUG pricing is currently set ~2% below Mercury post-pay headline prices after a fully achieved 10% prompt payment discount, essentially building the discount into base pricing and removing the contingent link to payment behaviour.

GLOBUG allows customers to disconnect and reconnect at no cost. Based on a recent internal study of 300 customers with both post-pay (Mercury) and prepay (GLOBUG) history, **GLOBUG customers typically benefit by around $400 per annum**[65] by retaining value they had previously lost to repeated missed post-pay prompt payment discounts, physical disconnection / reconnection visit costs and debt management fees. As a result, for the same total cost, these customers can purchase approximately 1,400kWh of additional energy (enough to run a 2kW heater for 7 hours a day on every day of winter).

The GLOBUG service is available nationally (subject to technical requirements), can be accessed without a credit check and maintains strong referral relationships with budgeting agencies and community support organisations.

Based on surveying by Consumer NZ we know GLOBUG customers are more likely to be considered vulnerable as they have significantly lower than average survey results for factors such as household income, insulation levels, efficient heating and are more likely than average to have experienced financial difficulty paying monthly energy bills, have missed payments, had to pay fees for overdue fees or had to take out a loan to pay the bill. As outlined above, pre-pay products are better suited to manage these latter factors than most post-pay products.

The additional retail data analysis provided by the EPR provides some valuable insights from across the market, in particular that pre-pay pricing is competitive with post-pay pricing:

> "*Our analysis of published rates for pre-pay and standard services from retailers which offer both options indicates the rates are now aligned for these options. Furthermore, the billing data indicates average power charges for pre-pay match the average pay-on-time rates for standard service options*.[66]"

Pre-pay also has the added benefit of meaning vulnerable customers do not miss out on prompt payment discounts:

> "*However, consumers on pre-pay options may incur additional fees, such as for topping up their account, or for receiving information about their balance. On the other hand, pre-pay customers never incur additional costs for lost prompt payment discounts.*

[65] Based on Mercury analysis of 300 customers on post-pay products. Analysis was provided to the EPR Chair and secretariat on 20 July 2018.
[66] Initial analysis of retail billing data, MBIE, Oct 2018, pg18

Overall, analysis of the retail data indicates pre-pay consumers pay approximately $40 a year more than other comparable consumers, primarily due to additional payment channel fees."

The same analysis also indicates that the average impact of lost PPDs for decile 10 (most deprived) consumers ranges from $50 p.a. on average to $250 p.a. for 5% of consumers in this decile.

It is therefore reasonable to conclude that consumers on pre-pay products, while subject to some fees (see commentary below) are likely to receive an offsetting, or even potentially positive benefits, from "retaining" PPDs under pre-pay.

We recommend that the EPR panel should assess and quantify the value to decile 10 customers of avoiding fees for reconnection and disconnection which can range from $30 to $150. For those customers experiencing multiple disconnection and reconnection in a year these costs are likely to be substantial. Mercury's analysis above suggests in total benefits to pre-pay customers could be in the order of $400 p.a.

Pre-pay international comparison

Prepay has low penetration in New Zealand at a 1.31% of market share. This is low compared to the 6% of New Zealand households the review identified as potentially vulnerable. Pre-pay has much higher penetration in the United Kingdom where 16% of households are on a prepay product[67]. Pre-pay is not available in Australia due to highly restrictive hardship regulation for disconnections which perversely is driving up retail costs to serve and exacerbating the affordability issue. Regulation is precluding the solution in the Australia.

Pre-pay fees

Many vulnerable consumers face significant challenges in terms of managing daily expenses. It is not uncommon for such consumers to be living in a simple cash economy where they may not have a functioning bank account let alone access to a credit card. They may have their bills such as rent paid direct by a budgeting service and then receive a cash withdrawal for other necessities like groceries and power or a pre-pay phone top-up. As a result, their ability to access payment channels other consumers take for granted is severely limited.

For our GLOBUG customers this usually means topping up their balance at a local convenience store or petrol station. To meet the needs of these customers Mercury has to make available a wide and convenient payment network with hundreds of payment points and very fast clearance of funds. Mercury funds this infrastructure by charging between $0.20 (internet banking) and $0.75c (over-the-counter) per transaction which is set as cost recovery only.

Pre-pay is often singled out for these fees but the reality is that post-pay retailers charge them from $1.20-$1.30 for over the counter transactions. A GLOBUG customer on weekly over-the-counter top-up cycle will pay approximately $39 for 52 transactions, whereas a customer who pays a weekly post-pay bill will pay between $62.40 and $78.00 for 52 over-the-counter payments.

[67] International Review of electricity retail markets, Newgrange consulting

Prompt Payment Discounts

Please see our comment in Section 3 above for our view and recommendations regarding prompt payment discounts.

Changes in distribution pricing

Mercury passes through changes in distribution prices to consumers and considers that if any specific rebalancing is taken forward as part of the review a process should be established with industry and the EA and ComCom to make sure such pass through is transparent. This rebalancing would also need to occur with the removal of the LFCT Regulations and needs an industrywide approach and broad consumer education initiative.

Retailer operating costs

Operating costs have generally been driven by upgrades to billing systems to enable more dynamic pricing and product offerings. Operating costs are also increased by the high level of churn in the market and activities associated with either reducing or increasing churn to or from a retailer.

Retailers are also now required to accept and store half hourly data due to smart meters now offering this functionality, and to bill and reconcile on the same basis. Additional operating expenditure is required to manage a greater granularity of data and keep it secure. In comparison in Australia, retailers are only just moving away from billing on a quarterly basis and smart metering infrastructure has far lower penetration than in New Zealand which potentially explains why systems costs may appear lower currently.

As noted in the previous section, bad debt due to non-payment is also a significant driver of retailer costs to serve in both Australia and New Zealand. We support the previous section's recommendations in terms of targeting WEP and energy literacy to address this issue.

16. *What are your views on the assessment of barriers to competition in retailing?*

Mercury considers barriers to entry are very low in the market as evidenced by the significant number of retailers compared to New Zealand's small population.[68] This compares highly favourably to both the United Kingdom and Australia.

With five large retailers innovating and competing and around 30 other retail brands, the electricity sector could well be considered the most competitive of any industry in New Zealand. While collectively the top five retailers hold 90% of market share, individual shares are low compared to other sectors such as petrol retailing and supermarkets which are typically dominated by two or three main players.

Some commentators question whether the competition is effective if there is not a significant decline in market share of incumbents versus new entrant retailers. However, as has been highlighted through our submission, competition in New Zealand is much more dynamic and

[68] International Review of electricity retail markets, Newgrange consulting,pg25, Table1

effective in New Zealand than for example in Australia and the United Kingdom where innovation has been stifled and customer service reduced by the presence of regulated standing offer tariffs. New Zealand's much higher penetration of smart metering infrastructure, underwritten by incumbent vertically integrated business, has also enabled more vigorous competition and faster switching times.

Incumbents in New Zealand therefore have had to be innovative, focus on understanding consumer needs, and provide new benefits for their consumers in response to the threat of new entry. This is exactly what would be expected in a competitive market. Unlike in other sectors, innovations in retail products have yet to be truly disruptive and remain largely niche propositions without material scale and savings that present a material rationale for widescale consumer switching. However, competition is clearly driving down the non-regulated components of the bill and providing long term benefits for consumers.

Saves and Winbacks

Mercury considers saves and win-back activity provides significant competitive benefits for consumers. As the ACCC noted:

> "Any action to prohibit save or win-back activity would be a significant regulatory intervention and one that may have unexpected and unintended consequences. As noted in our Preliminary Report, the New Zealand Electricity Authority in January 2015 introduced a scheme which bans retailers who opted in to the scheme from engaging in save activity. The scheme led to an increase in win-back activity (in place of saves) and no overall improvement in competition in the market. On the basis of these results, together with concerns about making such significant intervention on a competitive dynamic to the market, **the ACCC does not recommend that retailers be banned from engaging in save or win-back activity.**" [69]

Independent analysis to the IPAG showed there was no evidence to suggest incumbent retailers were targeting new entrant retailers:

"……. if typical switching rates were to persist in the long run, then most of the larger retailers would lose market share given typical switching dynamics observed between 2013 and 2017"[70]

Mercury also could not substantiate claims that retailers were overcharging consumers by $360m given this figure represented 90% of annual earnings for the largest five retailers.

Mercury supports the IPAG continuing its analysis and establishing if there is any compelling rationale for reform.

[69] Retail Electricity Pricing Inquiry—Final Report 2018, Part 6.4.4, pg151. Emphasis added.
[70] MDAG Customer Acquisition saves and win backs – issues paper, Chapter 5.3.3

Vertical integration

17. *What are your views on the assessment of vertical integration and the contract market?*

Mercury agrees that New Zealand's futures contract market is recognised as being pioneering and world class and as a model for other jurisdictions to emulate. The hedge market is fundamental to enabling efficient management of plant and fuel risk, providing certainty for merchant generators and retailers and also providing price transparency for major industrials.

Since 2010 the market has improved at a steady rate thanks to the efforts of the Electricity Authority, the ASX and large generator-retailers who have been willing to participate voluntarily as market makers. Other market participants and financial institutions have gradually entered the market to take advantage of the extra liquidity. However, in Mercury's view, their lack of experience and knowledge of the market's intricacies and how this translates into sustainable risk management strategies has presented challenges.

New Zealand's futures contract market has been underwritten by the balance sheets of four largest players providing liquidity which has enable significant entry from independent retailers leading to intense competition and a reduction in real terms of the competitive element of the electricity bill, showing that competition is working. In addition to providing liquidity into the contract hedge market, vertically integrated retailers have also provided significant liquidity into the Financial Transmission Rights Market. They have also entirely funded the roll-out of smart metering infrastructure in New Zealand which has significantly reduced switch times for consumers and enabled retail competition.

The is no evidence that liquidity in the futures market is acting as barrier to retail competition. Hedges are available in the market up to 3.5 years out and the equivalent of 24MW (enough to meet the demand of 24,000 houses) is available daily. This is more than 10 times the approximate daily retail churn in the market. This liquidity is also a significant benefit for independent merchant generators, as a 50MW generator is able to hedge its entire output for 3.5 years in just two days.

The role of the hedge market

It is important to understand the role the hedge market plays in the sector. The concerns from the EPR panel appear to be that liquidity reduced in the market during periods of market stress in winter 2017. Mercury notes that even the most liquid markets in the world can experience significant liquidity constraints during times of market stress as was demonstrated in global financial markets in 2008.

The role of the hedge market is to provide for long-term risk management. Participants should be identifying and hedging their risks far in advance of any period of market stress. It is unreasonable and imprudent to expect that during times of market stress sufficient liquidity will be available, in the same way it would be unreasonable to expect an insurance provider to offer someone insurance when their house is on fire.

Mercury notes that the inability of market participants to adequately manage their exposure to wholesale market risks led to the Electricity Authority implementing the stress testing regime. This requires market participants to submit a quarterly disclosure that they have modelled the impacts from various scenarios of market stress on their business and that they understand the risks. The disclosures are required to be certified annually by the boards of the respective companies. This ensure that market participants cannot claim they were unaware of such risks if exposed and claim the market is somehow responsible.

Mercury agrees the current voluntary market-making arrangements are not sustainable. The Electricity Authority is currently working proactively with market-makers to implement an effective transition from the current voluntary arrangements to commercial terms which should address the issues identified in the paper.

Part of the issue with the current model is that while retail competition has expanded significantly, the requirement for market making have not. Mercury considers there is now an opportunity to expand market making requirements for all generators and retailers in proportion to their generation and load and consider multiple settings for managing such requirements in stress situations.

We note that the EPR panel was asked to consider vertical integration. The First Report observes that vertical integration helps reduce risk management costs, which is particularly important in an energy-only hydro-dominated market with limited storage capacity where the risks associated with short time price volatility must be managed.

We do not agree with the assessment that vertically integrated firms can systematically offer discounts to commercial and industrial customers that their competitors cannot match, because they lack the advantages of vertical integration. The market for commercial and industrial customers is extremely competitive with a high churn rate. Because electricity represents a significant input cost, most of these customers employ brokers whose sole focus is to find them the best electricity deal possible. These businesses use significant amounts of electricity making them attractive customers for retailers to compete to acquire. The market is transparent with a requirement to disclose contracts over 1MW. Information about trades is available on the Electricity Authority website, the monthly and daily ASX reports and independent reports such as those produced by Energy Link.

We support the work the Electricity Authority has done on the disclosure regime for contracts negotiated directly between parties that don't go through the ASX, and on other matters such as plant outages and fuel stocks. Mercury is supportive of the regime being further strengthened. The Electricity Authority Market Design Advisory Group is currently working on how to achieve this.

Mercury does not consider there would be any consumer benefits from requiring vertically integrated entities to operate separately. This would not increase liquidity in the hedge market to any extent as the risks to both the generation and retail parts of the business would remain the same, and all that will have changed is that costs will have increased to hedge those risks which would occur through the market. Rather than a single trading team, every vertically integrated player would require two which would raise costs and feed through into consumer pricing.

18. *What are your views on the assessment of generators' and retailers' profits?*

Mercury welcomes the finding that no evidence was found to indicate generator-retailer profits are excessive compared to underlying costs. This issue was canvassed extensively by the Ministerial Review Technical Advisory Group in 2009 which drew the same conclusion.[71]

The EPR panel's analysis shows that electricity market competition in New Zealand has delivered for the vast majority of consumers. This has been underpinned by investments by vertically integrated companies that have enabled the substantial innovation and competition in our retail and generation markets that we now take for granted. This includes the roll-out of smart metering infrastructure funded by large retailers and liquidity in the futures and financial transmission rights market provided by large generators.

Transitioning from our established system of marginal cost pricing to pricing based on historic costs would require extensive and prohibitively expensive changes to current market arrangements which have been in place for over twenty years. It would create significant uncertainty undermining the confidence of those considering allocating capital to further generation capacity at a time when more renewable generation capacity will be crucial to achieving the government's goal of transitioning New Zealand to a low-emissions economy.

As well as chilling investment, switching to a centralised decision-making approach would increase costs for consumers. According to analysis by Chair of the Electricity Authority Brent Layton, implementing such an approach:

> '…*would require a large bureaucracy and a large army of generator staff supported by consultants to determine the appropriate amounts to pay existing generators to cover their operating and capital costs. 'I estimate that for approximately 110 generator-class market participants and their 300 plus plants it would take at least 300 analysts and lawyers five years to set up the system ($180 million) and after that 150 people to run it ($18 million a year)*.'[72]

The tendering process for future capacity along with the extensive negotiations with retailers over their contracts with the single contract buyer and the need to monitor the split between retail and generation activities within the one company would impose significant costs. One estimate involved 50 analysts and lawyers for each of these functions at an annual cost of $12 million[73].

The cost of planning errors would also need to be factored in, and these would likely be significant as was the case with ECNZ prior to our market and in the case of Brazil, Mexico and South Korea where central buying models have been tried.[74]

---

[71] https://www.mbie.govt.nz/info-services/sectors-industries/energy/previous-reviews-consultations/review-of-the-electricity-market-2009/documents-image-library/summary-of-main-decisions-ministerial-review-into-electricity-market-performance-december-2009%20-PDF%2028%20KB.pdf

[72] Electricity Authority, The Economics of Electricity June 2013, pg18.
[73] Op cit pg18.
[74] Op cit pg19.

Recently Poletti published a study on market power in the wholesale market. The study estimated that generators exercise market power and have extracted economic rents of $5.4 billion.[75]

Mercury's view, supported by analysis from Sapere and Read[76] is that the Poletti analysis is flawed because it considers only prices in the wholesale spot market without accounting for generators' exposure to spot prices or 'net position'. Generator exposure depends on a range of factors including generation output, retail customer demand and position in the derivatives market. Poletti also compares wholesale spot price with his estimate of the short run marginal costs of generation including the opportunity cost of water for hydro-generators.

The main problem with this analysis is that it is static so does not account for the dynamics of the opportunity cost of generating at any point in time which includes the financial (operating) costs of resources used plus the value of the option to delay generation to a future trading period. The option to delay can have significant value in markets like New Zealand's which are capital intensive, have limited economic storage and demand fluctuates[77]. In recognition of this issue, (spot prices rising above variable costs), our market has developed scarcity pricing arrangements[78].

Water charging

With respect to charging generators for the use of water and geothermal resources, Mercury does not support such an approach. We refer the EPR panel to our submission to the Tax Working Group (TWG)[79].

Hydro-generation plays a crucial role as back up to intermittent renewable generation such as wind and solar. Placing a charge on water would also be seen as a wealth tax on investors due to the privatisation or partial privatisation of most hydro generation assets. We note the interim report of the TWG provides some draft principles for taxing natural resource use which we would support. However, the report also states that 'Any potential water taxes will need to take account of Maori rights and interests in water.'[80]

Transmission

19. *What are your views on the process, timing and fairness aspects of the transmission pricing methodology?*

Mercury notes that the significant transmission investment undertaken (around $3.5bn) over the past 15 years has considerably reduced the market risks facing retailers in hedging their exposure to price separation and has been a key driver for increased competition in the retail market.

[75] Stephen Poletti, (2018), Market Power in the New Zealand wholesale market 2010-2016, University of Auckland.
[76] Sapere Research Group (2018) Electricity Sector Review 2018, p45-47.Read, (2018), Economic Framework for New Zealand Electricity Market
[77] Op cit. pg 45-49.
[78] Electricity Industry Participation Code Part 13.
[79] Mercury submission to Tax Working Group Enquiry into the future of taxation, (30 April 2018).
[80] Tax Working Group, Interim Report on the future of taxation (September 2018) p 68.

Mercury agrees the process for the Transmission Pricing Methodology has been contentious and costly and has created significant uncertainty for market participants. The process could have been improved by greater focus and time being spent initially on defining the problem the Electricity Authority was trying to solve and then identifying potential options before moving toward solutions backed up by robust cost benefit analysis (CBA).

Instead the Authority presented its preferred solution which triggered significant confusion as to how reallocating sunk investment costs could drive future dynamic efficiency gains. This then led to further consultation to try and fit the problem definition and the CBA to the proposed solution. The lack of initial modelling regarding impacts to consumers and market participants from the proposals also created significant uncertainty that subsequently needed to be addressed.

Mercury notes that the same issues that have been raised by the EPR panel regarding the over-allocation of distribution charges to residential consumers, which in turn exacerbates affordability issues, will occur with any reallocation of the historic transmission costs. **Transmission pricing therefore has the potential to negate any reallocation gains for residential consumers that may be envisaged by the EPR panel from reallocating distribution costs.**

Mercury supports the view that reallocating the costs of historic sunk investments risks creating wealth transfers without any material efficiency gains. However, there may be dynamic efficiencies resulting from improving transmission pricing signals for future investments.

We appreciate that the Electricity Authority's statutory objective is based on economic efficiency and does not include a consideration of fairness. However, in the context of the EPR it is worth noting that the status quo TPM for interconnection users could in many respects be considered "fair." Interconnection charges cover over 70% of Transpower's annual revenue requirement and are essentially allocated fairly on a non-discriminatory basis across to all load customers across New Zealand. This is a very common approach for major infrastructure investments like roading. A more beneficiary pays-like regime applied to this sunk asset base as proposed by the Authority, rather than for new transmission investment, could be seen to create "unfairness" particularly as it would impact disproportionately on some of the more vulnerable communities in New Zealand compared to the status quo.

Electricity generators currently pay for the costs of transmission to directly connect them to the transmission grid. The Electricity Authority's initial TPM proposal included measures to charge generators for a greater proportion of the shared transmission grid. However, the Authority subsequently abandoned this proposal after concluding that this would distort the signals in the highly efficient wholesale market and result in higher consumer pricing[81]. Looking forward, with the significant generation investment to 2050 required, charging generators for a greater transmission costs would create substantial uncertainty for future investment and consumer pricing outcomes which would negatively impact on a least-cost transition for New Zealand to a low carbon economy.

[81] Our submissions to the Electricity Authority on the Transmission Pricing Review which detail our position further are available at: https://ea.govt.nz/development/work-programme/pricing-cost-allocation/transmission-pricing-review/consultations/#c15374

Distribution

20. *What are your views on the assessment of distributors' profits?*

We support the view that there is potential for distributors to cross-subsidise their competitive businesses from their non-competitive core network business. Contrary to the EPR panel's view, Mercury considers there is evidence that such cross subsidisation has occurred as we point out below in the case of Vector[82].

The industry concern is broader than looking at whether the distributor has made excessive profits. Cross-subsidisation, if allowed to occur, will have a significant chilling effect on competition. Distribution monopolies have three distinct advantages over current competitive businesses:

a. Distributors can claim the costs of installing investments in the home where there is significant competition for new energy solutions.

The current definition of the lines service extends beyond the meter and into the home, which enables distributors to install technologies like batteries and potentially solar in homes for "free" while recovering the costs as regulated revenue from all other electricity consumers on the network. In January 2017 for example Vector wrote to a number of Auckland households offering a "free" Tesla Powerwall version 1 battery (see figure 1).

Such investments can easily be justified as enhancing network reliability, but currently there is no way for market participants or the regulator to be able to assess whether this is the case or whether there may have been lower cost providers of the same or a different service that would have achieved the same effect. Such requirements are common in Australia, for example where a regulatory investment test regime for distribution investments is required.

[82] See also page 9 of the ERANZ EDB Review.

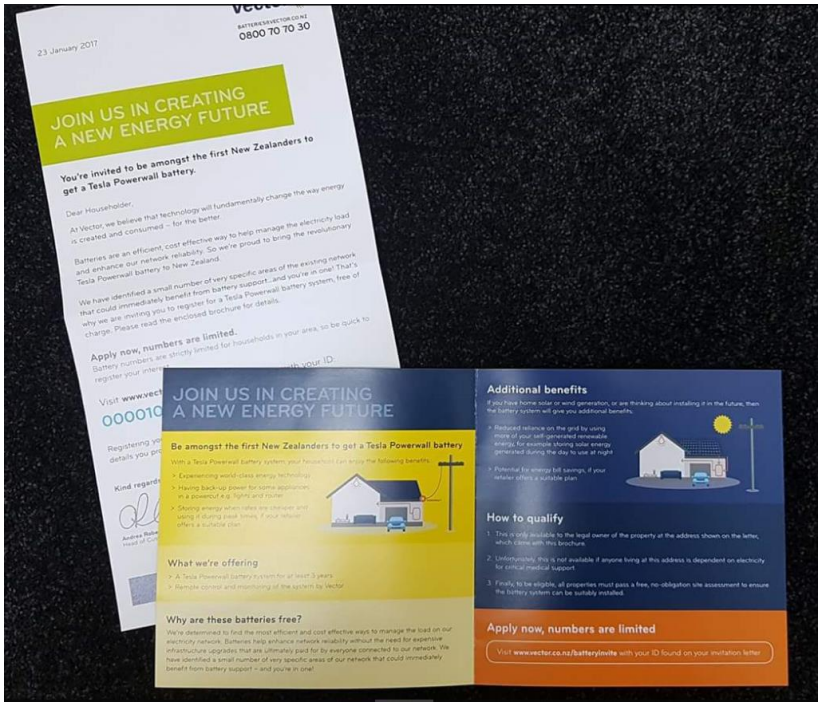


Figure 1: Free battery communications from Vector

The main impacts this can have for consumers is that it lessens the ability of the competitive market to offer better solutions at potentially lower cost. As monopolies can recover costs from all consumers on their networks, they face no risk and no commercial loss from getting the choice of technology wrong.

Further, it creates incentives for distributors to favour specific technological solutions that may be of future financial benefit to its related businesses. Many distributors acquire related parties that earn unregulated revenue by providing services to the regulated business. Tree management is an example, and evidence was provided to the Commerce Commission illustrating that distributors were contracting with their own businesses at costs above what the competitive market would deliver.[83] The Commerce Commission has recently tightened the rules around related party transactions. Vector acquired a related party, HRV, which offers a solar and battery services in competitive markets.

The Vector "free" battery offer provides a salient example of the above issues. Vector and its majority shareholder, Entrust, have an agreement that commits Vector to spend $10.5m per year on projects in the Entrust district. Historically this fund has been used for undergrounding projects in the Entrust district, but from 2015 the parameters around the fund were changed and extended to include new technology initiatives such as solar and battery and EV chargers. The programme is now known as the Energy Solutions Programme.

In its report to Entrust in 2015/2016 Vector noted the following (emphasis added):

[83] See Asplundh submission to the Commerce Commission (11 August 2016) "Input Methodologies Review - Related Party Transactions".

Future Of Energy

Installation of 3kW Vector Solar and 6.4kWh Tesla Powerwall battery combination systems into 100 homes and 30 schools commenced in April, highlighted by the official New Zealand launch of the Vector Solar and Tesla Powerwall energy systems at Rongomai School on 13th May.

The Honourable Simon Bridges, Minister of Energy and Resources officially launched the first Vector Solar and Tesla Powerwall energy system. The launch was attended by Melanie Higgin, US Consul General, Candy Gree, Deputy Chief of Mission from the US Embassy, Entrust trustees, and members of the Vector board and executive team, as well as distinguished guests from the local community.

Of the 130 systems targeted for installation within this tranche, 36 were installed by the end of the year. The balance of the 130 systems have been procured, are held within inventory and are expected to be installed by the end of September. Vector will use the project to kick start the company's entry into the residential energy storage/management market in September 2016. Additionally Vector has completed installation of solar systems at Ngati Whatua's properties in Orakei.

Funding, therefore, that had previously been allocated to undergrounding, which is of significant resilience benefit for consumers, has been redirected to fund Vector's entry into competitive markets.

Electric vehicle charging is another example where the Commerce Commission has clarified costs should not be being recovered from consumers, as it does not contribute to reducing the cost of the lines services. Mercury acknowledges that many distributors may have made such investments for altruistic reasons to encourage EV uptake which is admirable given the wider benefits for New Zealand.

However, Mercury agrees such investments should be transparent and in the wider consumer benefit. "Free" EV charging can have regressive impacts as it directly benefits mainly owners of EVs who are unlikely to be the most vulnerable. Further over time it would drive up the cost of distribution charges which will further impact vulnerable consumers. Mercury supports distributors and other electricity businesses installing charging infrastructure where it is funded directly from earnings rather than cross subsidy.

b. Distributors have access to data that can be used in competitive markets

Mercury outlines its views on consumption data in more detail in response to Question 21 below. The main point is that distributors are able to request customer consumption data from retailers for network planning purposes. Such data could have significant commercial value for related parties for some distributors, allowing them to cherry pick high value customers their competitors can't identify as easily. Retailers have been seeking much tighter assurances from distributors as to how such data is being used with varying success and there is a role for regulation to provide clarity (see our further views below on measures).

c. Distributors control pricing of the network for all users and also may control competitors' distributed energy resources

Mercury considers the lack of effective ring-fencing arrangements to limit the entry of distributors into competitive markets will create perverse incentives for distribution pricing and promote the regressive outcomes for consumers that the EPR panel has identified should be avoided.

Distributors who acquired related parties earning unregulated revenue, for example in battery and solar products, face little incentive to introduce cost-reflective pricing structures that may benefit all consumers as a whole but disadvantage their commercial interests. As the EPR panel has noted, without cost-reflective pricing, there will be significant future costs for consumers which will impact on the most vulnerable disproportionately.

While it is unlikely distributors would introduce pricing that would explicitly favour their own commercial interests, they could prioritise the dispatch of their own distributed energy resources in any centralised platform. Many distributors are highlighting the need for, and investing in, such platforms. This is giving rise to questions about equal access which as the EPR panel notes is being looked at currently by the Electricity Authority, which Mercury supports.

21. *What are your views on the assessment of barriers to greater efficiency for distributors?*

We support the ERANZ qualitative review of "EDB Efficiency and Performance" dated 13 August 2018 (ERANZ EDB Review) and the proposals which include improving the legislative and regulatory frameworks and ensuring that consumers' voices are better heard so that networks are not upgraded where there is no consequential improvement in service quality and reliability.

Distribution pricing

We agree with the EPR panel's position on distribution pricing and the challenges.

The impact of the LFCT Regulations and potentially the over-allocation of distribution charges to residential consumers is creating excessive variability of electricity bills. This is also exacerbating the seasonal variability that occurs in bills when household consume more electricity in winter. This puts huge seasonal pressure on household budgets.

A series of reports by Concept[84] on the impact of new technologies quantified that **current distribution tariff structures are create misaligned signals and encourage suboptimal decisions which could cost $1.8 billion over the next 20 years**. The ACCC review has some useful information on the benefits of cost-reflective pricing and Australia is transitioning down that route. However, we disagree with the mandated recommendation in Australia for all customers to be switched to cost-reflective tariffs but we do consider all distributors should have to offer a cost-reflective tariff to retailers.[85]

[84] Concept "Electric cars, solar panels, and batteries in New Zealand Vol 2: The benefits and costs to consumers and society", June 2016.
[85] Retail Electricity Pricing Inquiry—Final Report 2018 Part 7.3.

We support cost-reflective pricing but the interests of consumers need to be considered and the retailer is best placed to work with the consumer on pricing options and appropriate transition. Cost-reflective pricing should therefore be initially 'opt-in' for customers selected by the retailer, and the market should be allowed to develop and evolve. Any changes to distribution should subject to transition (we suggest 5 years to align with the phase out of the LFCT Regulations) and supplemented by measures to assist vulnerable consumers (which we consider could be addressed through better targeting of the WEP).

To date, reform of distribution pricing has been challenging due to the large number of distributors and the lack of consensus around the need for reform. The process has been driven by the Electricity Authority which is keen to see the benefits from pricing reform but has been constrained by the slow progress from distributors. Roadmaps[86] from all distributors for cost-reflective pricing have been mandated by the Electricity Authoirty but show little consistency or ambition, reflecting a general lack of interest in reform from distributors. We are also concerned that distributors who have invested in commercial solar and battery storage businesses may be dis-incentivised to change pricing methodologies as their solar business interests' conflict with them moving to cost-reflective pricing (see discussion in previous section).

Mercury considers the EPR panel should recommend that a default distribution pricing tariff should be required to be implemented by distributors and offered to retailers.

Consumers favour simplicity over complexity, and analysis by Concept indicates that a substantial proportion of the benefit from distribution pricing reform can be achieved from relatively simple pricing structures that increase the proportion of fixed charges and provide some limited signalling of peak demand.[87].

Efficiency pressures and Business Size

As the EPR analysis indicates, 50% of New Zealand's distribution networks could be considered sub-scale and face challenges in terms of managing costs and delivering innovation.

Price quality regulation should be introduced across all networks and greater cost sharing among distributors should be encouraged. The Commerce Commission should review the feasibility and benefits of extending regulation to community trust-owned networks.

The review should also consider impacts that the Optimised Deprival Value (ODV) methodology has had as a basis for determining fair and reasonable charges in the regulated sector. ODV resulted in higher network charges upfront for consumers than a historic cost approach.[88]

We also agree that the Commerce Commission should be enabled to use performance bench-marking to set default-quality regulation which is currently prohibited under the Commerce Act.

[86] In October 2016, the EA requested each distributor publish a 'roadmap' for moving to more efficient pricing by 1 April 2017: https://www.ea.govt.nz/development/work-programme/pricing-cost-allocation/distribution-pricing-review/development/roadmaps-and-next-steps/

[87] Concept "Issues and Options for Moving Towards More Cost-Reflective Network Tariffs" (2 November 2017)

[88] NZIER The Origins of ODV (2000) https://nzier.org.nz/static/media/filer_public/40/68/40686af5-52ca-4a0c-bb2e-1259dc34c94f/origins_of_odv.pdf

Standardisation

The current lack of standardisation among distributors creates unnecessary costs in terms of negotiating bespoke use-of-system agreements and dealing with the considerable number of pricing structures. This can also act as a barrier to new entrant retailers, particularly outside the major metropolitan centres.

Mercury supports the EA's proposed Default Distribution Agreement (DDA) to encourage standardisation. There is work that could be done to improve standardisation of other areas such as pricing, data systems, monitoring and metrics.[89]

Non-core investments/lack of focus

Mercury share the ERANZ EDB Review[90] concerns about the significant growth in non-core investments by distributors. We consider regulators should oversee non-core investments, particularly any 'trade-off' to the primary business of network operation.

Competition

Currently the service regulated under Part 4 of the Commerce Act is 'electricity lines service'[91] and in the case of distributors it is 'the conveyance of electricity by line'.[92] The Commerce Commission considers that these definitions can include investments in emerging technologies behind the meter.[93] The Electricity Authority, which is responsible for implementing the Electricity Industry Act 2010 (EIA), has concluded that battery storage is 'generation' and EV charging infrastructure is 'retailing' under the Act. As such, distributors may include investments in these technologies in their regulated asset base as part of the lines service (albeit they are constrained by the statutory thresholds).[94]

Our primary concern relates to the provision of technologies into the home by distributors and retailing, where significant competition exists. As highlighted in previous sections, competition risks being undermined where distributors can roll out new technologies that are provided in competitive markets, as regulated assets. We refer to the ERANZ EDB Review which states that the ability for distributors to retail is "*contrary to the general approach underlying the historic separation of the monopoly electricity businesses from the competitive generational and retailing arms of the*

[89] See ERANZ EDB Review pages 19 – 21.
[90] Pages 7 – 8.
[91] Commerce Act 1986 Section 54C(1)(a).
[92] Ibid.
[93] But they did not see any reason at that time to amend the input methodologies under Part 4 of the Commerce Act: See https://comcom.govt.nz/news-and-media/media-releases/2016/commission-releases-draft-decisions-on-review-of-rules-for-regulated-electricity,-gas-and-airport-services.
[94] Electricity Industry Act 2010 sections 72, 75, and 76. There must be separate ownership if a distributor is also generating more than 250MW. Corporate separation and arms'-length rules apply if a distributor also generates more than 50MW or retails more than 75Wh per year to customers connected to their network.

industry."[95] And, with over 40 retail brands in the electricity sector, any justification that may have existed for allowing distributors to retail no longer exists.[96]

Given the growing number of investments in the emerging technology space and the negative impact on competition, the scope of the regulated lines service under Part 4 of the Commerce Act should be narrowed to exclude behind-the-meter investments.

As noted in previous sections, Vector has provided 'free batteries' to households, justified based on enhancing network reliability.[97] However, it is not currently possible to for other providers of battery services to validate such claims as there is no transparent way for the market to understand the network's needs or tender to provide the network the same or a similar service that reduces network demand and that may be more cost-effective for consumers. We have also seen another distributor include EV charging investments in their Regulated Asset Base giving them guaranteed cost recovery.[98]

Policy and regulatory settings should encourage direct investment in new technologies "across all sectors of the industry".[99] There should be improved transparency, to give industry confidence that there is equal access and a level playing field. This should be a joined-up approach between the Commerce Commission, the Electricity Authority, and the Innovation and Participation Advisory Group (IPAG). Industry should be involved in the process, including retailers who can advocate for the consumer.

The threshold under the EIA should be removed for retailing. With world-leading retail competition now evident in New Zealand, the concerns that led to the removal of the restrictions of distributors in the past no longer apply. This would also greatly assist in resolving the current tensions between retailers and distributors regarding the efficient sharing of consumption data. Such data has significant commercial value in competitive retail markets and retailers currently have little assurance such data is being used only for network planning purposes.

The thresholds for the EIA should also be revised for generation. Mercury appreciates that distributed generation can be a viable least-cost option at the extremes of the distribution network where it may be uneconomic to build network. Mercury would support a revision to the generation threshold to reflect this distinction but considers the current 50MW threshold (which includes batteries following the Electricity Authority's guidance) is too high given the impact to competition such investment in battery storage could represent to consumers. Mercury notes that the current system is flexible enough to consider exemptions as was evidenced by Top Energy's application for

[95] ERANZ EDB Review page 18.
[96] Ibid.
[97] Vector 'free battery' offer to consumers on the network.
[98] Orian submission to the Commerce Commission responding to their Open Letter on Emerging Technologies: http://comcom.govt.nz/regulated-industries/electricity/performance-analysis-and-data-for-distributors/impact-of-emerging-technologies-in-monopoly-parts-of-electricity-sector/

[99] Te Mauri Hiko Transpower White Paper 2018, page 7.

its Ngawha geothermal station, although concerns were raised as to the competition impacts during that process.

Business size

Mercury acknowledges there are unlikely to be material efficiencies given the density effects of networks from distributor amalgamation[100]. However, we agree that efficiencies of scale are possible by means other than amalgamation, including contracting between distributors, joint ventures, collaboration and also 'standardisation' (see our points above). The amalgamation of PowerNet and Otago Power Services Limited in 2016 is an example of benefits being gained from their standardised processes and practices.

Metering data

One of the many benefits of New Zealand's electricity market which is often cited is our high penetration of smart metering infrastructure, which enables significant competition benefits such as faster consumer switching and innovative pricing products. The roll out of smart metering infrastructure has been led by the incumbent vertically integrated retail sector, which signed the initial contracts with Metering Equipment Providers (MEPs) to support the development of their metering asset base.

Retailers contract with MEPs for consumption data. This is used to bill customers and provide them with information as to their usage. As this data is personal, we are required to seek appropriate checks and balances to ensure privacy is protected before sharing this information. The Office of the Privacy Commissioner has also requested that distributors review whether aggregated/anonymised can meet network planning needs and to ensure that personal information is not collected unnecessarily.[101]

Retailers are willing to provide anonymised consumption data to distributors where there is a justifiable reason (such as to assist them with analysis for pricing reform) and subject to constraints but we have no evidence that distributors require more granular consumption data for network planning purposes. The consumption data that retailers contract for is of limited use to distributors in an outage situation. This is because retailers will generally only receive consumption data from an MEP only once in every 24-hour period, as any more frequently is not required for retailer billing purposes.

Mercury supports the work of the ERANZ Data Working Group (DWG) who have been proactive in developing a data request template for distributors to complete, setting out reasons and detail around data requests. The DWG has also clarified that retailers do not contract for and therefore do not hold voltage data or outage data and has resolved the misconception in the sector that retailers

[100] See TBD Advisory report on the "Estimated Efficiency Gains from Amalgamation of Electricity Distribution Businesses" dated 31 August 2018

[101] Privacy Commissioner Public Statement about Bulk Disclosure of Smart Meter Data (26 May 2017).

are obstructing access.[102] The DWG fully support distributors contracting with MEPs for these services on commercial terms.

Mercury notes much of the tension around data access arises because of concern regarding distributors' entry into competitive markets. If this issue were to be addressed through appropriate ring fencing or redefinition of the lines service and the reintroduction of the restrictions on distributor retailing, access to data would no longer be a concern.

Governance

We are concerned that reduced efficiency is the trade-off from investments in non-core activities as set out in the ERANZ EDB Review.

For example, the example provided above of Entrust's 2015 decision to allow Vector to use funding (historically used for undergrounding) for investments in new technologies (including batteries into homes and schools and offering free batteries to customers)[103] furthers Vector's commercial interests rather than its role as a community-owned distributor. The April 2018 storms showed reliability and resilience issues on the network that could be improved by undergrounding. There is a lack of oversight and governance of distributor activity. Some distributor decisions seem to be haphazard and lack consideration of the long-term interest of the consumer.

Asset Management and Planning

Mercury does not have a view on the time-frame for infrastructure planning but Asset Management Plans should be more explicit around opportunities for the market. The ERANZ EDB Review also notes concerns around the current price-quality regulatory regime and that consumers are paying too high prices because it is overly generous.[104]

Mercury considers disclosure relating to network investments should be significantly improved[105]. We have welcomed the increased scrutiny the Commerce Commission has introduced to provide greater clarity as to how distributors are treating and recovering the costs associated with new technologies. This should continue to be developed with enough detail to allow market participants and consumers to make informed assessment of whether distributors have made efficient procurement choices that promote the long-term interests of consumers.

We note various distributors have been reportedly in breach of quality standards in the last five years[106]. In Mercury's view, this shows a lack of focus among some distributors on maintaining their

[102] Letter from Nick Wilson (Chair of the ERANZ Data Working Group) to Rob Bernau (for the Commerce Commission) dated 16 August 2018.
[103] Entrust 2017 Annual Report page 5.
[104] ERANZ EDB Review pages 12 – 17.
[105] Mercury letter to Commerce Commission responding to "Open Letter on Gathering Information Relating to Emerging Technologies" dated 25 May 2018 at page 2.
[106] In November 2017, the Commerce Commission informed us that they were reviewing quality standard breaches by Vector, Aurora, and Alpine Energy. Aurora Energy and the Commerce Commission are currently in

core assets. The Commerce Commission is bringing legal proceedings against some distributors and is reviewing the quality standards, which we support. Mercury supports improvements to the frameworks to ensure reliability include benchmarking, improved monitoring and enforcement, and a re-focus on core investments.

22. *What are your views on the assessment of the allocation of distribution costs?*

We refer to our response to Question 4.

23. *What are your views on the assessment of challenges facing electricity distribution?*

Mercury supports consideration of whether a Distributed System Operator could add value as we have concerns that if distributors assume control of distributed energy resources and are at the same time involved in the distributed energy market, they will have incentives to reduce access for competitors. This is not in the long-term interests of consumers. Refer to our response at Question 20.

litigation over breach of quality standards in 2016 and 2017: https://comcom.govt.nz/news-and-media/media-releases/2018/commission-to-file-proceedings-against-aurora-energy-for-breaching-quality-standards. Then back in 2016 the Commerce Commission issued a warning letter to Wellington Electricity after it failed to comply with minimum standards for network reliability in 2013 and 2014: https://comcom.govt.nz/news-and-media/media-releases/2016/commission-warns-wellington-electricity-over-quality-standards.

Summary of feedback on Part Four

24. ***Please summarise your key points on Part four.***

Generation

- We agree with assessment that the wholesale market is highly efficient and that competition is effective.
- There is no evidence any short-term market power has led to inefficient outcomes. Progressive changes are being made to regulatory frameworks to monitor for any market manipulation.
- We agree barriers to generation competition are low.
- We support the Virtual Asset Swap contracts phasing out over the period to 2025.
- We agree the current market can meet projected increases in demand for electricity. Whether this occurs at least cost will be highly dependent on policy settings.
- We agree that targeting 100% renewable electricity will drive up consumer costs unnecessarily. Mercury supports a renewable low carbon energy target for this reason.
- There are potential risks to the future availability of (currently thermal) generation sources used to provide deep energy storage during dry years and batteries will never economically fill this role.
- We need to avoid subsidies for renewable technologies as these have demonstrably driven up consumer costs in Australia and the UK.
- The market will provide for enough back-up generation into the future as it does currently.
- We note that no evidence was found to indicate generator-retailer profits are excessive compared to underlying costs.
- Historic cost pricing has been roundly discredited and would lead to unstainable cost for consumers to implement estimated at $180m as well as have a chilling effect on investment.
- Mercury rejects the work of Poletti based on critiques from various sources that have been provided to the EPR.
- We note that water pricing for hydro generation has also been largely dismissed by the government's Tax Working Group.

Contract Market

- New Zealand's futures contract market is world leading and has enabled significant retail competition that has helped reduce the competitive elements of the electricity bill.
- There is significant liquidity in the futures market to manage risk for merchant retailers and generators – over 24MW daily can be traded. This represents enough electricity to power 24,000 households or 10 times the average daily retail churn and is enough volume for a 50MW generator to contract for 3.5 years within two days.
- The hedge market is for managing long term risk. Liquidity disappears in even the largest markets during times of stress. Market participants should be hedging risks well in advance of market stress.
- Mercury agrees the current voluntary market-making arrangements are not sustainable
- Part of the issue with the current model is that while retail competition has expanded significantly, the requirements for market making have not.

- The Electricity Authority is currently working proactively to transition the current voluntary arrangements to commercial terms which should address the issues identified in the paper.
- The market for commercial and industrial customers is highly competitive.
- Requiring separation of vertically integrated trading arms would not increase liquidity and would raise costs to consumers. We do not consider this would be in the long-term interests of consumers.

Retail

- We agree that consumers are benefiting from retail competition and that there is significant innovation occurring in retail products and services.
- However, many retailer propositions remain niche and their ability to scale remains to be seen.
- The number of retailers and level of consumer retail switching is among the highest in the world, which is remarkable given New Zealand's relative size
- Consumers don't switch based on price alone and there may be insufficient incentives for consumers to switch more, given New Zealand's strong focus on rewarding loyalty. Mercury for example over the past two years **has provided $7.2m in direct loyalty benefits to customers** through incentives such free power days and offering Airpoints on purchases.
- Regulated standing offer tariffs in the United Kingdom and Australia have reduced competition and innovation and focussed those markets only on discounting. As a result, service levels and customer satisfaction rates are much lower and fines much higher than in New Zealand.
- The EPR's analysis shows that fixed pricing is significantly value-adding for consumers and is consistent with Mercury's view that consumers value certainty over prices rather than highly variable pricing.
- The EPR's analysis shows there is no material variance in pricing between incumbents and new entrant retailers, which varies by network area.
- The overseas experience shows interventions to address perceived issues with pricing variance ended up exacerbating the issues.
- Door knocking may not be leading to optimal outcomes for vulnerable consumers as there is little ability to check what was advised verbally to the customer through the door knocking process.
- Mercury strongly encourages the EPR panel to provide further detail on the role pre-pay products play in supporting vulnerable consumers.
- Customers on Mercury's pre-pay product GLOBUG typically benefit by around $400 per annum by retaining value they had previously lost to repeated missed post-pay prompt payment discounts, physical disconnection / reconnection visit costs and debt management fees.
- As a result, for the same total cost, GLOBUG customers can purchase approximately 1,400kWh of additional energy (enough to run a 2kW heater for 7 hours a day on every day of winter).
- We welcome the EPR analysis that pre-pay pricing is competitive with post-pay pricing
- Pre-pay customers do not miss out on prompt-payment discounts, which has been an issue raised by the EPR panel
- While the EPR's analysis points to fees for pre-pay top-ups, such fees are cost-reflective and also exist for consumers paying over the counter on post-pay products and for GLOBUG they are set lower.

- The EPR's analysis shows the costs of any top-up fees are more than offset by the value pre-pay customers receive from not missing out on prompt payment discounts.
- Pre-pay customers also avoid fees for reconnection and disconnection which can range from $30 to $150.
- For those customers experiencing multiple disconnections and reconnections, these costs are likely to be substantial. We encourage the EPR panel to assess these benefits and we can assist in providing further data.
- Pre-pay has a low penetration currently of around 1.3% of households versus the 6% the EPR First Report identified as vulnerable.
- Mercury considers barriers to entry are very low in the market as evidenced by the significant number of retailers compared to New Zealand's small population.
- There is a lack of any disruptive retail proposition at scale, but intense competition means incumbents have had to constantly innovate and offer value to loyal customers.
- The evidence does not point to any material competition issues with saves and win-backs. Mercury supports the MDAG review process continuing to deal with any issues.

Transmission

- The process for TPM reform could have been improved by a focus on earlier problem definition.
- Transmission pricing has the potential to negate any reallocation gains for residential consumers that may be gained from any potential rebalancing of distribution costs.
- Mercury supports a prospective application of any beneficiary-pays approach to avoid significant price impacts, particularly for areas with a higher proportion of vulnerable consumers.
- Greater generation charges for transmission are not supported as they were rejected by the Electricity Authority based on impacting wholesale market efficiency and consumer pricing.
- Greater generation charges for transmission risks negatively impacting on a least-cost transition for New Zealand to a low carbon economy.

Distribution

- We are concerned that distributors are compromising quality of core investment infrastructure to take part in offering competitive products and investments in non-core business activities; and that they have an unfair advantage as a monopoly in offering competitive products.
- Contrary to the EPR panel's view, Mercury considers there is evidence that such cross subsidisation has occurred in the case of Vector's investments in the competitive battery market
- Current regulation enables distinct advantages for distributors over competitors in markets for new technologies through their ability to recover costs from all consumers (and avoid risk), through the access to consumption data for network planning purposes and through their control of network pricing and potentially distributed energy resources.
- The costs of lines charges are increasing while the quality is declining. The regulatory framework and governance structure should be reviewed to ensure a level playing field, and to improve transparency and accountability of distributors and their investment decisions.
- The excessive variabilisation of lines charges needs to be addressed as it is contributing to higher bills in winter than is necessary and driving perceptions that electricity is expensive, which it is not.

- Current distribution tariff structures are creating misaligned signals and encouraging suboptimal decisions which could cost $1.8 billion over the next 20 years and have significant regressive implications.
- Consumers favour simplicity over complexity and the evidence suggests a significant proportion of the benefits from cost-reflective pricing could come from simple pricing structures.
- There is industry consensus that the LFCT Regulations should be removed.
- The lack of standardisation among distributors creates unnecessary costs in negotiating bespoke use-of-system agreements and dealing with the multiple pricing structures.
- New Zealand's smart metering infrastructure, which has enabled significant benefits for consumers, has been underwritten by incumbent generator-retailers
- Much of the tension around data access arises because of concern regarding distributors' entry into competitive markets.

Solutions to issues and concerns raised in Part four

25. ***Please briefly describe any potential solutions to the issues and concerns raised in Part four.***

Generation / Contract Market

- The EPR should recommend the Government revise the 100% renewable electricity target to a renewable low carbon energy target
- The National Policy Statement for Renewable Electricity Generation should be reviewed
- The Electricity Authority should be supported in in work to transition the current voluntary hedge market-making arrangements to commercial terms
- This could include examining the option to expand market making requirements for all generators and retailers in proportion to their generation and load and consider multiple settings for managing such requirements in stress situations.

Retail

- Given the strong performance of the retail sector, in Mercury's view significant intervention is not required.
- However, we would support retailers being required to provide information to their customers periodically, ensuring they are aware they can switch and providing links to relevant resources such as Consumer Powerswitch where they can compare whether they are on the best deal for them.
- This could occur, for example, when customers roll-off fixed term pricing deals or acquisition rates.
- Support for vulnerable consumers could be addressed through targeted funding for energy literacy advice services for vulnerable consumers through budgeting agencies. The Electricity Authority is the most credible entity to support this.
- The EPR panel should undertake further analysis on the benefits pre-pay can deliver for vulnerable consumers.

- Prompt payment discounts should be cost-reflective as per our recommendations in section three.
- The Market Development Advisory Group (MDAG) process should be supported to reach any conclusion on any modifications to the saves and win-backs regime
- Door knocking practices should be reviewed to understand if banning the practice would lead to improved outcomes for vulnerable consumers.

Distribution

- The legislative and regulatory framework must be fit-for-purpose as distributors who are natural monopolies move into offering competitive products.
- Mercury supports effective ring-fencing of distributor investments in new technologies, or measures that would material achieve the same intent such as redefining the lines service to exclude the home.
- The LFCT Regulations should be phased out over five years
- A default distribution pricing tariff should be mandated for distributors to offer to retailers but not be mandated for consumers.
- This default tariff should progressively increase fixed distribution charges (in line with LFCT Regulations phase out) and introduce limited peak signalling to encourage efficient consumer behaviour.
- We support the EA's proposed Default Distribution Agreement to encourage standardisation. There is work that could be done to improve standardisation of other areas such as pricing, data systems, monitoring and metrics.
- Price quality regulation should be introduced across all networks, encouraging greater cost sharing among distributors. The Commerce Commission should review the feasibility and benefits of extending regulation to community trust-owned networks.
- The review should also consider impacts of the Optimised Deprival Value (ODV) methodology, as a basis for determining fair and reasonable charges in the regulated sector.
- the Commerce Commission should be enabled to use performance bench-marking to set default-quality regulation which is currently prohibited under the Commerce Act.
- The Commerce Commission should investigate further any inefficiencies with network pricing resulting for residential consumers.
- If reallocation is able to be justified, it should be phased in over time. To address vulnerability, network areas with the highest deprivation scores should be targeted first.
- The ability for distributors to retail up to a certain threshold should be removed. This would also assist in resolving the current tensions between retailers and distributors regarding the efficient sharing of consumption data.
- The threshold for distributors being able to own generation should be revised to reflect investments only in situations where building network would be uneconomic (e.g. rural areas).

Part five: Technology and regulation

Technology

26. *What are your views on the assessment of the impact of technology on consumers and the electricity industry?*

Mercury agrees residential consumers will benefit from new technology. We refer the panel to the discussions on the outlook for electricity prices in Question 6 which outlines the analysis we provided to the Productivity Commission.

27. What are you views on the assessment of the impact of technology on pricing mechanisms and the fairness of prices?

Mercury agrees there is a need to reform distribution pricing as the excessive variabilisation of lines charges is contributing to higher bills in winter than is necessary and again driving perceptions that electricity is expensive. We also agree with the EPRs problem definition that current flat pricing is sending inefficient signals for investment in new technologies which will have regressive impacts.

We refer the EPR Panel to our detailed views on distribution pricing reform in Section 4 Question 20.

28. What are your views on how emerging technology will affect security of supply, resilience and prices?

Mercury agrees with the assessment that many new technologies, in comparison to other jurisdictions, have little benefit in New Zealand given our generation mix and demand patterns. We agree with the Transpower analysis that solar power, even if widely adopted by residential consumers, would not offer any help in meeting winter peak demand.

We refer the EPR panel to our responses Question 6 which outlines our views based on the analysis we provided to the Productivity Commission. It is important that there is a proper understanding of the deep energy storage challenge in New Zealand and that battery storage will never be cost effective under any cost reduction scenario to substitute for the role flexible sources of thermal generation play in providing this role.

Regulation

29. What are your views on the assessment of the place of environmental sustainability and fairness in the regulatory system?

We agree with the analysis of the Productivity Commission that the costs of giving the Electricity Authority or the Commerce Commission a specific sustainability objective would likely outweigh the benefit and that an economy-wide approach should be favoured.

We also agree with the EPR First Report analysis that the lack of targeting of the WEP is inconsistent with the recommendations from the ACCC review and should be addressed by making the WEP

consistent with the targeting for insulation subsidies (see further discussion and recommendations to section three).

30. What are your views on the assessment of low fixed charge tariff regulations?

We agree that the regulations are poorly targeted and have unintended consequences - for example vulnerable consumers that are high users do not benefit from the low fixed charge tariff and all low users benefit regardless. Further, they constrain how cost-reflective distribution pricing can be implemented (stepped or tiered prices).

Mercury supports the regulations being phased out with over a five-year transition period. They should be replaced by a default distribution pricing tariff should progressively increase fixed distribution charges (in line with LFCT Regulations phase out) and introduce limited peak signalling to encourage efficient consumer behaviour. See our discussion in response to Question 21 for further details.

Further targeting of the WEP to vulnerable consumers is also required to ensure any impact from distribution pricing reform is manageable. Finally, energy literacy can address any gaps understanding the options that are available for consumers to benefit from energy efficiency and/or reduce bill-shock.

31. What are your views on the assessment of gaps or overlaps between the regulators?

Part 3 of the EIA allows distributors to generate and retail up to certain thresholds. If outside these thresholds, then the distributor must structurally separate the retailing/generating arm of its business.107 However, there is little transparency and lack of clarity as to the total generation/retailing a distributor is producing – this falls into the Commerce Commissions ambit (being part of the disclosure regime under Part 4 of the Commerce Act); and distributors generating/retailing within the thresholds can inhibit competition (the Electricity Authority's is to promote competition but is statutorily constrained).

Mercury agrees this issue is creating uncertainty and has recommended the thresholds for retail and generation should be amended as outlined in our response to Question 20.

We support the Electricity Authority's DDA. The roles of the regulators need to be clarified and if the EA is unable to mandate terms and conditions between distributors and retailers then this needs to be addressed. The Commerce Commission quality standards108 are very high-level benchmark terms that do not give the same accountability as a DDA would.

Further, whether the DDA is implemented or not, what appears to be missing in the regulatory regime are standardised terms setting out what the core services are for distributors that go beyond the current reliability standards against which they can be held accountable. Regulation in this space appears to have fallen though the gap.109

[107] Ibid.

[108] SADI and SAIFI.

[109] See our letter to the Commerce Commission dated 22 December 2017 responding to its "Open Letter – Priorities for the Electricity Distribution Sector for 2017/18 and Beyond".

There are also overlapping issues such as the reform to cost-reflective pricing (which is commissioned by the Electricity Authority but also affects distributor's investment decisions) and the work of the IPAG which will look at incentives to provide access to others to deliver distribution or other services. We fully support a joined-up approach between the Electricity Authority, the Commerce Commission, and IPAG but there must be clarity around scope of each of the moving parts.

We agree that competition is another issue. The regulatory framework is no longer fit-for-purpose and needs to consider the growing investments in emerging technologies by distributors and the unlevel playing field this creates. We also share the concern that distributors may exploit information advantages and use their monopoly service to subsidise competitive ones.110 In 2016111 when the Commerce Commission decided not to amend the Input Methodologies, the emerging technologies market was less mature. Now, we have seen distributors enter competitive markets so the need for intervention is no longer merely theoretical. The Commerce Commission is making some positive steps to gather information from distributors to better understand their investments in emerging technologies. We support this initiative and a continued joined-up approach to ensure that these investments are in the consumer's best interest.

We note the suggestion of 'third-tier' rules to address the competition issues that arise because of the current regulatory setup. We think that there are issues that are better dealt with at the primary or secondary level. It seems there are policy settings that need to be addressed – for example, whether the thresholds under the EIA should be reduced, whether ring-fencing is now appropriate, and/or a re-defining of the lines service for the purposes of Part 4 of the Commerce Act.[112] Conversely, we appreciate the need for flexibility and for the regime to develop as the market evolves.

32. What are your views on the assessment of whether the regulatory framework and regulators' workplans enable new technologies and business models to emerge?

The Electricity Authority is best placed to address any need for regulatory intervention as new business models emerge. At this stage, we think intervention is premature and the likelihood of there being net benefits is low.

The Electricity Authority has also looked at reform needed to accommodate multiple trading relationships.113 We also think it is early days in this space. There needs to be further understanding of what consumers want, how they want to interact with the electricity market, and the size of the pool of consumers who would benefit from this interaction. Currently any net benefits from reform are extremely low.

---

[110] This is a real risk – see our response to question 20, above.

[111] See https://comcom.govt.nz/news-and-media/media-releases/2016/commission-releases-draft-decisions-on-review-of-rules-for-regulated-electricity,-gas-and-airport-services.

[112] See our response to question 21 above for further detail.

[113] https://www.ea.govt.nz/development/work-programme/evolving-tech-business/multiple-trading-relationships/consultations/#c16922

33. What are your views on the assessment of other matters for the regulatory framework?

No specific comment – some of the issues here are duplicated in other sections.

Summary of feedback on Part five

34. *Please summarise your key points on Part five.*

- Mercury agrees residential consumers will benefit from new technology. We refer the panel to the discussions on the outlook for electricity prices in Question 6 which outlines the analysis we provided to the Productivity Commission.
- The excessive variabilisation of lines charges needs to be addressed as it is contributing to higher bills in winter than is necessary and driving perceptions that electricity is expensive, which it is not.
- Current distribution tariff structures are creating misaligned signals and encouraging suboptimal decisions which could cost $1.8 billion over the next 20 years and have significant regressive implications.
- Consumers favour simplicity over complexity and the evidence suggests a significant proportion of the benefits from cost-reflective pricing could come from simple pricing structures.
- We agree with the assessment that many new technologies, in comparison to other jurisdictions, have little benefit in New Zealand given our generation mix and demand patterns.
- We agree with the Transpower analysis that solar power, even if widely adopted by residential consumers, would not offer any help in meeting winter peak demand.
- It is important that there is a proper understanding of the deep energy storage challenge in New Zealand and that battery storage will never be cost effective under any cost reduction scenario to substitute for the role flexible sources of thermal generation play in providing this role. We refer the EPR panel to our responses Question 6 which outlines our views based on the analysis we provided to the Productivity Commission.
- We agree with the analysis of the Productivity Commission that the costs of giving the Electricity Authority or the Commerce Commission a specific sustainability objective would likely outweigh the benefit and that an economy-wide approach should be favoured.
- We agree EPR First Report analysis that the lack of targeting of the Winter Energy Payment is inconsistent with the recommendations from the ACCC review and should be addressed by making the Winter Energy Payment consistent with the targeting for insulation subsidies
- We agree that the Low Fixed Charge tariff regulations are poorly targeted and have unintended consequences
- We agree there are current overlaps with regulators regarding the thresholds for distributors generating and retailing electricity
- We support the DDA being developed by the Electricity Authority

- We agree that the regulatory framework is no longer fit-for-purpose and needs to consider the growing investments in emerging technologies by distributors and the unlevel playing field this creates. See our comments in Question 21
- We consider changes to third tier regulation are unlikely to resolve the key competition issues around emerging technology
- The Commerce Commission is making some positive steps to gather information from distributors to better understand their investments in emerging technologies.
- The Electricity Authority is best placed to address the need for regulatory intervention as new business models emerge.

Solutions to issues and concerns raised in Part five

35. *Please briefly describe any potential solutions to the issues and concerns raised in Part five.*

- Mercury considers the EPR panel should recommend that a default distribution pricing tariff should be required to be implemented by distributors and offered to retailers. See our specific recommendation to Part 4.
- Mercury supports better targeting of the WEP and provision of energy literacy advice. See our specific recommendations to Part 3.
- The EA and Commerce Commission should not have specific sustainability or equity objectives.
- The roles of the Commerce Commission and the Electricity Authority need to be clarified to ensure that the regulators are working together to ensure a level playing field and that gaps in the regulatory framework are addressed.
- The DDA should be progressed as an option for regulators and distributors to provide the core service terms for distribution.
- We support the ongoing work of the Commerce Commission in evaluating the activities of distributors in implementing emerging technologies. However, fundamental change is needed which goes beyond that which would be appropriate for third tier rules.
- The statutory thresholds, ring-fencing, appropriate monitoring and enforcement settings all need to be considered at the primary level. See our recommendations to part four.

Additional information

36. *Please briefly provide any additional information or comment you would like to include in your submission.*

Mercury strongly encourages the EPR panel to give more prominence in its next paper to areas that it considers are working well for consumers and ensure a balanced view of the facts, particularly around the **factors that impact on affordability**. This includes not using 1990 as starting point for the pricing analysis, at this provides a misleading picture of the performance of New Zealand's world leading electricity market.