Welcome to this month's ERANZ newsletter issue #6. View this email in your browser

Welcome from the Chief Executive

Each month I think there isn't much news to share and then we fill up the pages easily. It shows how integrated and important our sector is, from cyber security and identity theft, to ensuring we have a system fit for the future needs of New Zealand.

This month we kick off a new regular guest column to feature views from leading electricity participants. The inaugural feature is from new Genesis Energy CEO, Marc England who offers some fresh eyes and perspectives.

As always feedback welcomed.

Jenny Cameron
Chief Executive, ERANZ

Guest column

Marc England
Chief Executive, Genesis Energy

Much discussed future energy possibilities are quickly turning into the reality of today. The days of one way information and energy flows of a self-serving network industry is not going to survive in an environment of customer control and choice. While many traditional parts of the sector are struggling with the speed and impact of customer-driven changes on their business, others, such as Genesis Energy, are embracing it as a business opportunity.

In recent years I have worked in both the United Kingdom and Australian energy markets and participated in this changing market dynamic. The issues facing those markets are no different than here: rapidly developing new technology and digital services, lower cost of entry for new businesses into the electricity market, flattening consumer demand for energy and, most importantly, a greater desire by consumers for more choice and control enabled by both new technology tools and the decentralisation of electricity supply.

New Zealand has a set of unique advantages and, conversely, disadvantages, resulting in a slower energy evolution over some of the markets I have worked in. On the positive the country has inherited a high degree of renewable generation that should be protected for future generations to come. In addition, I see the isolation of the market and its structure as an ideal platform to test a range of new technologies. Being slow to some of the changes in the energy environment should also allow us to leapfrog the mistakes of others.

On the negative side of the ledger is the distribution structure in New Zealand and a belief in retail markets that competition is based solely around price discounts. I am aware of the history and the range of ownership models for lines companies, however 29 separate lines companies is neither affordable nor sustainable for a country with a population of only 4.5 million. The UK, by comparison, has 12 networks, owned by seven companies. And competition based solely on discounts, well that to me screams of a sector bereft of ideas which is clearly not true.

It is an exciting time for New Zealand's energy consumers and therefore an exciting and challenging time for energy retailers. The business model that was first developed over a century ago by Thomas Edison – generate in a centralised power station, connect customers through a grid and then send them a bill at the end of the month – will change as new technologies take hold.

Installing solar panels was a start but did not truly engage energy consumers. Solar panels are essentially a set and forget product – but they can be so much more.

Storage batteries are the catalyst to change all that. The ability for a consumer to create electrons, store them, use them at times that suit them or sell them to someone else is a complete game changer. While some traditional players in the market will attempt to control them that will only be at the detriment of consumers. Batteries are just the beginning of a new energy 'eco-system' that will meaningfully engage consumers and give them greater choice and control over their energy use. I am not saying it is the beginning of the end of the Grid, but it will see a substantial movement of control and revenue downstream of the meter and into the hands of the consumer.

While the reality of today is very exciting, what is concerning is that there is a real risk that our regulatory environment is not moving fast enough to support the anticipated consumer demand for distributed energy production and new digital and data-driven service.

We are encouraging the various regulators to talk to each other on these matters as decisions reached today will be difficult to reverse and could inadvertently relegate New Zealand into an energy technology backwater. Simply put, the new technologies downstream of the meter should be developed to benefit consumers, not weighted in favour to benefit regulated lines companies that have different incentives, and don't need to go downstream of the meter to manage their networks efficiently.

As an industry we need to reduce infrastructure costs, be clear on the boundaries between regulated monopolies' assets and consumer competitive markets while delivering world-leading solutions for our customers. It is essential we have a market structure and regulatory framework that does not inadvertently stifle new investment and create a barrier to the natural consumer demand for smarter technologies.

Cyber-attack: companies urged to seek GCSB assistance

Electricity companies have been identified as among those that should be using the services of the GCSB as part of their approach to protecting their data and systems from cyber-attack. It is not beyond the realms of fantasy. Ukraine had their electricity system hacked in December 2015 that affected generation, distribution and call centres. Israel experienced malware attacks in January 2016 which affected the supply in the middle of one of the coldest spells in the year, and the US reports attacks once every four days on its electricity utilities. No doubt, companies have their own experiences with cyber-attacks and steps taken to protect against it. Now the Government is offering more tools to assist.

The Intelligence and Security Bill allows private sector companies access to New Zealand's top counter intelligence operators, and at its launch last month the Minister in Charge of the GSCB and SIS, Chris Finlayson, invited the private sector to seek the help of the GCSB – if they weren't already doing so – to protect their vital information: "*There are a number of examples of companies or agencies that have very valuable intellectual property or trade secrets, and we want to protect them as they do their job for New Zealand …*"

Prime Minister John Key said private sector entities were already using the services of the GCSB, "*but I personally think a hell of a lot more of them should, and the reason for that is that we now live in a world where not only most of the secrets but also the operational activity of companies are held digitally. So, if you are an electricity supplier, a water supplier or if you run aircraft navigation systems – all of that work happens now in an electronic environment. There's a risk if those environments are compromised. So, companies have to take cyber security seriously, and we are seeing an exponential number of attacks both on New Zealand companies and on government agencies.*"

Papers released by the Prime Minister's office show that the GCSB has, since April this year, "provided hands-on, highly intensive assurance" to six private-sector organisations. It logged a total of 316 cyber incidents between April and August, compared to 190 in the year to July last year. GCSB’s main counter to cyber threats is the CORTEX project, which deals with threats to “organisations of national significance,” the papers say. “The organisations receiving CORTEX protections include government departments, key economic generators, niche exporters, research institutions and operators of critical national infrastructure.”

Identity theft: a balancing act

Identity theft is a rising issue in the electricity retailing industry. Recent reported examples have involved Mercury, Powershop, Meridian, and then-Mighty River Power. All retailers are likely to have been targeted at some point and there have also been incidents involving phone companies.

Mercury

In July, Mercury made changes to its sign-up process after it turned out that a man they believed owed them $1500 was in fact the victim of identity theft. The victim was contacted by a debt collection agency who said he owed the money, but he had never signed on with Mercury and soon discovered that his identity had been stolen, with the thief using his full name and date of birth to establish the account. Mercury’s process of seeking identification before the debt collection referral had failed to prevent the referral from taking place. In addition to seeking identification during the pre-referral credit process, Mercury now also asks for formal identification during sign-up.

Powershop, Meridian, Mercury

As reported by the media in August, a woman will be sentenced later this month after admitting setting up three electricity accounts – with Powershop, Meridian, and Mercury in late 2014. She pleaded guilty to three charges of obtaining by deception and one of using a document to gain pecuniary advantage after setting up the accounts in the name of someone she went to school with. The accounts racked up hundreds of dollars of debt. She also obtained a $100 prezzie card from Meridian.

One of fastest growing crimes

Police say that identity theft is one of the fastest growing areas of crime around the world. Latest available figures (from the 2015 Identity Conference in Wellington) show that in 2014 almost 200,000 Kiwis had their identities compromised and misused in some way, and that spells trouble for business across the spectrum, particularly those offering credit. New Zealand and Australia’s only identity national support service, ID Care, says said an average of $13,600 was involved in each case.

NetSafe also reported an increasing number of calls relating to cyber-crime in 2015, including identity theft and fraud, with more than 8121 incidents reported last year, involving losses totalling $8 million. Statistics also show that identity theft is often someone known to the victim, rather than by a complete stranger.

Drivers’ Licences

ID Care says licence specifics are the “highest prize” for identity thieves. In Australia, a new helpline received more than 6500 calls in its first six months, with most relating to stolen licences. They are used to access not only bank accounts and buy mobile phones, but also to apply for credit, such as for electricity accounts. ID Care says two-thirds of people seeking help from them are victims of licence identity theft. In a quarter of cases, criminals used licence details to access a victim’s bank accounts. They also bought mobile phones (20 per cent), applied for credit cards (19 per cent), and applied for loans (13 per cent).

ID Care says fraudsters prize licence details more than the physical card or credit card details because they are a key form of identity. “The physical – and, increasingly, the online – use of drivers’ licences across government and business has made the licence the most sought-after form of identity favoured by identity thieves.”

Identity crime

The Department of Internal Affairs says for business and government, identity crime is a bigger problem than simply identity theft. Identity crime includes the creation of fake identities, using the identities of deceased persons, as well as identity theft. It says identity crime (which includes creating false identities) may cost the economy as much as $209 million a year. As many as 133,000 people may be victims of identity theft annually.

Identity crime very often involves a person related to the victim and one retailer who has experienced ID theft report this to be the case in the vast majority (over 80%) of cases they have investigated. A thief who knows their victim well will often have the ability to answer personal questions about the victim with confidence (including dates of birth and full names but also more in depth information like employer details, electricity account details or address history).

Checking identities

There are companies that offer sophisticated ID checking services for business who may be susceptible to identity fraud. Many of these specialist companies offer access to a wide range of data that can verify identities, as well as systems that enable organisations and businesses to electronically verify customer’s details against multiple independent data sources. Often, it involves a person being verified from two independent sources for full name, date of birth, and address. They can also offer an ongoing due diligence service for companies that need to continually validate their customer database and can update or add new information. Customer records can be cross-referenced against consumer databases to validate existing records, and to see if customer circumstances have changed.

Checking services can check IDs through a variety of ways:

- drivers licence verification
- motor Vehicle registration service
- NZ Passport, Citizenship and Births – verification service
- consumer credit bureau (credit history).

The Police recommend

The only acceptable form of identification for companies seeking to obtain proof of identification is a photo driver's licence or a passport. Even then they warn that some fraudsters have obtained a photo driver's licence or passport using the birth certificate of someone they are pretending to be or intend to steal from. Bankcards should not be accepted as ID, because it's possible for a fraudster to remove the original hand-written signature and replace it with a signature in their own handwriting.

It’s clear that the electricity retail sector, and other sectors, need to find a balance of rigorous customer identity checks, while still allowing consumers to continue to easily move between companies.

Vector going to court over UoSAs - implication for retailers

Vector is seeking a declaratory judgement from the High Court to clarify the law around whether or not the Electricity Authority (EA) has the jurisdiction to impose a standardised, mandatory Use of Systems Agreement (UoSA).

Vector CE Simon Mackenzie says the extent of the EA's powers to mandate contractual terms of supply are not clear, and it would be useful for the industry, in particular other electricity distribution businesses, for the position to be clarified. He says a judgement will help promote a workable regulatory regime by defining the parameters of the EA and the Commerce Commission. *"The industry needs to know if the [Commerce Commission] says 'yes' but the EA says 'no', who should we listen to? Understanding that boundary is imperative, particularly given the constant advances in emerging technology that are impacting the industry."* This action raises some very interesting issues for other work, such as distribution pricing but also the broader regulatory framework for the sector, which have implications for the sector.

No dates have yet been set. ERANZ will be keeping a watching brief on this topic.

SHORT UPDATES

NZ's electricity story

The Electricity Authority(EA) has released an updated and refreshed version of 'Electricity in New Zealand' that may be useful to help companies tell the industry story to their consumers. The 32-page booklet provides a high-level easy-to-understand overview of the sector and market.

You can download a PDF from this link or you can get a hard copy by sending an email to communications@ea.govt.nz (include postal address and the quantity required).

Distribution Pricing - Electricity Authority conference

The Electricity Authority (EA) held a Distribution Pricing conference on 17 August 2016 in Wellington.

There were over 150 attendees at this event representing a wide range of consumers, organisations and viewpoints. ERANZ and the retailer position was represented by Jenny Cameron Chief Executive, who gave the opening remarks, Michael Pryor from Contact Energy discussed the incentives for change, James Tipping from Trustpower, the issue of retailer pass-through of costs, and Steve O'Connor from Flick Electric Co., the need for coordination, communication and transition.

ERANZ pushed for a timeframe and target date to set which generated a lot of debate. ERANZ is now working with ENA to coordinate the next steps which will include a workshop on their future pricing structures when their consultation paper is released (TBC – expected early October). The presentation slides and a video of the conference can be seen here.

Consumer Protection website

MBIE has launched its redeveloped Consumer Protection website which provides information for consumers on what needs to be done before, during and after purchasing a product or service. On things electricity it gives advice on choosing electricity and gas providers, switching providers, billing, smart meters, and general sections on entering into contracts and agreements. The launch was part of the September meeting of the Consumer Protection Forum, which brings together managers from government agencies, non-government organisations and the private sector as part of a collaborative approach to protecting consumers.

Unfair Contract Terms ruling from Commerce Commission

To assess various sectors compliance with the unfair contracts terms provisions of the Fair Trading Act introduced in March 2015, the Commission is undertaking a series of reviews. They reviewed the contracts of 9 of the major retailers and found there were 59 potentially unfair terms. Their report was released on 29 August and can be viewed here. All the companies have either amended the terms, agreed to amend the terms, or were able to provide justification for the terms which the Commerce Commission accepted. See media commentary here.

EECA to widen focus beyond electricity

Great to see the Government aligned with the ERANZ proposal to widen the pool for EECA's funding levy so it can change its focus from not just electricity but to wider energy productivity and reducing emissions. Under the proposed changes, EECA will be able to access funding through the Petroleum and Engine Fuels Monitoring Levy and the Gas Levy to use on initiatives it conducts in the transport and industrial sectors. Energy and Resources Minister Simon Bridges says that given the Government's climate change commitments, it was timely to make changes to EECA's levy funding allowing it widen its focus. The levy change will be part of a bill that is expected to be introduced to Parliament later this year. The levy change would take effect from the middle of next year. The electricity levy will still need to be used for electricity efficiency initiatives, and ERANZ will be keeping a watching brief to see how those develop under the new EECA strategy (under current consultation).

Mercury's free energy day: a winner

Congratulations to Mercury for taking home two awards at the TVNZ NZ Marketing Awards for 2016 on 1 September 2016. They won the Consumer Products and Services, and the Utilities/Communications categories for their campaign to promote their free energy days. The advertisements centred around asking children what they would do if their power was free. The judges said: *"The electricity market is highly competitive, with deals around price often being the only differentiator between brands. So Mercury decided to try something different. And it paid off."*

Demand scenarios all point to year-on-year growth

Electricity demand will grow by between 0.4% and 1.3% each year out to 2050 in each of five scenarios developed by MBIE to explore future demand and supply. The scenarios are in a report, the Electricity Demand and Generation Scenarios (EDGS), and are designed to investigate key uncertainties in the electricity sector about generation supply and demand which helps when it comes to planning for the future and assessing future proposals for planning for capital investment in the grid. MBIE is keen to receive feedback on these metrics – is there anything they have missed or could improve on for next time? Are they useful? Do you agree? Is anyone interested in a round table discussion with key MBIE officials on the scenarios?

The modelling is based on a variety of conditions that influence the electricity market, such as the level of renewable energy, high population growth, strong rates of uptake of electric vehicles, and the potential closure of Tiwai Point aluminium smelter.

Relevant finding in the scenarios:

- peak demand is expected to grow to between 6,560 MW and 8,060 MW by 2040
- high uptake of EVs and home batteries can lead to increased renewable generation and reduced reliance on gas-fired
- investment in solar PV systems with batteries could reach around 390,000 by 2040, with solar PV capital costs falling to $3.16/W for a 3kW system and battery costs fall to $167/kWh. However, this will make up only 1% to 3% of generation
- charging EVs mainly overnight means little additional demand is added to peak periods, as transport electricity demand increases with high EV uptake
- investment in residential solar panels with batteries can maximise household use of solar and shift demand away from peak periods
- additional transport electricity demand from a high uptake of EVs can be met by new geothermal, solar PV with batteries, and wind generation.

The scenarios

Mixed Renewables: Has a mixture of geothermal and wind plant built, starting in 2020. Assumes average of 1% annual demand growth, reflecting moderate GDP and population growth, and current views on relative technology cost and expected fuel and carbon prices.

High Grid: Assumes higher GDP and population growth rates leading to higher demand across all sectors, with 1.3% per year growth in grid-connected demand. Higher gas exploration effort results in higher domestic gas supply with a flat wholesale gas price of around $6/PJ to 2040.

Global Low Carbon: Assumes high carbon price and lower-cost renewable wind and solar technology, leading to more renewable build. Assumes high uptake of petrol hybrid vehicles and solar PV systems, and flat electricity demand per household due to efficiency measures.

Disruptive: Lower technology costs leads to high uptake of solar PV with batteries and electric vehicles. Total electricity demand and grid connected demand increases as additional EV demand is only partially offset by solar. Peak and off-peak retail electricity price signals lead to flattening of demand, with lower peak demand through battery load shifting and off-peak EV charging.

Tiwai Off: Smelter shuts at start of 2018 and lower GDP growth leads to lower demand across all sectors, averaging 0.4% p.a. Some existing thermal retires due to drop in demand in short term. With less capacity on the system, more flexible North Island generation is built in the early years to meet peak requirements.

The EDGS was developed to explore a plausible range of uncertainty in future electricity demand and supply, rather than serving as a prediction of the future state of the market. They replace the scenarios contained in the Statement of Opportunities produced by the Electricity Commission. The full report is here.

A level playing field for all: submissions to the Commerce Commission

ERANZ and the Policy Committee have been firmly focussed on the issue of the Commerce Commission's input methodologies (IM) for emerging technology, see press release here. Over the month of August it involved preparation of a submission and then a cross-submission, both of which can be viewed on the Commerce Commission's website here. ERANZ has also supported the work that Contact Energy has been doing on the WACC review, and they have engaged with the Commerce Commission in a further workshop on that topic that was held on 7 September. The next step is a technical consultation to be held in October and a final decision will be due in December.

ERANZ predicts that the issue of who can do what, how and where (not to mention why) across the electricity sector is going to be an issue rearing its head more and more. The IM issue is around how the distribution companies are able to allocate costs. As we see them start to experiment in areas beyond monopoly "lines and pole" assets and into competitive areas of solar supply, battery storage supply, peer-to-peer platforms, electric vehicle charging stations, and other areas, this raises the concerns about inefficient cross-subsidisation and misuse of market position. This affects not just retailers, but any other entrant into the market that might be able to equally (or better) offer those services (think Greensync in Australia) and ultimately consumers if choice is affected through lack of competition and inefficient investment. The rules for the regulatory framework are being tested and ERANZ will be advocating to ensure an open and competitive market can be maintained as a new energy world emerges.

Watch out for the Smart Grid Forum event on 18 October of panel discussion between Australian and NZ regulators on the topic.

The first of the political policy announcements: United Future's microgeneration, EV subsidies

UnitedFuture has announced policies to encourage electric vehicles and home microgeneration systems. The party may continue to poll well below the margin of error, but it has shown it can hold sway with the government of the day, so it's worth taking a look at what it's proposing: A $5 million annual fund to promote electric vehicle ownership would allow up to $5000 to be claimed or up to 30% of the cost of a vehicle, whichever is smaller. It would further apply to businesses that replace company cars with EVs, and business would be able to claim funding in order to set up infrastructure such as charging stations. A $10 million annual fund would be available for homeowners to install microgeneration units such as solar panels – the smaller of $5000 or 80% of the cost of installation in new builds and up to $3000 or 80% for existing homes.

This may seem like an about-face for Dunne, who last year voted against Green Party MP Gareth Hughes' Bill to introduce standard buy-back rates for surplus solar power generation, but speaking to his office they say he voted against that Bill because it would have been too much intervention in the market. They are interested in "nudging" the market to have outcomes beneficial for a greener New Zealand. The UnitedFuture policies are evaluated by the Morgan Foundation and they gave the EV grant a provisional tick (EV good, but this is not necessarily the right way to incentivise uptake), and a big cross to the microgeneration grant (on the basis that solar should be an individual decision and subsidies for solar are not in the best interest of NZInc). See their commentary here (and while you are there, you might also be interested in their commentary on pricing).

National still on top – most believe New Zealand heading in the "right direction"

The latest Roy Morgan poll from late August had a significant finding that went unnoticed in the media – it showed 58% of respondents thought that "*New Zealand was heading in the right direction*" compared to 30.5% who thought that New Zealand was "*heading in the wrong direction*". ANZ bank reports that business is on a 20-month high in August, with the biggest bounce in agriculture. Migration flows are strong into New Zealand, which is putting the pressure on housing (see August newsletter – issue 5) and will likely remain a political issue running into election year, providing plenty of ammunition for New Zealand First and Winston Peters.

The Poll also showed National support stood at 46% during August, in line with their support over the last 12 months. Green-Labour alliance stands at 40% (Labour at 25.5%, Greens at 14.5%), and NZ First at 9.5%. Commentators consider that National's lead remains strong due to leadership and economic performance, but also Labour's failure to gain any traction in the key fields of education, health and welfare.

Positions open

Labour and the Greens are on the lookout for good staff at the moment. Andrew Little's Chief of Staff Matt McCarten is to head to Auckland to run the party's campaign there. Views are this is a better use of his core skills as he was not comfortable dealing with the day-to-day parliamentary processes that chiefs of staff have to handle. Labour is now urgently seeking a new Chief of Staff, as well as Chief Press Secretary.

The Greens are also recruiting for their energy policy adviser and have been putting feelers out through the sector (Business Energy Council and others) for good candidates who do have experience in the sector.

Able to afford to have a warm house? New statistics from MSD

The Ministry of Social Development (MSD) has just released its Social Report 2016 which monitors trends across key dimensions of people's lives up to 2014 to provide a picture of progress towards better social outcomes. This is an update of their 2010 report.

A key feature of the report of relevance to the electricity sector is its Material Wellbeing Index (MWI) which is a survey-based measure of the material living standards of households. Income is not the only measure of material wellbeing, as such, the MWI is a non-income measure developed by MSD based on actual household consumption, rather than on household income. It measures standard of living by whether households do not have the basics or essentials because of the cost and need to purchase other basics (eg a good meal once a day, keeping the house warm, having a good bed, going to the doctor, dealing with unexpected essential expenses, and so on). There is no definitive point at which people are in hardship or not, but it can show how some of the costs – particularly housing - put pressure on other basic costs – such as keeping the house warm.

The report shows that over time, most social wellbeing outcomes for New Zealanders have improved or remained unchanged. There has been some improvement in the numbers of those living in material hardship, but the numbers are still sobering and show the pressures on many households.

In 2014, 8.0 percent of people lived in households identified as experiencing material hardship, based on the MWI less severe threshold. This was slightly lower than the result for 2013 (9.2 percent). In 2014, 4.5 percent of people lived in households facing more severe material hardship, compared with 5.0 percent in 2013. In terms of housing affordability 27% of households spent more than 30% of their disposable income on housing costs. This metric increased from 1988 to 1998 then improved to 2004, before again rising in 2007 then flattening out (has worsened for low-income households). In terms of household crowding, 10% of individuals lived in households requiring one or more additional bedrooms to completely accommodate household members. This has improved since 1986 when it was 13%.

On average the report finds that market income per person is again improving following a decline after the 2008 Global Financial Crisis. It also finds that though the proportion of the population in material hardship rose during the Global Financial Crisis, it has declined since and shows improvement for recent-change and medium-term-change. Income inequality remains much higher than in the 1980s, but the proportion of the population with low incomes has remained relatively stable for recent-change and medium-term-change, and is lower than the highs of the mid-90s.

More specifically, social wellbeing outcomes are not the same for all New Zealanders:

- Māori and Pacific peoples are performing less well across a number of measures, although improvements are occurring over time
- females continue to fall behind males in some domains such as Economic Standard of Living, while they are ahead of males in others such as Health
- sole-parent households consistently have poorer outcomes, particularly in the areas of Economic Standard of Living and Social Connectedness
- having a low income and low material wellbeing and living in an area of high deprivation result in relatively poor social wellbeing outcomes across most domains.

There is a great deal more data to mine in the report, but it does highlight the sobering reality for many in New Zealand and why the electricity retail sector is a touchpoint for experiences of hardship.

UPCOMING EVENTS

September 2016

- September | The International Drive Electric week **starts this weekend**. See here for event details

- 20-21 September | The Women in Energy and Resources Leadership Summit 2016, Amora Hotel, Wellington

October 2016

- 5 October 09.30-12.00 | Seminar on the Consumer Guarantees Act and how it relates to electricity supply.
Coordinated by EGCC with MBIE and assistance from ERANZ. The seminar will be held at Minter Ellison offices in Wellington & Auckland (via video link). More details will follow shortly via invitation from EGCC

- 18 October | Regulatory implications of distributed energy resources in Australia and NZ, by Smart Grid Forum, Wellington | on receipt of invitation, bookings can be made here

November 2016

- 17 November | ERANZ AGM & stakeholder function, Wellington

- 18 & 19 November | SEANZ, The Power Shift launch event, Christchurch. Details of the event can be viewed here

Follow us on social media and via our soon to be launched website

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