17 December 2021

James Stevenson-Wallace
Chief Executive Officer
Electricity Authority

By e-mail: reviewconsultation2021@ea.govt.nz

Dear James,

The wholesale market has a $2.4 billion p.a. over-pricing problem

Electric Kiwi and Haast Energy Trading (Haast) agree with MBIE that “The New Zealand Electricity Market … remains the best model for delivering the outcomes expected from the sector”. We want the wholesale electricity market to fully deliver the competitive outcomes it was set up and designed to enable.

We also agree with MBIE’s warning that the electricity sector needs to “maintain its social license to operate” and “If people lose trust in the market and market participants, perhaps because of pricing or reliability, then the political process may explore alternatives to the current market. Such alternatives exist and are being used in other jurisdictions”.[1]

The Authority’s findings include $2.4 billion of potential wholesale market over-pricing per annum.[2] The actual extent of the over-pricing is potentially larger as this estimate uses pre-Pohokura outage pricing as a base-line. Market failures of this scale and nature need to be addressed to protect the electricity market, and ensure the market operates properly and efficiently.

Structural reform and break-up of Meridian is needed for a thriving, competitive electricity industry.

Meridian’s warnings 10-years ago are mirrored in the Authority’s wholesale market review findings

Meridian’s 100%-owned subsidiary warned in 2011: “... we remain fearful that ... manipulations … may become more prevalent in the market, leading to higher and more volatile wholesale energy prices, and in turn prices faced by consumers”.[3] Meridian also warned of the risk “anything goes”[4] and high prices could be the “new normal”.[5]

We are not sure whether Meridian’s warnings were prescient or simply a self-fulfilling prophecy.

We agree with Meridian “Participants will lose confidence in the integrity of the market if prices are divorced from efficient supply-demand conditions and excessively higher than underlying costs. This could result in both inefficient investment signals and inefficient consumption by individual consumers, as well as reducing the potential level of demand-side management through deterring demand-side participation in the wholesale market”.[6]

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[1] MBIE, Investigation into electricity supply interruptions of 9 August 2021, 2021: https://www.mbie.govt.nz/dmsdocument/17988-investigation-into-electricity-supply-interruptions-of-9-august-2021

[2] This includes $863m of over-pricing due to the Tiwai contract arrangements and $38/MWh which the Authority has not been able to explained based on supply and demand conditions and may be a result of “lack of competitive offer behaviour by generators”: https://www.linkedin.com/posts/electricity-authority-of-new-zealand_the-authority-is-currently-consulting-on-activity-6874514213331718144-qcCl

[3] Meridian (Powershop), Draft decision of the Electricity Authority under Part 5 of the Electricity Industry Participation Code regarding an alleged Undesirable Trading Situation on 26 March 2011, 13 May 2011.

[4] Meridian, Draft Decision regarding alleged UTS on 26 March 2011 – Cross Submission, 19 May 2011.

[5] Meridian, Proposed Actions regarding 26 March 2011 UTS, 21 June 2011.

[6] Meridian, Draft Decision regarding alleged UTS on 26 March 2011, 13 May 2011.

Where we depart from Meridian is that we believe bad corporate behaviour and the abuse of market power is undermining confidence in the market, as opposed to their view it is other market participants or the Authority reporting on, or calling out, such behaviour that is undermining confidence.[7]

The Authority's wholesale market review bears out Meridian's warnings, as well as the views of Matt Rowe that there has been a step change in spot prices and offer behaviour;[8] and the views of Entrust that the Tiwai contracts are "being used to artificially prop up wholesale prices":[9]

- The Authority investigation highlights that the Authority letter to Meridian is likely to be one of various factors that contributed to the structural shift in pricing the Authority has identified.[10]

- Since Entrust raised its concerns about the Tiwai arrangements in 2018 the Tiwai contract price has reduced substantially, and the problem has gotten worse. The Authority can draw on the evidence provided by Entrust, as well as previous MBIE-Treasury modelling of the impact of Tiwai to support its investigation findings.

The Authority should disregard Meridian's aggressive and misleading PR response

The criticisms and statements Meridian has made about the Authority's work are cynical, solipsistic and ill-founded.

Meridian has attempted to paint the Authority's review as "confirm[ing] that high wholesale electricity prices over the last three years, reflect tight supply and demand conditions, and natural gas scarcity for electricity generation".[11]

The Authority was very clear that while "Prices over the review period have, at least to some extent, reflected underlying supply and demand conditions … some of the price increases since the Pohokura outage appear to be unexplained by the underlying conditions". The price increases that could not be explained were $38/MWh. The Authority was also very clear "we observed some evidence to suggest that prices may not have been determined in a competitive environment" and "We observed some evidence to suggest that generators have an increased incentive and ability to exercise market power, and may have been doing so over the review period".

We also weren't able to reconcile the Meridian CEO claim "If we follow the Authority's thinking around the smelter exit contract, this has some seriously negative implications for new large electricity consumers, and our collective goal to create a zero-emissions economy with more opportunity for jobs"[12] with his claim that if NZAS was to exit "Following the transmission [upgrades] you would have seen a pretty quick supply side correction, and most likely, Huntly would have closed".[13]

[7] The Meridian Chief Executive has claimed it was the Authority that was undermining confidence in the market: "To the extent there has been any loss of confidence in current market arrangements (and we do not believe there has been) we suspect the real cause to be the misreporting of the comments and figures in the Authority's preliminary decision": Meridian Submission: Preliminary decision on claim of an undesirable trading situation,18 August 2020.
[8] https://www.energynews.co.nz/column/wholesale-prices/43428/lakes-are-near-full-gas-fields-are-back-operating-so-why-are-new
[9] https://www.mbie.govt.nz/dmsdocument/4169-entrust-electricity-price-review-first-report-submission
[10] Haast previously provided submissions to the Electricity Authority/MDAG in support of Matt Rowe's analysis and conclusions. The Haast submissions also provide evidence which supports the Authority's wholesale market review findings:
- Critique of Concept's report "Review of impact of trading conduct enforcement action on spot prices", 2 December 2019.
- Rebuttal of Concept's report "Review of impact of trading conduct enforcement action on spot prices – addendum", 11 February 2020 (https://www.ea.govt.nz/assets/dms-assets/26/26498Haast-Energy-Trading-11-February-2020.PDF).

[11] https://www.meridianenergy.co.nz/news-and-events/meridian-responds-to-electricity-authoritys-wholesale-market-review
[12] https://www.meridianenergy.co.nz/news-and-events/meridian-responds-to-electricity-authoritys-wholesale-market-review
[13] https://www.nzherald.co.nz/business/households-paying-200-a-year-more-than-they-should-be-due-to-tiwai-contract-regulator-claims/QQSZLE3SR375YYHYIMDNL5B2KE/

It isn't obvious how Meridian thinks bringing forward the closure of Huntly would have "seriously negative implications for … our collective goal to create a zero-emissions economy". We don't buy into their green-washing.[14]

As well as suggesting the Authority's analysis and views were speculative and "incorrect", the Meridian CEO claimed the Authority's report had been written "in splendid isolation" from the electricity market and didn't reflect the "real world".[15]

The misleading and unfair way Meridian has attempted to frame the Authority's findings is consistent with the approach it took to the Authority's December 2019 UTS determination, where Meridian claimed the Authority had a "reform agenda", "bent the UTS rules to reach its desired results" and "helped to perpetuate … myths".[16]

Having read all the Authority wholesale market review material, we could not find anything to support Meridian's criticisms about "tone and choice of language", "incorrect use of the information we have provided" or that "The Authority has either misunderstood or misinterpreted some of that information, rather than assessing it accurately and reasonably on its own terms".[17]

We won't be bullied by Meridian into staying silent about abuses of market power and nor should the Electricity Authority.

A competitive wholesale market creates a competitive retail market which benefits Kiwi households

Electric Kiwi has been the fastest growing electricity retailer since we took on our first customers in December 2014. Our customer base has grown to 76,000 or 3.5% of the market, which makes us the largest retailer not controlled by, or integrated with, a generator. Our customers have benefited from market leading offers and service, and collectively saved $34 million in the last 7 years. We have been an aggressive price leader for the vast majority of this time which has pressured large retailers to lower their prices and resulted in significant savings for consumers in general.

Competition from innovative independent retailers like Electric Kiwi is critical for driving down retail electricity prices and the Government's goals of ensuring affordable electricity for Kiwi households and businesses, and electrification of the economy as part of the country's zero carbon ambitions.

As we have grown our ability to hedge at a reasonable price has been obstructed through a lack of access to equivalent contract terms with vertically-integrated counterparties. Combined with an extreme futures price environment, which in our opinion is not reflective of short or long-run generation costs, we've been forced to reduce investment in New Zealand and refocus on our Australian retail business where the wholesale environment is much more competitive and therefore reflective of underlying costs. This is not what we want for the Electric Kiwi brand or for Kiwi consumers.

We believe we are among the most efficient retailers in the market and have adopted a prudent hedge policy. We haven't been out competed but are being required to take these measures because regulatory and market failures have led to perverse market outcomes and rent seeking behaviour from large gentailers.

[14] https://www.nzherald.co.nz/business/luke-blincoe-an-open-letter-to-meridian-energy/GP3WXYWTW3HX7QOL36YZUSPNVQ/
[15] https://www.nzherald.co.nz/business/households-paying-200-a-year-more-than-they-should-be-due-to-tiwai-contract-regulator-claims/QQSZLE3SR375YYHYIMDNL5B2KE/
[16] Meridian Submission: Preliminary decision on claim of an undesirable trading situation,18 August 2020.
[17] Meridian, Review of competition in the wholesale market from 2018 Pohokura outage to mid-2021, 24 September 2021.

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Summary of Electric Kiwi and Haast Energy Trading's views

- **The Authority has found clear evidence of abuse of significant or substantial market power:** The Authority's investigation confirms our assessment "prices have materially increased for reasons other than hydrology and fuel prices, and that the most likely explanation for this change lies in bidding behaviour and trading conduct".[18,19]

- **The Authority has identified evidence of market manipulation:** The Authority's findings of market outcomes that don't reflect "underlying [supply and demand] conditions", align with the ACCC's guidance[20] in relation to Court precedent on the definition of market manipulation:[21]

  > ... market manipulation is centrally concerned with conduct, intentionally engaged in, which has resulted in a price which does not reflect the forces of supply and demand.

- **The overpricing due to the Tiwai contracts is only part of the story:** Thanks to the lack of competition amongst electricity generators, the wholesale price of electricity over the last 4 years has been nearly double what it used to be. Based on the Authority's modelling that could translate to $2.4 billion per annum in over-pricing due to use of monopoly power.

- **The problems in the wholesale electricity market have put a handbrake on retail competition:** The review should also look at the harm suppliers with significant market power in one market may have in closely related and down-stream markets, including the harm monopoly pricing in the wholesale market is causing to competition in the retail markets.

- **Structural problems in the electricity market undermine NZ's climate change ambitions:** The problems the Authority has identified are becoming increasingly urgent and need to be resolved to support New Zealand's transition to a low carbon economy. The Authority should be looking at the harm monopoly conduct in the wholesale electricity market is causing to the environment, and to NZ's planned energy transition.[22]

- **The break-up of ECNZ was a job half-done:** The breakup ECNZ and formation of new competing generators was sound, but the job was only half done. Meridian inherited 55-60% of New Zealand's hydro generation capacity, 35% of our generation supply and a position of significant market power. **Meridian is too large for effective competition to fully develop and thrive.**

- **Structural problems require a structural solution:** The Authority should recommend the Government adopt structural reform of the wholesale market. The Authority should avoid creating a situation where the Authority's review, which followed shortly on the heels of the Electricity Price Review, necessitates the Government establish yet another review to determine whether to undertake structural separation and what form that reform should take.

- **There is precedent for structural reform that can be drawn on:** The break-up of ECNZ, the ownership separation of lines from retail/generation, the asset swap between Genesis and Meridian**,** and the separation of Chorus and Spark all provide precedent for structural reform. The Electricity Industry Reform Act and telecommunications reforms, in particular, involved privately-owned assets.

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[18] Haast, Rebuttal of Concept's report "Review of impact of trading conduct enforcement action on spot prices – addendum", 11 February 2020 (https://www.ea.govt.nz/assets/dms-assets/26/26498Haast-Energy-Trading-11-February-2020.PDF)

[19] If the Concept Report prepared for the Electricity Authority/MDAG in 2019 is corrected for the modelling issues Haast identified it supports the Authority's wholesale market review conclusions, including that there has been a structural shift and spot prices cannot be fully explained by physical (i.e. non-behavioural) factors, including changes in hydro storage and gas prices.

[20] ACCC, Guidelines on Part XICA - Prohibited conduct in the energy market, May 2020.

[21] See Director of Public Prosecutions (Cth) v JM (2013) 250 CLR 135 at [70].

[22] New Zealand's climate change objectives have become a prominent part of the Authority's TPM review, and this should be mirrored in the wholesale market review.

- **The electricity market needs more generators that are able to actively compete:** Horizontal structural reform is essential to move beyond the failed attempt to use behavioural regulation (trading conduct rules) as a band-aid to deal with structural problems (concentration of generation ownership). There are various structural options which merit consideration. Our preferred option is to split out Manapouri and the Huntly coal assets into a new SOE (Kiwi Power).[23] Even the creation of just one new generator would make a big difference to competition in the electricity market.

- There are other options which merit consideration, and may be complementary, such as the Authority's suggestion that a cap be placed on the generation capacity of each electricity generator. We believe it would be desirable for Meridian to be prevented from owning or operating new firming generation including batteries.

- **The Tiwai contracts are an undesirable symptom of the underlying structural problems in the wholesale market.** The progression of the review of the Tiwai contract, ahead of the broader wholesale market review, has resulted in an imbalance where the focus of the consultation is on options for addressing the Tiwai contract even though this is simply a subset and symptom of the wider, larger wholesale problems.

- Again, the first best solution is structural. If the underlying structural problem is addressed, then there would be no need to consider options such as regulation of contracts and the Authority could instead leave it to the market to determine appropriate contractual arrangements with Tiwai and other large electricity users. This is consistent with the Authority's preference for market-based solutions over regulation.[24]

  The need to regulate Tiwai-type contracts should only be transitional, pending wider structural reform.

Structural problems require a structural solution

Electric Kiwi and Haast support structural reform to deal with the inherent structural problems in the electricity industry which are limiting both wholesale and retail competition.

Given the Electricity Authority has been clear structural options are outside its remit, it should recommend the Government adopt structural reform and provide evidence of the substantial downward pressure this would put on electricity prices.[25] Failure to provide a firm recommendation could result in the Government needing to undertake duplicate work, potentially with a Commerce Commission investigation a la retail fuel market and supermarkets, and further delay in resolving the situation.

There are various options which merit consideration. The Authority should model the expected outcomes against workably competitive benchmarks to determine the potential optimum configuration (including optimal number of new generators and which stations the incumbents should be required to divest).

Our preferred structural solution – Kiwi Power

A relatively simple option is to split out Manapouri and the Huntly Rankine units and coal stockpile into a new SOE which we term Kiwi Power. The resulting generator would immediately have circa 1550 MW of capacity spread across both islands and increase spot market competition in absolute and locational terms significantly. This option has the advantage of only reorganising assets of government controlled gentailers.

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[23] A requirement for Meridian to divest Manapouri only wouldn't go far enough.
[24] e.g. refer to the Authority's decision-making and economic framework used for distribution and transmission pricing.
[25] Consistent with the approach taken by the Commerce Commission in its retail fuel markets and supermarket studies.

Kiwi Power would control assets (the rankine units and coal stockpile) which can mitigate the looming mid-decade capacity shortage highlighted by Transpower in its recent security of supply report[26] and the ability to time their retirement following a potential Lake Onslow build. Additionally, Kiwi Power could consider deploying a battery at Huntly or Auckland to further support upper North Island capacity as required. We believe it will be undesirable from a market concentration perspective if Meridian is allowed to control additional battery capacity built in Auckland.

The Kiwi Power option has the benefit of taking the heavy burden of providing coal-fired firming off Genesis' hands and deliver it to the Government who incentivised to deliver firming solutions which meet the countries wider decarbonisation commitments.

Alternative structural solution – Kiwi Hydro

An alternative option would involve establishment of Kiwi Hydro SOE by splitting Manapouri away from Meridian and reorganising Contact's and Meridian's assets as follows:

1. Manapouri Power Station is moved from Meridian to Contact.
2. Contact's Clutha river and Lake Hawea assets including Clyde, Roxburgh and control gates are moved to Kiwi Hydro.
3. Meridian and Contact's Auckland Battery project is moved to Kiwi Hydro.
4. Kiwi Hydro Commits to build the Lake Onslow project and a large Auckland battery.

This option has the benefit of paving the way for Lake Onslow to be built and fully integrated operationally with the other Clutha river assets, as well as mitigating mid-decade capacity risks in the upper North Island by sizing the Auckland battery accordingly.

Whichever option is chosen, the new SOE should be excluded from entering the electricity retail market to increase the amount of generation available for development of a dynamic liquid hedge market and trade with large users, financial intermediaries, independent generators, and independent retailers.[27]

In addition to the divestment of Manapouri in both the Kiwi Power and Kiwi Hydro options, we support a moratorium on Meridian building new dispatchable generation including batteries. There is precedent for a moratorium with the original ECNZ-Contact split in which ECNZ was precluded from investing in more than 50% of future generation capacity.

The Tiwai contracts are an undesirable symptom of the underlying structural problems in the wholesale market

Like the Authority and Entrust, we are troubled by the arrangements Meridian and Contact have in place for supply to Tiwai Smelter.

We raised these concerns with the EPR when the contract rate was reported to be 5c/kWh. Our concerns are only heightened now the contract rate is reported to be 3.5c/kWh.

We agree with the Authority "Both Meridian and Contact were able to profit from selling to NZAS because they benefit from increased revenue from the rest of New Zealand … However, only a generator about the size of Meridian could sell to a customer on those terms … these issues arise from the scale of generation (particularly in the South Island) …"

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[26] https://www.transpower.co.nz/system-operator/security-supply/security-supply-annual-assessment
[27] We also support consideration of vertical separation requires to split retail and generation, but recognise the benefit of vertical separation diminishes as market power issues in the wholesale and hedge markets are addressed.

One regrettable consequence of the Electricity Industry Reform Act was that it substituted lines-retail vertical integration for retail-generation vertical-integration. The Electricity Industry Reform Act does at least provide precedent for ownership separation, which could be applied to the 5 largest incumbent retailers, as well as how corporate separation and arms-length rules could be applied.

The Authority's observations simply serve to highlight the Tiwai contracts are a symptom of the underlying structural and competition problems in the electricity market, rather than the problem itself.

Again, the first best solution is structural.

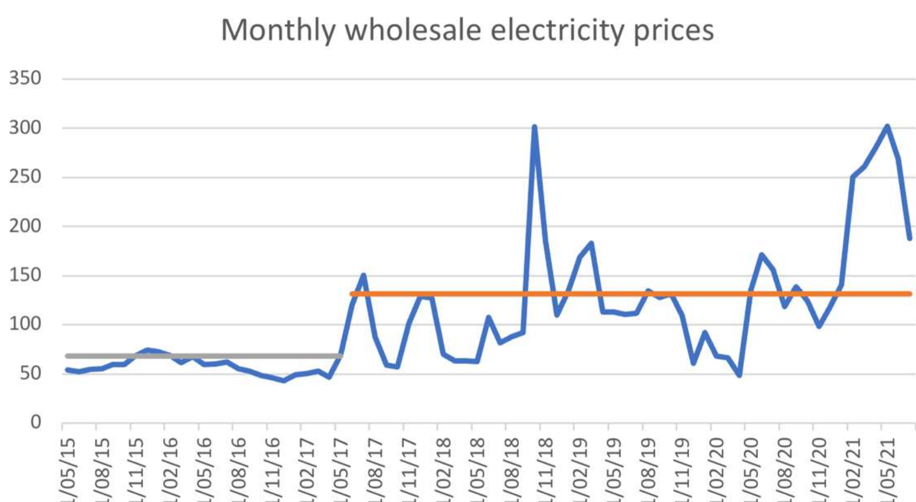
If the underlying structural problem is addressed then there would be no need to consider options such as regulation of contracts and the Authority could instead leave it to the market to determine appropriate contractual arrangements with Tiwai and other large electricity users. Regulation of contracts may be a pragmatic option to introduce ahead of structural reform, if the regulation can be introduced more quickly and in time to prevent a repeat of the Tiwai issues after 2024.

Market power is increasingly driving spot prices

The Minister of Energy has questioned whether wholesale electricity prices "need to be as high as they have recently been?" Another good question would be how high is too high or for too long?

Since the Minister asked the question, we have had new record prices for a three month period ($281/MWh), six months ($259/MWh) and the last 12 ($190/MWh). You have to go back to June 2008 for a higher single month ($309 v $301)

Spot prices have averaged $131 over the last four years. That's around twice their historic norm. Between 2009 and mid-2017 spot prices averaged $68/MWh. Like with like comparison is a little bit more difficult, but if you look at the prices from October 1996 to mid-2017 they averaged $62/MWh.

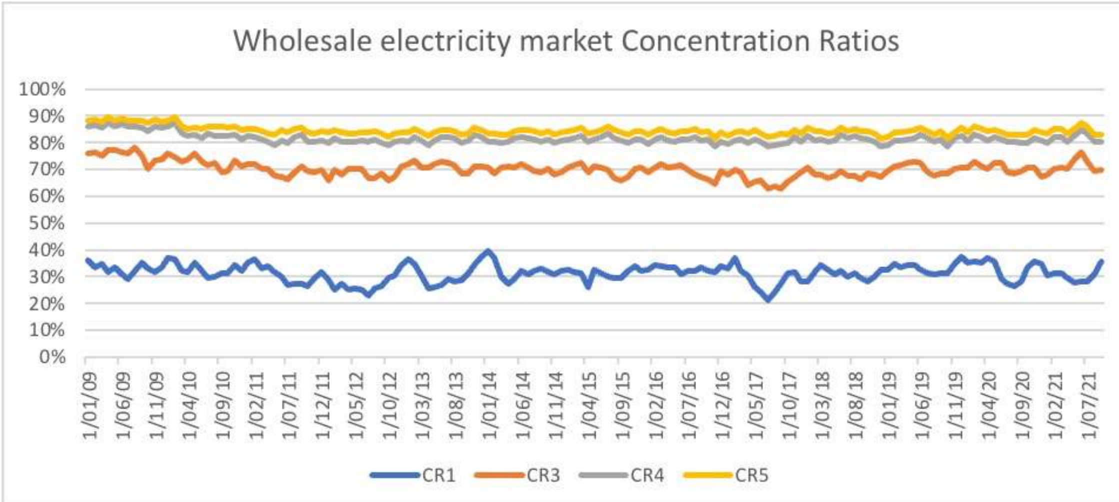


According to The Brattle Group, acting for Meridian, "The concentrated structure of the New Zealand market" results in prices deviating from cost. Meridian has similarly been clear "there are no requirements to offer based on costs" and it is "economically rational" for generators to seek to generate "at prices the market will support".

The wholesale electricity market suffers from high levels of concentration and weak competition

The Authority's wholesale market review does not include concentration ratios even though this is a commonly used measure of market concentration. The wholesale market meets the Commerce Commission's definition of a concentrated market with the three largest generators (CR3) holding more than 70 percent market share.

The Concentration Ratio for the largest 4 generators (CR4) sits above 80%.

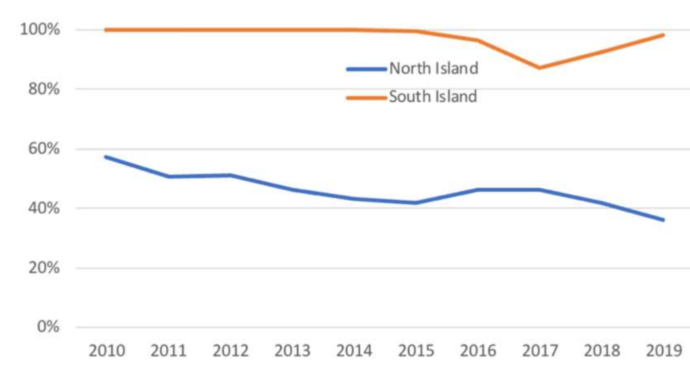


We agree with the Authority gross pivotal situations are part of the problem, and a useful measure of market power.

Consistent with this, we also agree with MDAG gross pivotal situations give rise to concerns about abuse of market power and not just net pivotal situations: "While a gross but not net pivotal supplier may not profit from raising prices in the short term, it may have incentives to raise prices (or create greater volatility) to increase hedge and/or retail returns over the longer term".[28,29] Basically, if you are gross pivotal you are in a position to increase prices by withholding generation capacity. We have seen this, for example, with Contact and Meridian unnecessarily spilling water as part of the December 2019 UTS.

The figure below shows how much of the time a generator is gross pivotal on an aggregated basis (not just looking at each generator separately, as the Authority does in its consultation material).

Figure: Proportion of time large generators are gross pivotal at an island level across all trading periods (Source: Electricity Authority)



[28] MDAG, "HIGH STANDARD OF TRADING CONDUCT" PROVISIONS: A REVIEW BY THE MARKET DEVELOPMENT ADVISORY GROUP, DISCUSSION PAPER, 25 February 2020.

[29] We similarly also agree with Mercury that "During times when one party can become net pivotal in a constrained region purely through its own actions and without sanction, there is no short term supply side competition and consequently no competition ... The net pivotal party can squeeze the wholesale and hedge markets in the region ... The squeeze behaviour does lead to higher costs in the region (whether through wholesale or hedge market outcomes) which must through time be recovered from consumers in that region ...". Mercury, UTS on 26 March 2011 - Cross submission in response to Submissions made 13 May 2011, 19 May 2011.

The Authority has documented well, albeit with unnecessary caution and qualifications, that the wholesale market is not fully or workably competitive, and there is evidence the market will further deteriorate. The Authority considers the large generators are “dominant” and have “control over substantial amounts of generation”.

We note and agree with the Authority, for example:

- **The market is concentrated:** “The HHI for generation in New Zealand has been hovering around 2,000 since 2014, with slight decreases when storage has been low”.

- “Meridian has 30 percent of the market-generating capacity (from its South Island hydro generation) but is needed to meet demand over 90 percent of the time”

- “Meridian … was gross pivotal in the South Island around 77 percent of the time in each year from 2016 to 2018. This increased to around 90 percent to 95 percent in 2019 to 2021 (to 30 June).” This means that 90 to 95% of the time Meridian has market power enabling it to set the spot price by withholding electricity capacity or raising offer prices (which the Authority describes as “economic withholding). We saw this vividly in December 2019 when the Authority found Meridian (and Contact) unnecessarily spilt water resulting in higher spots and an Undesirable Trading Situation.[30]

- **There is evidence of market manipulation:** “Differences in price between the North Island and South Island have been subdued over the review period when storage has been high. This suggests some generators may have been economically withholding so the price they pay to cover their retail books in one island is not much higher than the price they receive for their generation in the other.”

- Between 3 – 17 December 2019, “ … Meridian’s use of what it terms ‘non-clearing tranches’ means that generation is effectively withheld from the market” and “the average extra generation Meridian could have achieved is 82MW, and around one-third of the spill at Benmore could have been sued to generate. We estimate the spot market impact of this was $70m”.

- Generators may be willing to subsidise NZAS because its demand increases national prices and spot market revenues by as much as $850 million per year, more than offsetting the cost of the subsidy.”

[30] The Authority found that Meridian (and Contact) didn’t breach the high standard of trading conduct rules that existed at the time because it was “shielded” by the safe-harbour provisions which existed at the time. Meridian unsuccessfully complained to the Broadcasting Standards Authority when Radio NZ correctly made the point that Meridian got off on a “technicality”.

The Trading Conduct rules have been amended to remove the safe-harbour provisions and this loophole.

Russell McVeigh has usefully provided examples of market manipulation relevant to the Authority's wholesale market review:[31]

> (a) **Withholding capacity:** If the capacity could not have profitably been withheld in a competitive market, withholding the capacity from the market is likely to breach the new test. The European Commission ("**EC**") has investigated generators in the EU for abusing their dominance by withholding capacity, with any potential losses from that withheld capacity recouped through obtaining higher prices for the capacity that was dispatched.[37] This is consistent with the safe harbours in the current Code, which requires generators to offer all of its generating capacity that it is able to operate in a trading period.[38]
>
> (b) **Excessive offer prices.** Excessive offer prices are likely to breach the new test if such prices would not have been possible or profitable in a workably competitive market. The EU prohibition of market manipulation prohibits pricing wholesale energy products at an "artificial" level.[39] European case law and guidance has determined that artificiality considers whether prices "correspond to available production capacity or to fundamental market data".[40] This includes considering:
>
> (ii) the capacity of the generator to offer more electricity. This is linked to (a) above;
>
> (iii) the demand for electricity at the point in time that prices increased (i.e. can the increased offer prices simply be attributed to perceived increased demand); and
>
> (iv) any justifications offered by the defendant as to why prices had increased.

- **Abuses of market power are getting worse:** e.g. "Prices have been higher since the Pohokura gas field outage in 2018, and some of the increase may not be explained by underlying conditions". The Authority's finding that there has been a structural shift in prices since the Pohokura gas field outage in 2018 confirms the earlier conclusions of Matt Rowe that there has been a significant structural shift in electricity spot prices that is not explained by changes in market fundamentals.[32]

- "We observed some evidence to suggest that generators have an increased incentive and ability to exercise market power, and may have been doing so over the review period."

- "[Meridian] has a large percentage of offers in its top tranche, even when storage is higher (and its offers over $300/MWh have been steadily increasing since 2014)."

- **The level of market concentration will get worse not better:** "The HHI for generation … may increase with the recent announcements by Contact and Meridian regarding investment in Tauhara and Harapaki, respectively, and Mercury developing Puketoi and Turitea, and acquiring Tilt's New Zealand generation assets."

Electricity retail markets are not any more competitive than wholesale

It is well documented that the retail electricity market, whether defined on a regional or national basis, is either concentrated or highly concentrated (e.g. national average HHI = 2,080 as at 31 November[33,34]). It is important not to be beguiled by the large number of retailers (40) in electricity retailing across New Zealand:

- Over 30% have less than 10 customers;

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[31] https://www.ea.govt.nz/assets/dms-assets/26/26735Meridian-submission-MDAG-HSOTC-discussion-paper.pdf

[32] https://www.energynews.co.nz/column/wholesale-prices/43428/lakes-are-near-full-gas-fields-are-back-operating-so-why-are-new

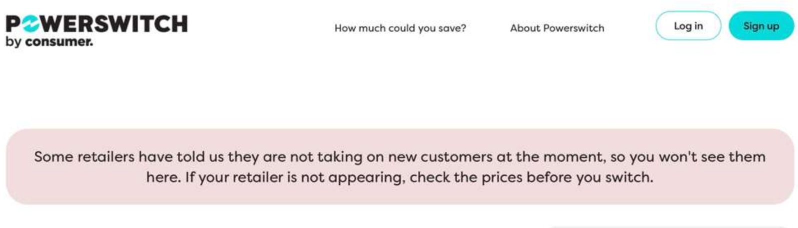
[33] https://www.emi.ea.govt.nz/Retail/Reports/R_HHI_C?DateFrom=20170601&DateTo=20211130&RegionType=NZ&_si=v|3

[34] As of 1 January 2021, the residential HHI was 2,150 and the SME HHI 2,627.

- 60% have less than 100 customers; and
- Three-quarters have less than 3,000 customers.

We agree with the EPR Panel observation that "the wholesale contract market isn't working effectively, limiting the ability of independent generators and retailers to manage price risk and undermining confidence in the market". Since the completion of the EPR, the wholesale market situation has deteriorated with unprecedented high spot prices, further limiting the availability of hedging arrangements (including availability at reasonable prices) that would enable independent electricity retailers to compete on a level laying field.

It has been well publicised a number of independent retailers withdrew from Powerswitch due to a lack of availability of reasonably priced hedging arrangements.[35]



Potential new retailers such as Octopus have delayed entry for the foreseeable future.

While the Electricity Authority has suggested, as evidence of improved competition, that "At the end of November 2020, small and medium retailers collectively served 15.6 per cent of ICPs in the market, overtaking Mercury who supplies 15.5 per cent. In aggregate, small and medium retailers now supply the third-largest number of consumer connections with only Genesis and Contact supplying more"[36] the situation has deteriorated and the aggregate '3rd place' was short-lived.[37] Since March 2021 the small and medium sized retailers' aggregate market share has been decreasing.[38]

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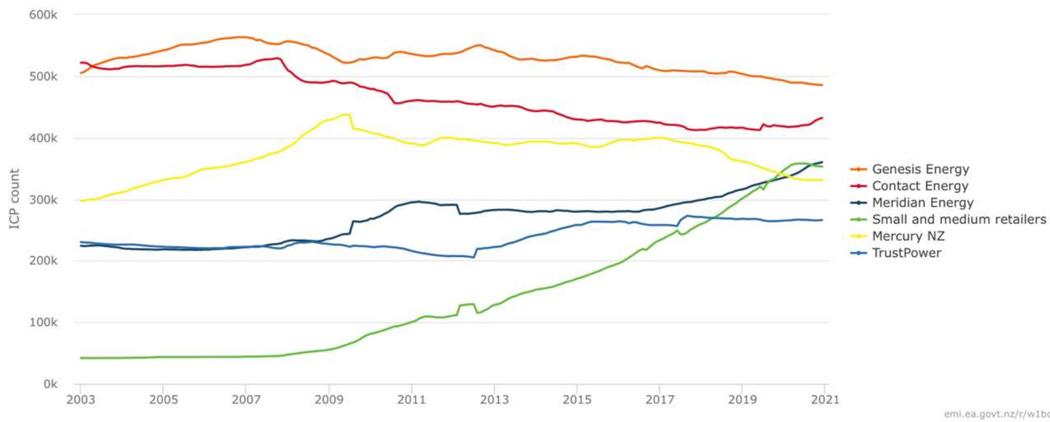
[35] https://www.tvnz.co.nz/one-news/new-zealand/electricity-prices-getting-less-competitive

[38] https://www.emi.ea.govt.nz/Retail/Reports/R_MST_C?Grouping=T5&MarketSegment=All&ParentCompany=Y&Percent=N&RegionCode=NZ&RegionType=NZ&_sdr=ALL&_si=fr|1081,frc|D,v|2

[38] https://www.emi.ea.govt.nz/Retail/Reports/R_MST_C?Grouping=T5&MarketSegment=All&ParentCompany=Y&Percent=N&RegionCode=NZ&RegionType=NZ&_sdr=ALL&_si=fr|1081,frc|D,v|2

[38] https://www.emi.ea.govt.nz/Retail/Reports/R_MST_C?Grouping=T5&MarketSegment=All&ParentCompany=Y&Percent=N&RegionCode=NZ&RegionType=NZ&_sdr=ALL&_si=fr|1081,frc|D,v|2



In the last two years, we have seen the smallest reductions in market concentration since the formation of the Electricity Commission two decades ago with 2021 projected to be even worse.[39]

There are signs emerging of the trend in market concentration levels starting to reverse and worsen, particularly in the South Island. The reversals may be modest so far but should be seen as a warning for the direction competition is heading in the electricity market. It is no longer safe to simply rely on continuous, albeit modest, improvements in competition statistics:

- **The 5 largest incumbents' market share is growing for the first time in two decades:** Since April 2021, the aggregate market share of the 5 largest incumbent retailers has been increasing nationwide.

- **South Island market concentration is getting worse:** Since January 2021, the HHI and CR1 for the South Island overall has deteriorated. The CR3 has deteriorated since December 2020.

- **South Island generation dominance is being mirrored in retail:** The two largest generators in the South Island, Contact and Meridian, are rapidly becoming the two largest retailers in the vast majority of network reporting areas:

    - In 2000, Contact and Meridian were the two largest retailers in just 4 of the 16 South Island network reporting areas. This has now risen to 8 and is likely to become 10 in the near to medium term.
    - In 2000, either Contact or Meridian was the largest retailer in 8 of the network reporting areas. This has now risen to 12 and likely to become 14 in the near to medium term.
    - The only South Island network reporting areas where Contact or Meridian are not the largest are Malborough (Meridian is on track to overtake Trustpower as largest retailer), Buller (Pulse Energy is the largest retailer) and Westport (Trustpower is the largest retailer, with Contact and Meridian in 2nd and 3rd place, respectively)

- **There are worrying signs in recent changes to market concentration:** The HHI deteriorated in 16 of the 39 network reporting regions in the last 3 months, and in 15 over the last 6 months. This included a deterioration in 12 out of the 16 South Island network reporting regions in the last 3 months, and 11 over the last 6 months.

- The warning signs for the deteriorating state of retail competition are highlighted by Ashburton where HHI market concentration is now higher than it was four years ago, Dunedin where the HHI

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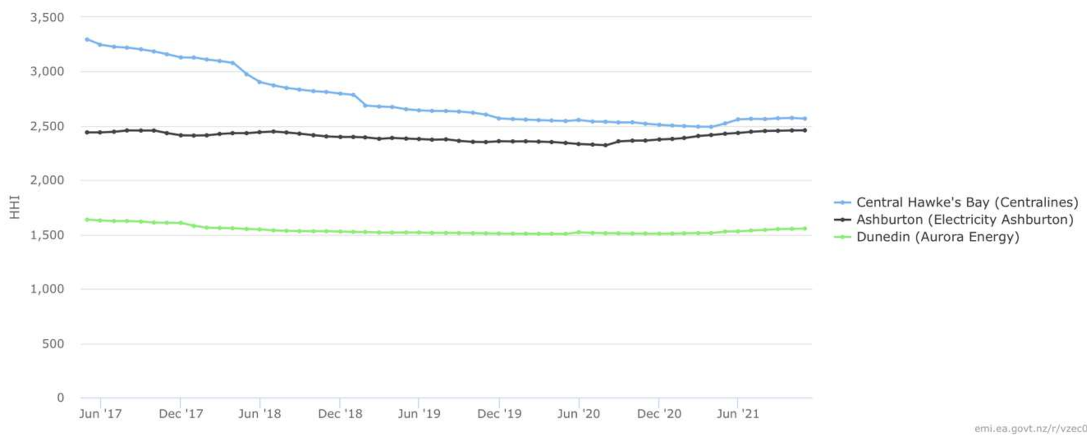
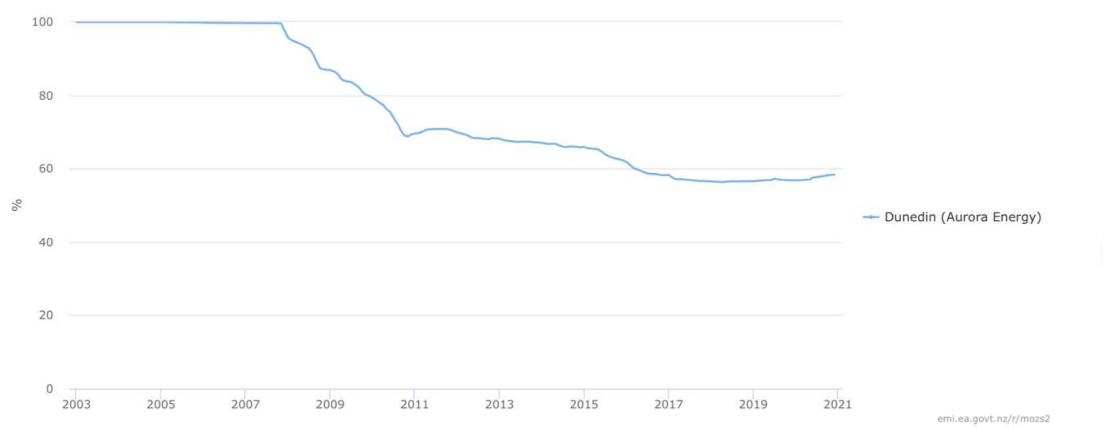
[39] Based on market concentration statistics collected and published by the Electricity Authority from 2003 onwards.

is the highest since June 2018, and Central Hawke's Bay where the HHI is the highest since December 2019.[40]



- Market Concentration Ratios show similar signs of deterioration in retail competition.
- The CR3 for New Zealand has slightly deteriorated since May 2021.
- The CR3 deteriorated in the 16 out of 39 of network reporting regions in the last 3 months, and 17 over the last 6 months. This included a deterioration in the majority (10 out of 16) of South Island network reporting regions in the last 3 months, and 11 over the last 6 months e.g. Dunedin where the CR3 is the worst it has been in 4 years:[41]

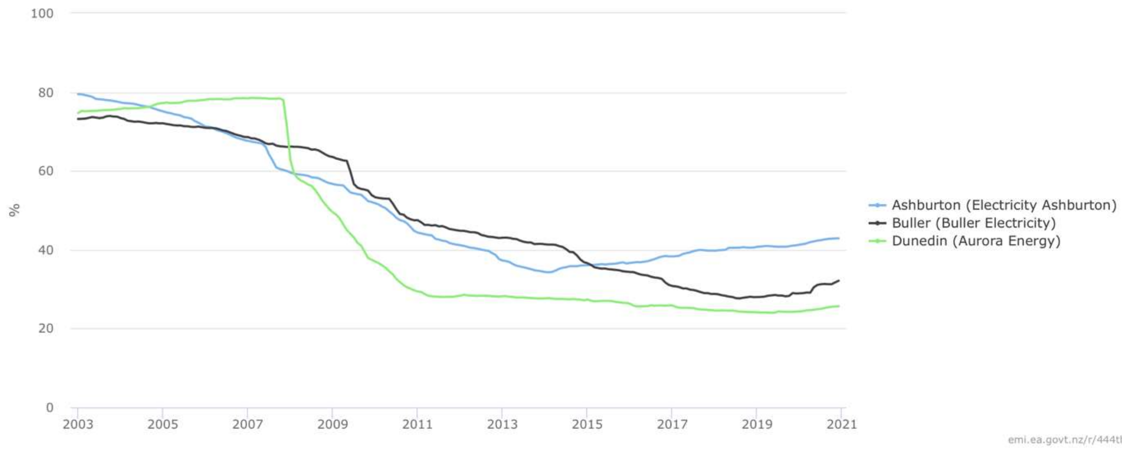


- The CR1 deteriorated in the 13 out of the 39 of network reporting regions in the last 3 months, and in 12 over the last 6 months. This included a deterioration in 8 out of the 16 South Island network reporting regions in the last 6 months e.g. the largest retailer in Ashburton has been

40 https://www.emi.ea.govt.nz/Retail/Reports/R_HHI_C?DateFrom=20040101&DateTo=20211130&RegionType=NWK_REPORTING_REGION_DIST&_rsdr=ALL&seriesFilter=16,31,37&_si=v|3

41 https://www.emi.ea.govt.nz/Retail/Reports/R_CR4_C?DateFrom=20040101&DateTo=20211130&RegionType=NWK_REPORTING_REGION_DIST&CRLevel=3&_rsdr=ALL&seriesFilter=37&_si=v|3

increasing in market share for nealy 7 years, in Buller the CR1 is the worst it has been in 4 years, and in Dunedin it is the worst it has been since the end of 2017.[42]



Lower and more affordable prices for Kiwi households and businesses are the main benefit from competition

The Authority's wholesale market review limits the calculation of consumer detriments to narrow efficiency-only.

The harm to consumers from an oligopolistic market and exploitation of market power arise from high spot prices and will substantially dwarf any likely efficiency impacts.

This is reflected in the Authority's estimate the Tiwai contracts result in "potential efficiency costs … around $57 million to $117 million per year" but the harm to consumers amounts to increases in "national prices and spot market revenues by as much as $850 million per year". The Authority noted "there is … a wealth transfer … from consumers to generators, of around $729 million per year, that greatly out-weighs the efficiency losses for generators, providing incentives for the agreement".

If prices are $850 million higher than they should be (or $200 per household) consideration of whether "electricity is going to consumers with the highest valued use" is not likely to be highest in consumer concerns or long-term interests. This excludes the additional $1.6 billion per annum ($38/MWh) the Authority wasn't able to explain or justify based on supply and demand conditions.

We agree with Duignan Munro that "in the short-term price elasticities are small and thus the inefficiency effects of price discrimination are small relative to the wealth transfer effects" and "The valuation of the inefficiency effects is not able to reflect longer term implications".[43]

Electric Kiwi and Haast agree with the comments made by John Stephenson (Sense Partners) as part of the work Sense Partners is doing for the Authority on the TPM: "If all prices fell by $10 then people could e.g. (a) work less and enjoy the same consumption benefits (b) save and invest in something without foregoing any of their consumption benefits (c) buy more of something else to use/consume. So even if they have zero elasticity in the market in question there is still scope for a substantial welfare improvement ...".[44]

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[42] https://www.emi.ea.govt.nz/Retail/Reports/R_CR4_C?DateFrom=20040101&DateTo=20211130&RegionType=NWK_REPORTING_REGION_DIST&CRLevel=1&seriesFilter=27,31,37&_rsdr=ALL&_si=v|3

[43] Munro Duignan Limited, Review of the Electricity Authority discussion paper "Inefficient Price Discrimination in the wholesale market – issues and options", 22 October 2021.

[44] https://www.ea.govt.nz/dmsdocument/25805-4-11-fw-fw-wealth-transfers-in-the-tpm-cba

This is not a “zero-sum” game from a New Zealand Inc perspective and it is our view that the effects of this wealth transfer are extremely harmful, now more than ever in an environment of cost inflation and widespread energy poverty.

The Authority’s Strategy development: Final strategy framework noted “There is clear support from stakeholders for us to review our interpretation of our statutory objective, especially given the length of time that has elapsed since the original interpretation was released” and that “We intend to commence this review in the 2020-21 Financial Year”.[45] The Authority has not provided an update on this project. We are not aware of this work commencing yet, despite it being nearly half-way into the 2021/22 financial year.

Next steps in the wholesale market review

The work the Authority has undertaken so far is more than sufficient to establish there are substantial, structural problems in the electricity market, that are harmful to competition, the efficient operation of the electricity market and the long-term interests of consumers, as well as prima facie evidence of possible Commerce Act breaches.

It is clear the issues the Authority is confronting should be prioritised and addressed at pace. The Authority’s requirements on Transpower for development a new TPM (slightly over 12 months in total) provides a suitable benchmark for the rate at which the wholesale review should be undertaken and completed.

Different aspects of the review have been progressed at different rates, with the Authority’s investigation into the Tiwai contract much more advanced than the overall consideration of competition problems in the wholesale market. The most important element of the review is consideration of the options under “Other options that could be considered”. The discussion on “Other options” is high-level and focussed on possible negative aspects of the options and the “significant implications for [the] companies”, rather than their pros and cons which should include increased competition and lower, more efficient and affordable prices.

The suggestion that “One difficulty” with structural reform and break-up of the generators “is that there may be fixed costs or overheads that create economies of scale, and these economies could be lost” is tantamount to suggesting the optimal market structure is an oligopoly and the Authority should not promote competition.

Even though “Addresses root cause of inefficiency and any competition concerns” is included in the Authority decision criteria, for example, this is not considered in the options evaluation.

Vertical separation of generation and retail businesses is not considered at all, but this seems to be because the Authority hasn’t considered the downstream, retail market, impacts of market power in the wholesale market.

This imbalance needs to be addressed as the appropriate solutions to competition problems in the wholesale market should eliminate incentives for Tiwai-type contracts.

Enhancements to the Authority modelling

The Authority has made a good start with its modelling of the problems in the wholesale market; particularly on how it has played out with the Tiwai contract, but the depth of the review modelling can be improved, and there are a number of areas where the analysis can be enhanced:

[45] Electricity Authority, Strategy development Final strategy framework: Feedback paper, 7 July 2020.

- **The duration of the analysis needs to be extended:** We believe modelling should be performed for the existence of the market and not just assume that pre-2019 the market was workably competitive.

  The Authority should not limit itself to "look[ing] at whether prices over the review period (January 2019 to June 2021) were determined in a competitive environment, for the long-term benefit of consumers" but consider the entire period the Authority has been in existence or since the break-up of ECNZ.

  For example, the Authority has identified evidence of offer prices well above workably competitive levels well before the Pohukura outage or the latest iteration of the Tiwai contracts were negotiated e.g. "the percentage of higher priced offers for Meridian's Waitaki hydro stations has been increasing gradually since 2014". This should help confirm the extent to which prices have exceeded economic cost by too much and for too long.

  Implicit in some of the Authority's analysis is that the pre-2019 period represents a period of acceptable competition. We disagree. The market was significantly oversupplied in the 10 years following the global financial crisis. Many generators over estimated electricity demand and committed to new generation that wasn't needed. In a competitive market this should lead to below average prices and returns for generators, but the period saw average spot and forward prices close to the long-run marginal price of new generation throughout. A market where cyclical troughs lead to fair economic returns, and cyclical peaks lead to super profits is clearly not competitive in the way most economist would describe it. The work of MEUG, Poletti and Wolak have all showed supernormal profits in the pre-2018 period. The Authority's modelling should not use the pre-2018 period as the proxy for workable competition. First principles analysis such as that carried out by Wolak and Poletti is the best method to establish the level of competition in the spot market.

- **The Pohokura outage shouldn't necessarily be considered as the single "break-point" as changes in market behaviour have also occurred gradually over time** (especially subsequent to warning notices being sent to gentailers for trading conduct issues).

  For example, Matt Rowe suggested the Authority's decision in May 2017 to send Meridian a warning letter rather than taking enforcement action for breach of the Code may have had "the unintended consequence of [causing] ongoing higher prices" while, in response, Concept suggested "the breakpoint [may have] actually occurred in February 2017, before the letter to Meridian was sent or published".[46]

- **Adjust the modelling to account for the impact that electricity prices can have on gas prices**, and not just the other way around. We expect this will demonstrate that less of the spot prices are explainable by legitimate supply and demand conditions, and more by market power problems.[47]

- **Take into account downstream and environmental impacts:** Broaden the consideration of the harm caused by competition problems in the wholesale market, to also consider the impact on downstream markets such as the electricity retail markets and implications for the transition to a decarbonised economy and electrification.

- **Expected outcomes for workably competitive markets should be modelled to determine the optimum configuration of the wholesale market**. In our view, the two superior scenarios for structural reform are:

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[46] Concept Consulting, Review of impact of trading conduct enforcement action on spot prices, August 2019.
[47] We have raised this previously. For example, in work undertaken by Concept for MDAG on the Trading Conduct Review, Concept found that electricity prices were structurally higher after May 2017 but attributes this to changes in gas prices and hydro storage, because it didn't take into account that electricity prices affect gas prices. At the time, Haast provided modelling analysis, including Granger Causality test, which demonstrated this impact. Haast, Critique of Concept's report "Review of impact of trading conduct enforcement action on spot prices", 2 December 2019.

1. Creating an independent generator SOE owning Manapouri and the Huntly Rankine units; OR
2. Moving Manapouri from Meridian to Contact and creating an independent generator SOE owning Contact's Clutha and Hawea assets and a grid-scale battery in Auckland.

We agree with Meridian "workable competition is the correct interpretation of the Authority's statutory objective".[48] The High Court has provided useful precedent for how a workably competitive market benchmark should be set and was clear "In a workably competitive market no firm has significant market power and consequently prices are not too much or for too long significantly above costs".[49]

- **Other considerations:** Include forecasts of HHI and Concentration Ratios for the next decade. The Authority's analysis includes qualitative commentary only that market concentration will get worse.

- Review the Tiwai contract modelling against previous modelling work that has been done on the impact of the Tiwai contract on electricity prices. As we have discussed with the Authority, we consider that this will provide support for the Authority's modelling.

Concluding remarks

About 15 years ago, Telecom wasn't delivering the broadband that New Zealanders wanted or deserved, and so government directed that it split its retail and its wholesale up and access arrangements for independent retailers were overhauled.

The result has seen a more competitive telco sector, and better service to Kiwis.

Investment has flourished, with large commitments to upgrade to (now) 5G mobile and fibre roll-out etc.

Electric Kiwi and Haast want to see Kiwis benefit from competition developing and flourishing in the electricity market as well. We are doing our bit, but the market power of the large generators and the resulting flawed wholesale market are acting as a handbrake on our ambitions.

The time for tinkering is over. The Authority should recommend the Minister pursues structural reform of the generation market.

Recommended solutions for reform of the electricity industry

- Electric Kiwi and Haast support structural reform to deal with the inherent structural problems in the electricity industry limiting competition.

- Our preferred option is to split out Manapouri and the Huntly coal assets into a new SOE (Kiwi Power).[50] Even the creation of just one new generator would make a big difference to competition in the electricity market.

- An alternative option would involve establishment of Kiwi Hydro SOE by splitting Manapouri away from Meridian and reorganising Contact's and Meridian's assets as follows:
    - Manapouri Power Station is moved from Meridian to Contact.
    - Contact's Clutha river and Lake Hawea assets including Clyde, Roxburgh and control gates are moved to Kiwi Hydro.
    - Meridian and Contact's Auckland Battery project is moved to Kiwi Hydro.
    - Kiwi Hydro Commits to build the Lake Onslow project and a large Auckland battery.

[48] https://www.ea.govt.nz/assets/dms-assets/26/26735Meridian-submission-MDAG-HSOTC-discussion-paper.pdf
[49] WELLINGTON INTERNATIONAL AIRPORT LTD & ORS v COMMERCE COMMISSION [2013] NZHC [11 December 2013].
[50] Kiwi Power would provide a natural home for Project Onslow.

- There are other options which merit consideration, and may be complementary, such as the Authority's suggestion that a cap be placed on the generation capacity of each electricity generator. In particular we believe it would be desirable for Meridian to be prevented from owning or operating new firming generation including batteries.

- Whichever option is chosen, the new SOE should be excluded from entering the electricity retail market to increase the amount of generation available for development of a dynamic liquid hedge market and trade with large users, financial intermediaries, independent generators, and independent retailers.[51]

- Regulation of contractual arrangements with Tiwai and other large electricity users may be a pragmatic option to introduce ahead of structural reform, if the regulation can be introduced more quickly and in time to prevent a repeat of the Tiwai issues after 2024.

Yours sincerely,

Luke Blincoe
Chief Executive, Electric Kiwi Ltd
luke.blincoe@electrickiwi.co.nz
+64 27 601 3142

Phillip Anderson
Managing Director, Haast Energy
phill@haastenergy.com
+64 21 460 040

[51] We also support consideration of vertical separation requires to split retail and generation but recognise the benefit of vertical separation diminishes as market power issues in the wholesale and hedge markets are addressed.

One regrettable consequence of the Electricity Industry Reform Act was that it substituted lines-retail vertical integration for retail-generation vertical-integration. The Electricity Industry Reform Act does at least provide precedent for ownership separation, which could be applied to the 5 largest incumbent retailers, as well as how corporate separation and arms-length rules could be applied.