#### 11 March 2022

Tony Baldwin Chair Market Development Advisory Group Electricity Authority

Dear Tony,

# MDAG has highlighted well the importance of addressing competition problems to enable efficient operation of the wholesale electricity market and successful transition to 100% renewables

Electric Kiwi, Flick Electric, Pulse Energy, and Vocus (the independents) welcome the inquisitive approach MDAG has taken to the 100% renewables future project. We also welcome that MDAG is working to a clear and ambitious end-date for completion of the project.

We acknowledge the amount of work MDAG and Authority staff have put into the 100% renewables project, including expert input from external advisors. We appreciate the engagement we have had with the MDAG Chair and Authority staff in dealing with our queries.

#### The independent retailer WMR submission is part of our MDAG submission

Given the high degree of overlap between the wholesale market review (WMR) (which looks at the present state of competition) and the MDAG renewables project (which looks at how the strength of competition could change), the independent retailer joint WMR submission should be treated as part of our MDAG submission (and vice versa).

Our WMR submission should be particularly relevant as MDAG moves into the next stage of its policy development and options identification. While MDAG has "urge[d] stakeholders to not presuppose the measures or changes that should be put in place", the principal options needed to address the competition issues raised in both the MDAG and WMR consultations are the same.

It is important MDAG and the Authority are clear how the WMR and renewables project fit together.

#### The focus of the project should be on promotion of competition

The focus of the project should be on the importance of a workably and fully competitive market for the efficient and effective operation of an energy-only market, rather than hypothetical concerns that high prices could result in price suppression. It may have been valid to be worried about the risk of price suppression when the wholesale electricity market was first established and the market was immature,<sup>3</sup> but New Zealand has now had 25 years of experience with operation of the market and,

<sup>&</sup>lt;sup>1</sup> We similarly provided favourable comment on the approach MDAG took to the High Standard of Trading Conduct Rules review, and how this was a marked step up from previous the previous saves and winbacks review.

<sup>&</sup>lt;sup>2</sup> Albeit that the end of June deadline is now out-of-date and will need to be extended.

<sup>&</sup>lt;sup>3</sup> When the wholesale electricity market was established – with ECNZ and Contact in operation – Government officials considered the prospect that "a fully competitive market" could "lead to long periods of relatively low spot prices, inspected with very infrequent periods

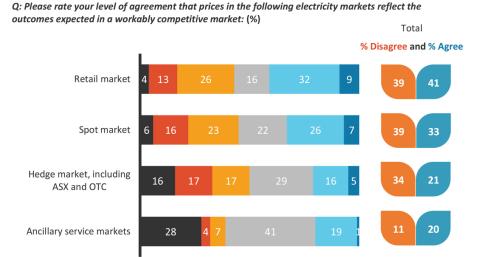
as MDAG have noted, "Historical concerns about missing money problems have not been borne out to date". The only example of price suppression we are aware of is the Electricity Commission decision to price Whirinaki below the SRMC of oil, which was supported by Meridian but opposed by other market participants, and large users.

#### Competition is currently inadequate

While it is laudable MDAG is endeavouring to adopt an "open-minded and rigorous" approach to the project, which "put aside ... 'priors' on how the market is likely to behave", MDAG isn't starting from a 'blank sheet of paper'. It isn't possible to consider how the paragraph 3.38 pre-conditions for a successful competitive energy-only market will be meet without considering the current state of competition. MDAG should assess the current energy-only market against these conditions so that it is clear what and where the gaps are now. The system is already transitioning. It is not a step change to 100%RE.

Submissions from the independents and many other market participants and consumers to the Electricity Price Review and the Electricity Authority (on various topics), the Authority's WMR, and the appallingly bad results from the Authority's UMR survey,<sup>4</sup> all highlight the starting point for the MDAG project is that there are currently substantial competition problems in the electricity market.

The UMR survey found, for example, that only 33% of market participants agreed spot market prices reflect the expected outcomes in a workably competitive market. A higher proportion (39%) disagreed and 29% were neutral or unsure.



Similarly, only 35% percent of market participants agreed (51% disagreed) competition between electricity generators ensures wholesale market prices are set at an efficient level. These types of findings are directly relevant to the issues MDAG is grappling with.



of very high spot prices in abnormally dry years" and the risk of "unacceptably high" spot price. Source: John Culy, Report to the Officials Committee on Energy Policy, Managing "Dry-Year" Risk in a Fully Competitive Market: Issues and Options, May 1995.

<sup>&</sup>lt;sup>4</sup> It is unlikely to be a coincidence that the number of participants that consider independent generators (18%) and independent retailers (19%) operate on a level playing field match the number of gentailers that participant in the UMR surveys (19%).

The Electricity Authority is appropriately asking questions about the extent to which spot market pricing over the last several years, including in January this year,<sup>5</sup> reflect genuine scarcity or artificial pricing and market power. The Authority recently presented to the Economic Development, Science and Innovation (EDSI) Select Committee that: "What we have observed is that prices in the market do not always match underlying supply and demand conditions at times. The mark-up of price over cost is at times high ... There's evidence of market power may have been exercised through economic withholding, and there has been some factors holding back investment ..."<sup>6</sup>

Unless these issues are dealt with, the prospect of more volatile and higher prices and levels of market concentration, as part of the transition to 100% renewables, can reasonably be expected to heighten fears and the likelihood spot prices will reflect (ab)use of market power and undermine confidence in the market.

#### **Process matters**

MDAG meeting minutes note the Electricity Authority's "preference" that release of the consultation material be delayed until after Christmas "because the Authority was already consulting on Transmission Pricing Methodology (TPM), future security and resilience of the New Zealand power system (FSR), and the wholesale market competition review and didn't want another substantial consultation to be released before Christmas".

The best way to deal with a 'bottleneck' or peak in consultations is to provide longerA for submissions, i.e. flatten the peak, and not to delay release of consultation material. Even if MDAG wasn't able to meet its self-imposed December target, it would have been better to follow Commerce Commission precedent and release the various consultant and expert reports as they were produced rather than as a single omnibus release with the consultation paper; especially given the very large amount of consultation material MDAG is seeking comment on in a short 6-week period. Various of the substantive consultant and expert reports produced by Concept Consulting, Dr Batstone and Sapare were completed between October and December 2021.

The delay in the consultation simply resulted in a shift from a relatively quiet New Year period to a period overlapping other significant consultation such as the Commerce Commission's gas price reset and the Authority on commercial market-making, and loss and constraint excess allocation.

MEUG has also raised that "High January wholesale prices don't match dry year risk" (Update from the Chair, February 2022):

Wholesale electricity spot prices increased significantly through January. On 11 January and a further 5-days since up to and including 1 February, average daily spot prices exceeded \$200/MWh. On 1 February average spot prices were \$362/MWh, with some trading periods over \$500/MWh. In comparison the average household retail price for total delivered electricity, that is spot price plus retailer costs and margin, Transpower charges, and local distribution charges are around \$300/MWh (equivalent to 30 c/kWh).

On 31 January, the System Operator published an update of the Simulated Storage Trajectories. It shows that despite a decrease in lake levels since December, no future scenarios breach the 'watch curve' or show a 1% risk of a dry winter.

This begs the question of why we are seeing some spot prices so high. Put simply, the System Operator has found there is a mismatch between observed actual spot and futures curves and the physical risk forecast. To spell it out; the System Operator's forecast security of supply risks arguably does not support sustained high futures prices.

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<sup>&</sup>lt;sup>5</sup> https://www.ea.govt.nz/about-us/media-and-publications/market-commentary/market-insights/high-wholesale-electricity-prices-in-jan-2022/

<sup>&</sup>lt;sup>6</sup> https://www.facebook.com/EDSISCNZ/videos/613768709722915

<sup>&</sup>lt;sup>7</sup> Minutes, meeting number 34, 2 December 2021: https://www.ea.govt.nz/assets/dms-assets/29/00-Final-MDAG-Minutes-Meeting-34.pdf

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#### Summary of the independent retailer views

- The foundations for a world-class electricity market were established in the 1990s with the break-up of ECNZ and the creation of the energy-only wholesale electricity market. However, questions about the competitiveness of the market and whether consumers pay too much for electricity have dogged the industry.
- We do not fear or object to the potential for the transition to 100% renewables to result in higher spot price volatility, if the volatility genuinely reflects the outcomes of a workably competitive market and tools are available to enable independent retailers (and generators) to manage risk on a level playing field with vertically-integrated incumbents. These are also preconditions MDAG have appropriately identified for an energy-only market to work properly.8
- The priority for the Authority and MDAG should be to make sure the energy-only model works as well as it can, which requires a workably and fully competitive market (or, using the Authority terminology, "thriving competition"). The adoption of a capacity-based market would mask problems in the electricity market (artificially hiding the true level of wholesale electricity prices) and could be a stepping stone towards more regulated options such as a single-buyer market.
- It is important MDAG clearly (and explicitly) distinguish between high prices that reflect genuine scarcity and inefficiently high prices due to use of significant or substantial market power: We appreciate MDAG has clarified its concern relates to price suppression relative to efficient prices. Price suppression of monopoly pricing is not a concern. Measures to protect against abuses of market power won't "trigger a vicious circle of undermined investment incentives and higher future prices".
- Too much attention has been given to hypothetical concerns about "price suppression". There are 28 references to concerns about "price suppression" in the consultation paper alone. We agree "Historical concerns about missing money problems have not been borne out to date". The only example of price suppression we are aware of is the Electricity Commission pricing Whirinaki below the SRMC of oil, which was supported by Meridian but opposed by other market participants, and large users.
- There is a monopoly pricing problem, not a price suppression problem: We consider price suppression should be the least of the Authority (and MDAG) concerns in a market where the large incumbent participants have market power, and the Authority has found evidence of widespread "economic withholding" and monopoly pricing.
- Conservative hydro storage policies could be used as a Trojan horse for dumping: It will be
  difficult to build or protect trust and confidence in the price discovery process, particularly in a
  scenario where hydro spill could become more common, if the size of the largest hydro
  generators means it can be profitable to unnecessarily spill water to artificially inflate spot prices
  e.g. December 2019.<sup>10</sup>

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<sup>&</sup>lt;sup>8</sup> Conditions (a) – (e) all require a workably and fully competitive market to be satisfied. Conditions (c) – (e) also require that tools are available to enable independent retailers (and generators) to manage risk on a level playing field with vertically-integrated incumbents.

<sup>&</sup>lt;sup>9</sup> The consultation paper doesn't explicitly make this distinction.

<sup>10</sup> https://www.ea.govt.nz/code-and-compliance/uts/undesirable-trading-situations-decisions/10-november-2019/

 MDAG should see periods where despite flooding and hydro spill (such as the period from November 2019 to January 2020 high spot prices were observed and only reduced due to a fall in demand) as the 'canary in the mine' and a warning of the problems that could eventuate in the transition to 100% renewables if hydro spill is expected to become more common.

#### MDAG has highlighted well the importance of competition

- MDAG has highlighted well the importance of competition for the efficient operation of the
  wholesale electricity market and a successful transition to 100% renewables. Acceptance of
  high prices in dry years requires confidence the market is workably and fully competitive.
- We also agree with MDAG that "market concentration could materially increase" if the transition
  to 100% renewables isn't well managed. The policy implications of an increase in market
  concentration depend on how competitive the hedge and spot markets are to start with.
  MDAG's work isn't being undertaken in a vacuum.
- The recognition that contracting (hedge market) will need to do the "heavy-lifting" heightens the
  need to address existing issues with market-making, and to consider the potential implications
  of an increase in concentration/market power of hydro-generation for market-making. We agree
  with Grant Read that "Increased price volatility clearly increases risk for all parties, and
  particularly for potential entrants".<sup>11</sup>

#### Consumers benefit from low prices in a competitive market

• In a workably competitive market, increased price volatility would mean extended periods of low pricing as well as high prices during scarcity. Low prices during periods of plentiful or surplus electricity supply will be critical for acceptance of high prices at other times. Periods of low prices when there is surplus electricity is needed to satisfy the paragraph 3.38 preconditions; particularly (a), (b) and (d), for an energy-only market.

However, the only commentary about low prices in the consultation paper<sup>13</sup> is the negative (and purportedly "quite plausible") suggestion that "the rise in the proportion of time when very low spot prices will occur" could "trigger" price suppression. We consider the opposite is more likely.

#### MDAG appropriately addressed gross versus net pivotal in the trading conduct review

The Grant Read discussion on market power and contract position is implicitly based on a oneoff static game. This results in a conclusion that the net pivotal position (not the gross pivotal)
position is what counts in terms of the incentives to use market power, and vertically-integrated
incumbents self-regulate by operating retail businesses which removes the benefit of monopoly
pricing in the wholesale market.

The net pivotal arguments ignore that use of market power in the spot price will result in ability to extract higher future contract prices (unless contract prices are regulated). MDAG addressed why gross pivotal is the relevant measure for considering potential abuses of market power in its

<sup>&</sup>lt;sup>11</sup> Grant Read, on behalf of Meridian, Interpreting Hydro Offers in the NZEM Reflections on the Electricity Authority's October 2021 Market Monitoring Review. 21 December 2021.

<sup>&</sup>lt;sup>12</sup> Grant Read, in submission on behalf of Meridian, has noted the flip-side to this point that the quid quo pro of periods of low prices is periods where SRMC exceeds LRMC.

periods where SRMC exceeds LRMC.

13 The consultation paper notes "the shift to 100%RE is expected to increase spot price volatility due to: ... More frequent periods of very low (possibly zero) prices when intermittent renewable generation is high relative to demand and storage lakes are already full". There is also a brief reference in the Grant Read paper.

trading conduct review and, consistent with this, the Authority similarly recognised it should use gross pivotal in its WMR.

• Grant Read's commentary about incentives to game the spot market gives rise to questions about how vertical-integration can distort wholesale market offers: Similar types of issues have manifest in relation to Genesis Energy's comments about 9 August 2021.

## Care is needed to ensure supply-side problems aren't misdiagnosed as a demand-side problem

- Some of the initial options MDAG has identified, particularly in relation to capacity mechanisms, appear to be premised on there being a demand-side problem. We reject assertions that there is sub-optimal take-up of hedging contracts due to short-sighted observation of extended periods of very low spot prices which "may prompt a behavioural change by purchasers, and encourage them to take on more spot exposure".
- We also reject in its entirety Sapare's premise that there is a "standoff between sellers of hedge products and buyers of hedge products", that this reflects a gap in views about what "prices are "too high"" and "the true value of covering price risk" or that it is "Difficult for small retailers ... to understand price formation, which reduces trust in market". Sapare's description of a "standoff" is jaundiced and simplistic.
- For the avoidance of doubt, we would be comfortable with the level of hedging prices used by the vertically-integrated incumbent suppliers for pricing their own retail services, particularly Meridian.
- It is not meaningful to talk about a price gap between supply and demand without undertaking price squeeze/non-discrimination/equivalence of inputs type testing. The gap in price between what vertically-integrated incumbent access providers want to provide services at to access seekers (if at all), and the price access seekers need to compete on a level-playing field, is symptomatic of vertically-integrated industries where access providers have market power. It does not matter whether the access provider is a monopoly or an oligopolist. What matters is that they have significant or substantial market power.

#### The options should target the pre-conditions for an efficient 'energy-only' market

- The options MDAG develops at the next stage of the project should be targeted at the 5 preconditions (paragraph 3.38) for the efficient operation of an 'energy-only' market. If the 5 preconditions are not <u>fully</u> met this does not mean MDAG should default to capacity-based
  options.
- The principal concern we have with the consultation paper option identification is that none of the "Measures to increase confidence in spot prices during genuine scarcity" would promote competition. This is despite MDAG's appropriate focus on the importance of competition, including for "Confidence among wholesale buyers and sellers that the high prices make sense, (which means confidence in the structure and rules of the market, including sufficiency of competition)".

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<sup>&</sup>lt;sup>14</sup> i.e. "Strengthen the stress testing regime to ensure market participants are consciously aware of the risks of their hedging choices" and "Explore measures that would introduce compulsory contracting obligations on purchasers to forward contract for their firm demand".

<sup>15</sup> https://www.ea.govt.nz/assets/dms-assets/28/Sapere-Research-Group-presentation.pdf

- Structural reform is the best solution for ensuring trust and confidence in the price discovery process: Refer to our WMR joint submission, which highlights our view that structural reform is needed (including break-up of Meridian) as well as hedge market reform.
- Absent structural reform, consideration may need to be given to more heavy-handed regulation of Meridian to curb its market power.
- The regulated price floor should be removed: Given MDAG's emphasis on avoiding price suppression, this should include both downward and upward price suppression. We would support MDAG considering whether the present regulated price floor (prohibition on spot prices below zero) should be removed to help signal the Authority has confidence in the price discovery process and the market delivering efficient prices.

Various other jurisdictions allow spot prices to go below zero, which could reasonably be expected to help dampen concerns about periods of high prices.

#### MDAG's work isn't being undertaken in a policy vacuum

We agree with MDAG that key issues it needs to work through include, in particular:

Key issues for wholesale market competition with 100%RE	Key issues for contracts market with 100%RE
"(a) What (if any) areas of the wholesale electricity market are likely experience increased supplier concentration and cause inadequate competition in the shift to 100%RE?"	"(a) What are the contract market features necessary to ensure participants will have reasonable access to the risk management products needed under 100%RE?"
<ul> <li>"(b) For any areas in (a) what is the timeframe over which changes are likely to occur?"</li> </ul>	"(b) Are the contract market features identified in (a) likely to be present as the shift to 100%RE occurs?"
<ul> <li>"(c) What are the options for addressing competition concerns identified in (a)?"</li> </ul>	<ul> <li>"(c) What are the actions needed to put the necessary features in place, to the extent that the contract market features in (b) are unlikely to develop naturally, for example by building on existing regulatory tools or developing others?"</li> </ul>
MDAG's questions do not exist in a policy silo o	
The competition issues MDAG have identified should be considered in the context that:	There has been ongoing concerns raised about the contracts (hedge) market, including:
<ul> <li>The wholesale electricity market is highly concentrated.</li> </ul>	The issues raised during the Electricity Price Review.
<ul> <li>When the Commerce Commission investigated the electricity sector in 2009 it found "each of the four largest gentailers - Contact, Genesis, Meridian and Mighty River Power - is likely to have held</li> </ul>	Concerns that vertically-integrated incumbent suppliers have incentives and ability to restrict access to adequate hedging arrangements by independent retailers.

### Key issues for wholesale market competition with 100%RE

substantial market power on a recurring basis, particularly during dry years ... Each of these companies has the ability and incentive unilaterally to exercise market power and increase wholesale prices during certain periods. The price increases in dry periods are well above any increases in input costs, including the higher opportunity cost of water when hydro storage is low".<sup>16</sup>

- The Authority's wholesale market review has identified problems with the extent of competition in the market.
- The Authority's wholesale market review findings are backed up by its UMR survey of market participants e.g. only "33% agreed spot markets reflect the outcomes expected in a workably competitive

#### Key issues for contracts market with 100%RE

- Concerns that high spot prices are resulting in price squeezes in the electricity retail market/current vertically-integrated incumbent supplier practices would fail non-discrimination and "equivalence of input" tests.<sup>17</sup>
- The Authority's UMR survey finding that: "21% [of market participants] agreed hedge market, including ASX and OTC reflect the outcomes expected in a workably competitive market", "19% agreed new entrant retailers can operate on a level playing field with established retailers" and "18% agreed new entrant generators can operate on a level playing field with established generators".

## Interpreting MDAG's conclusions in the wider context of the Authority work programme and the wider policy context

The MDAG conclusion that "the shift to 100%RE may reduce competition in some areas ... and ... market concentration is likely to increase", should be interpreted as an expectation that existing competition problems in the electricity market will get worse.

MDAG's conclusion that "Overall, the results suggest that increased volatility per se should not pose unmanageable risks for investors or purchasers" includes a very substantial qualification "provided they can enter into suitable forward contracts" given the existing lack of suitable forward contracts.

<sup>&</sup>lt;sup>16</sup> Commerce Commission, media release, Commerce Commission finds that electricity companies have not breached the Commerce Act, 21 May 2009 at: <a href="https://comcom.govt.nz/news-and-media/media-releases/archive/commerce-commission-finds-that-electricity-companies-have-not-breached-the-commerce-act.">https://comcom.govt.nz/news-and-media/media-releases/archive/commerce-commission-finds-that-electricity-companies-have-not-breached-the-commerce-act.</a>

companies-have-not-breached-the-commerce-act.

17 e.g. https://www.ea.govt.nz/assets/dms-assets/26/26944Independent-retailers-HME-Consultation-Submission-11-06-2020.pdf and https://www.ea.govt.nz/assets/dms-assets/28/Independent-retailers-submission-Internal-Transfer-Prices-and-segmented-profitability-reporting.pdf

# A successful organised market requires an efficient price discovery process

There are certain prerequisites for a successful organised market, including symmetric flow of information, a robust settlements system, avoidance of 'artificial pricing' (including what the Authority has labelled "economic withholding") and efficiency of the price discovery process. Market participants should be able to rely on predictable offer behaviour consistent with outcomes in a workably competitive market and which reflect cost.

The original objective of wholesale market reform was to "Enabl[e] a diversity of parties to add capacity to meet security of supply and growing demand, which recognised that a handful of near-monopoly decision-makers simply can't see or deploy the full range of optimal solutions" [footnotes removed]. Axiom (for Meridian) similarly articulates well that "... different generators may have contrasting expectations about future supply risks, (i.e., these are not 'facts' – there is an unavoidable element of subjectivity). Hydrological conditions, the nature of drought and the intensity of spill all vary across the different catchment systems. Generators' approaches to managing those perceived risks may also be coloured by a plethora of other factors, including the combination of generation technologies comprising their respective profiles". 19

This is what you want and should expect in a workably competitive market.

It is inconsistent with a workably competitive market for any individual generator to have control over New Zealand's hydro storage and/or significant or substantial market power which results in its expectations about future supply risks, and how they should be managed, materially impacting prices or how well the dry year risk is managed. It used to be 'If ECNZ got it wrong, New Zealand got it wrong'. We agree with Electric Kiwi and Haast it is now the case that: "If Meridian gets it wrong, New Zealand gets it wrong".<sup>20</sup>

We welcome MDAG's acknowledgement that "When the transition began in the mid-1990s, it was anticipated that achieving a well-functioning wholesale electricity market would involve a process of continuous improvement". We agree with MDAG "With the shift to 100% renewable supply underway, now is the time to revisit the wholesale market design to ensure it will meet the challenges and opportunities of electrifying a much larger part of our New Zealand economy using renewable sources of supply".

#### MDAG has articulated well the building blocks for a successful energy-only market

We welcome MDAG's emphasis that "Competition will be vital to ensure a successful shift to 100%RE. Without effective competition consumers and policy makers will not have confidence in electricity spot or contract prices. And without that confidence, investors are unlikely to commit the sums needed to underpin the shift to 100%RE."

We do not fear or object to the potential for the transition to 100% renewables to result in higher spot price volatility, if the volatility genuinely reflects the outcomes of a workably competitive market and tools are available to enable independent retailers (and generators) to manage risk on a level playing field with vertically-integrated incumbents. These are pre-conditions MDAG have

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<sup>&</sup>lt;sup>18</sup> Tusk Legal Services (on behalf of Mercury), Claimed Undesirable Trading Situation on 26 March 2011, 7 April 2011.

<sup>&</sup>lt;sup>19</sup> Axiom (on behalf of Meridian), Economic Review of the Electricity Authority's Analysis of Spot Prices, December 2021.

<sup>&</sup>lt;sup>20</sup> Electric Kiwi and Haast, Electric Kiwi welcomes the 2021 dry year review, 21 January 2022.

appropriately identified for an energy-only market to work properly. As MDAG has noted "it is critical that consumers have confidence that competition is disciplining prices".

## MDAG should consider the importance of low prices in a balanced way and not just focus on need for high prices in dry-years

MDAG has focussed on the need for high prices but the importance of low prices during periods of plentiful or surplus electricity supply is barely mentioned in the consultation paper.<sup>21</sup> The consultation paper's only comment about low prices is a negative assertion that low prices could result in price suppression.

In a workably competitive market, increased price volatility should mean extended periods of low pricing (including potentially negative spot prices<sup>22</sup>) as well as high prices during scarcity. Low prices are an important counterbalance to high prices. The occurrence of more low-priced periods is important to help build trust and confidence the market is working the way it should. If only high prices are observed there is a problem.

The absolute price differential between high and low prices is critical to the economics of investing in storage capacity, including batteries and hydro storage capacity. Artificially inflated low prices can have the same impact as inefficiently suppressed high prices. We agree with Grant Read: "The difference between this high MVS and the zero MCR value being received for spilled water should incentivise efforts to expand long-term storage capacity in various ways" and "The value of such options lies in their ability to arbitrage between low and high-priced periods".

Further, Grant Read's discussion on when prices could be expected to be low and when they could expect to be high, highlights that daily fluctuations in prices could result in high prices being concentrated in certain times of the day, e.g. an evening peak, which gives rise to the potential for demand-side management and load-shifting:

"... we should expect to see more periods with both very high and very low prices. At the same time, solar capacity expansion costs should limit summer day-time prices, but have much less impact on winter prices, and only indirect impact on night-time prices, via storage options, as discussed below. The overall effect may be to concentrate price spikes into evening peak periods, particularly in winter, and/or when wind generation happens to be low. And, if that pattern becomes predictable, it may actually be limited more by DSM responses, than by supply side options."

#### MDAG appropriately raise the risk of heightened market concentration

Care is needed to distinguish between efficient outcomes of a workably competitive market and inefficient outcomes due to (ab)use of significant or substantial market power. The statement about the need for "General public and political acceptance that volatility and high prices (in times of scarcity) in the wholesale market are, in fact, in the best long-term interest of consumers" needs to come with the rider that the high prices reflect genuine scarcity only, and not use or exploitation of significant or substantial market power.<sup>23</sup>

We agree with MDAG that if no regulatory changes are made "the shift to 100%RE may reduce competition in some areas" and market concentration is "likely" to "materially increase". We also

<sup>&</sup>lt;sup>21</sup> The consultation paper notes "the shift to 100%RE is expected to increase spot price volatility due to: ... More frequent periods of very low (possibly zero) prices when intermittent renewable generation is high relative to demand and storage lakes are already full". There is also a brief reference in the Grant Read paper e.g. "... If volatility is strong enough, it will imply a significant increase in the number, and length of intervals in which the perfectly competitive market price could fall to (near) zero. On the other hand, in equilibrium, there should be an offsetting increase in the number or length of intervals in which prices are very high."

<sup>&</sup>lt;sup>22</sup> Experience in countries like the UK, Germany and in other parts of Europe has been that the rise in renewable electricity generation has made spot prices more volatile and resulted in negative prices becoming more common.

<sup>&</sup>lt;sup>23</sup> MDAG don't make an explicit distinction between high prices due to genuine scarcity and high prices due to monopoly prices.

agree "That is because fossil-fuelled thermal plant is currently important in that area, but will cease operation under 100%RE. Furthermore, most of the relevant hydro storage capacity resides in a handful of reservoirs" and "This increased concentration may hinder competition in both the spot and contracts markets, especially for products to firm intermittent supply and provide seasonal flexibility".

MDAG's observation that "if hydro generators raise their offer prices for generating from stored water, it will not make the wind blow harder or the sun brighter, whereas at present it may incentivise increased thermal operation" is illustrative of the heightened market power hydro electricity generators, particularly Meridian, could have in a 100% renewables scenario.

Likewise, MDAG's statement that "a hydro generator that raises its offer price may cause storage controlled by a competitor to be drawn down faster" should be seen in the context that Meridian has 55-65% of New Zealand's storage capacity, limiting the extent to which a competitor may respond by increasing supply (drawing down capacity faster).

Given the issues MDAG has raised the likelihood of increased market concentration and weaker competition it is unclear why it suggested "incumbent operators' ability to raise prices for flexibility services may be constrained by actual or threatened new entry by wind and solar (possibly backed by batteries)". While it is possible there could be some countervailing market forces from small generators etc, the heightened market power MDAG acknowledge would be at its strongest during dry year periods making the prospect that high prices would be accepted as reflected genuine scarcity rather than abuse/exploitation of market power less likely.

#### High prices due to (ab)use of market power are not acceptable, including "in the wider political economy of the market"

We have previously noted "We are at the frontline of abuses of market power in the wholesale electricity market" and that:24

If or when Meridian (ab)uses its market power to raise wholesale electricity prices (including what it euphemistically describes as 'efficiently managing locational risk') it also results in windfall gains (higher spot prices) for Contact, Genesis, Mercury and Trustpower's wholesale businesses. There is no countervailing benefit, only detriments, for independent retailers and, more importantly, consumers. Abuses of market power erode our margins and ability to offer lower and efficient (genuinely cost-reflective) retail prices for consumers".

Consistent with the circumstances we face, the European Union recognises that "Where [a supplier] has significant market power on a specific market, it may also be deemed to have significant market power on a closely related market, where the links between the two markets are such as to allow the market power held in one market to be leveraged into the other market, thereby strengthening the market power of the [supplier]". In short, what this says is that problems of market power in the wholesale electricity market can result in heightened market power problems in the retail market. This is consistent with our observations and experience.

#### Meridian's statements on what it considers acceptable are incompatible with building confidence the price discovery process will deliver efficient prices

Meridian (in particular) has been abundantly clear it doesn't offer its generation at SRMC<sup>25</sup> and it doesn't have to. Meridian has also provided evidence about its behaviour and strategy, which based

<sup>&</sup>lt;sup>24</sup> https://www.ea.govt.nz/assets/dms-assets/26/26733Joint-Independent-Retailer-submission-MDAG-HSOTC-discussion-paper.pdf

<sup>&</sup>lt;sup>25</sup> Our references to SRMC include opportunity cost/water value.

on our reading, indicates it considers it can take advantage of its significant or substantial market power, and this is part of normal, economically rational behaviour e.g.:<sup>26</sup>

- "Meridian considers its offer strategy to be economically rational behaviour ... there are no requirements to offer based on costs ... Meridian and other generators have implemented these tactics for many years."
- "Spilling and making non-zero price offers is consistent with the normal operation of the wholesale market".
- "generation is highly concentrated regionally ... short-term demand responses are very inelastic
   at low-to-moderately-high spot prices ... When these features of the spot market are taken into
   account, it is very predictable that there are times when offer prices will not fall to the low levels
   that might be "expected" despite spill occurring" [emphasis added].
- "... hydro generators do not offer their generation based on a bottom up assessment of their costs, they ... are economically rational in seeking to generate high volumes at prices the market will support ... Commonplace strategies in this regard include ... non-clearing tranches at high prices during periods of spill ... and ... offering some volumes at a price just below that of the next available source of generation from a competitor (this is economically rational behaviour and is to be expected in the New Zealand electricity market ..." [emphasis added].

These comments are consistent with observations of other market participants.

Nova, for example, has commented "The SI hydro generators are of course expected to offer their generation in a way that maximises their revenues from the available water, but it has been widely understood that no generator should use its market power in a net pivotable situation to hold prices above what might be considered likely in a competitive market".<sup>27</sup> Similarly, Genesis has commented "Meridian's dominant position on the South Island provides the incentive to raise prices over the long term. It is economically rational to act on this incentive. ...<sup>28</sup>

# Care is needed to ensure supply-side problems aren't misdiagnosed as a demand-side problem

The Authority has asked the right questions in relation to whether market participants "have the tools and capability they require to manage financial risks in a world of increased volatility?" and "Do more risk management products need to be introduced into the market – from cap products to standardised power purchase agreements?"<sup>29</sup>

MDAG's recognition that contracting (hedge market) will need to do the "heavy-lifting" highlights the need to address existing issues with market-making, and to consider the potential implications of an increase in concentration/market power of hydro-generation for market-making.

We agree with MDAG there could be a problem with the extent to which parties take up hedging contracts "if purchasers have a lack [of] confidence in contract prices". We also agree "it is important

<sup>&</sup>lt;sup>26</sup> Meridian Submission, Preliminary decision on claim of an undesirable trading situation, 18 August 2020.

<sup>&</sup>lt;sup>27</sup> Nova, Re: Consultation on UTS preliminary decision, 19 August 2020.

<sup>&</sup>lt;sup>28</sup> Genesis, Re: Consultation on UTS preliminary decision, 18 August 2020.

<sup>&</sup>lt;sup>29</sup> Electricity Authority, Energy transition roadmap, 9 December 2021.

that the types of products needed to manage risk in a 100%RE will be available to market participants".

We caution against the consultation paper wording that "It would be a problem if parties' economic incentives to contract were to weaken" which could be interpreted as implying there is a demand-side problem rather than a supply-side problem; particularly when considered beside comments Sapere has made. We reject the assertion that there could be sub-optimal take-up of hedging contracts due to short-sighted observation of extended periods of very low spot prices which "may prompt a behavioural change by purchasers, and encourage them to take on more spot exposure". Any business that operates this way should not expect to survive.

We reject entirely Sapare's premise that there is a "standoff" between sellers of hedge products and buyers of hedge products", that this reflects a gap in views about what "prices are "too high"" and "the true value of covering price risk" or that it is "Difficult for small retailers ... to understand price formation, which reduces trust in market".<sup>30</sup>

Sapare's premise requires buyers and sellers in the market have equal bargaining power and the failure to transact may simply reflect a lack of understanding of the value of covering risk by small and independent retailers. This kind of commentary is not helpful. We have previously cautioned that the Authority risks its comments being interpreted as "victim blaming".<sup>31</sup>

## The problems in the contract market stem from vertical-integration of incumbent suppliers with market power

The gap in price between what vertically-integrated incumbent access providers are willing to provide services at (if at all) and the price that access seekers need to compete on a level-playing field is symptomatic of vertically-integrated industries where access providers have market power. If there is a gap it is in the internal prices vertically-integrated incumbents provide for their own retail businesses and the prices (and products) available to independent retailers.

We have canvassed the problems we face with the contracting market and the (limited) extent to which we can obtain hedge protection that enables us to compete on a level playing field in various submissions.

Independent retailers face the twin challenges of needing access to hedging arrangements from the vertically-integrated incumbents in order to compete, and that in periods of high prices the vertically-integrated incumbents can set their retail prices on the basis of internal hedging arrangements which are not available to independent retailers (violating concepts of equivalence of inputs, non-discrimination<sup>32</sup> and orthodox price squeeze tests). Meridian has been open its wholesale business will do what it needs to support its retail business, and Meridian's "vertically-integrated business model ... help[s] manage wholesale price squeezes like the one being experienced right now".<sup>33</sup>

The Authority has also included the option of establishing non-discriminatory pricing rules, as part of its wholesale market review on the grounds that this "would ... address efficiency and competition in wholesale forward energy and locational contracts" and "may prevent generators from selling electricity at a significant discount to certain parties but also prevent generators from selling electricity to others (eg, their competitors) at higher prices, unless those prices can be explained through differences in risks or costs in servicing different customers (or other similar reasons)". Reference: Electricity Authority, discussion paper, INEFFICIENT PRICE DISCRIMINATION IN THE WHOLESALE ELECTRICITY MARKET – ISSUES AND OPTIONS, undated.

<sup>&</sup>lt;sup>30</sup> https://www.ea.govt.nz/assets/dms-assets/28/Sapere-Research-Group-presentation.pdf

 $<sup>\</sup>frac{31}{\text{https://www.ea.govt.nz/assets/dms-assets/26/26944Independent-retailers-HME-Consultation-Submission-11-06-2020.pdf}$ 

<sup>&</sup>lt;sup>32</sup> The Authority has acknowledged that current incumbent practices are discriminatory. Reference: Electricity Authority, consultation paper, Internal transfer prices and segmented profitability reporting, 8 April 2021.

<sup>33</sup> https://www.youtube.com/watch?v=hjqyOxvAKqs

The independent retailers' experience, consistent with vertically-integration in other jurisdictions and network industries, is that sub-optimal hedging and risk management is due to weak (present) market-making arrangements and the incentives of vertically-integrated incumbent suppliers i.e. it is a supply-side problem. The independent retailers have been consistently clear about the desire to be able to hedge on a level playing field and that the inability to do so has curbed the growth of independent retailers and insulated incumbent retailers from competition.

#### Transaction cost benefits of vertical-integration can be over-stated

It should not be assumed or treated as axiomatic that transaction costs from contracting with 3<sup>rd</sup> parties is costly or significant.

Sapare give far too much weight to the importance of internalising transaction costs between retail and generation. If Sapare's proposition is accepted that increased transaction costs associated with market contracting in a more volatile world increase the likelihood that vertical-integration will be preferred more as a risk management solution, and doesn't put in place measures to ensure independent retailers (and generators) can compete on a level playing field, the Authority will consign the electricity market to a fundamentally oligopolistic structure where competition is not promoted or allowed to thrive.

We suggest a conscious decision on the future of competition versus a return to an oligopolistic structure by the Authority and government would be useful at this time. Limited changes would be required if regulators decided stimulating competition was a lost cause.

#### The focus should be on options that address the root problems

The options MDAG explores at the next stage of the project should be targeted at the 5 preconditions (paragraph 3.38) for the efficient operation of an 'energy-only' market. This requires identification of options which would address the current underlying problems in the market and promote competition.

#### "In principle, [structural separation] is a first-best option"

MDAG asked: "What are the options for addressing competition concerns identified"? Refer to our WMR joint submission, which highlights the need for structural reform (including break-up of Meridian) and hedge market reform. Reforms that improve competition are the most obvious and direct "Measures to increase confidence in spot prices during genuine scarcity events". <sup>34</sup> The size (and hydro capacity) of Meridian is a legacy of keeping the Tiwai contract 'whole' etc and is increasingly out-of-step with the requirements for efficient operation of the wholesale electricity market and the low carbon transition.

We agree with MDAG, that "In principle, [structural separation] is a first-best option for substantially reducing market power". Similarly, we agree with Trustpower that structural solutions are the ""gold-standard" approach to addressing market power issues at their source". 36

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<sup>&</sup>lt;sup>34</sup> It is surprising the MDAG discussion on "Measures to increase confidence in spot prices during genuine scarcity events" (paragraph 3.43(a)) did not mention options aimed at improving competition and ensuring "Prices that reflect real supply and demand conditions".

<sup>35</sup> https://www.ea.govt.nz/assets/dms-assets/26/26404High-Standard-of-Trading-conduct-MDAG-discussion-paper-on-pivotal.pdf

https://www.ea.govt.nz/assets/dms-assets/26/26736Trustpower-Submission-MDAG-HSOTC-discussion-paper.pdf

MDAG has suggested that remedial options, such as structural measures, "would need to be considered" "if competition were to become inadequate in some key segments of the wholesale market". With respect, MDAG has not undertaken the analysis needed to support the implicit presumption that competition is currently adequate. The evidence provided in the WMR etc strongly suggest otherwise.

Absent structural reform, consideration may need to be given to more heavy-handed regulation of Meridian (in particular) to curb its market power. This was the approach taken to ECNZ prior to establishment of Genesis, Mercury and Meridian, and included measures such as corporate separation and financial ring-fencing, investment restrictions (including retailing) and mandatory contracting requirements. The investment caps were intended to apply until ECNZ's share of New Zealand's generation capacity dropped below 45% (a condition Meridian does not meet).

#### The independents support mandatory market-making and new hedging products

As well as addressing competition issues in the spot market, the independents support consideration of options for addressing hedge market problems. We agree the "Contracts market will have to do more 'heavy lifting'" and "Overall, ... increased volatility per se should not pose unmanageable risks for investors or purchasers *provided they can enter into suitable forward contracts*. This involves both access to the products themselves and having confidence in the pricing of those contracts".

We also note, consistent with the MDAG views about how hedge products need to develop, that we have raised with the Authority that it should "consider the types of hedge market products/risk management tools that should be required to be available, particularly before the Authority attempts to procure incentive-based market-making services. This is something that can and should evolve over time. A challenge independent retailers have is limited availability of products other than base-load. The incumbent market-makers have limited incentives or interest to offer, for example, day-time peak products".<sup>37</sup>

The events of 9 August and MDAG's 100% renewable consultation highlight the pitfalls of relying on the correlation between base-load prices and profiled or capacity prices. The Authority has previously advocated this approach but suggested changes in market dynamics would strengthen the case for market making of peak-load contracts:

"The Authority's analysis, using historical data, has shown due to the high correlation between prices for baseload and peak spot prices, retail load risk may be effectively managed through the baseload futures products, which are currently market made and actively traded. If price relativities between baseload and peak load were to become more volatile in the future, a peak product or other products for managing outage and profile risks would be more attractive." 38

The Authority and the ASX have failed to introduce a cap product as was intended following the 2015 decision paper. There now appears no realistic prospect that a cap product will be introduced. The time has come for the Authority to reconsider how profile and capacity risks are managed.

The incumbent market-makers have limited incentives or interest to offer profiled or capacity products. No meaningful market in these products has developed in the 7 years since the Authority

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<sup>&</sup>lt;sup>37</sup> Ecotricity, Electric Kiwi, Flick Electric, Pulse and Vocus, The independent retailers support introduction of mandatory market-making, 18 January 2021 at: <a href="https://www.ea.govt.nz/assets/dms-assets/27/Independent-retailers-Hedge-Market-Enhancements-Permanent-mandatory-market-making-backstop-submission.pdf">https://www.ea.govt.nz/assets/dms-assets/27/Independent-retailers-Hedge-Market-Enhancements-Permanent-mandatory-market-making-backstop-submission.pdf</a>.

<sup>&</sup>lt;sup>38</sup> Enhancing trading of hedge products, Decision paper, 8 December 2015, https://www.ea.govt.nz/assets/dms-assets/20/20183Decisions-enhancing-trading-hedges.pdf

opted not to regulate market making for the peak-load products and started the now failed cap project.

The MBIE review of the events of 9 August recommended the Authority revisit the introduction of a cap market. We recognise the obstacles the Authority and ASX encountered in the previous failed cap project are not trivial. No cap products for NZ are currently listed on the ASX and this situation looks unlikely to change. Peak-load products on the other hand are already listed and could have market making introduced quickly. While peak-load products are not the ideal tool for managing capacity risks such as 9 August, they are significantly more effective than base-load, they are available, and they are a better tool for many types of customer hedging. Peak-load market making could be an interim measure adopted while the Authority works through what will likely be a lengthy process to list caps, at theat point the market making obligations could shift from peakload to cap products.

We believe the best option is for the Authority to immediately introduce regulated market making of peak-load monthly and quarterly products with the same spread, volume, and tenure as the current base-load market making. The Authority could consider bringing commercial market makers into peak-load products during subsequent commercial market making contracts.

#### Removal of the spot market price floor should be considered

MDAG's emphasis on avoiding price suppression should include both downward and upward price suppression. We support MDAG considering whether the present regulated price floor (prohibition on spot prices below zero) should be removed to help signal the Authority has confidence in the price discovery process and the market delivering efficient prices.

Various other jurisdictions allow spot prices to go below zero, which could reasonably be expected to help dampen concerns about periods of high prices.

We have also raised concerns with the Authority that the application of scarcity pricing can artificially and inefficiently raise prices.<sup>39</sup>

## Some options have problems which would need to be carefully worked through if taken further

None of the "Measures to increase confidence in spot prices during genuine scarcity" include promotion of competition. This is despite MDAG's focus on the importance of competition; including for "Confidence among wholesale buyers and sellers that the high prices make sense, (which means confidence in the structure and rules of the market, including sufficiency of competition". The Authority's question "What are the barriers to independent renewable generation of all scales being developed, connected and operated, and how can these be addressed?" 40 is a key aspect of the MDAG work going forward.

Price discovery in the wholesale electricity market needs to reflect the outcomes of a workable and fully competitive market if the project objective is to be meet: "The objective of the project would be to develop sound recommendations on what changes should be made to the wholesale electricity market assuming 100% renewable supply to ensure economically efficient price signals (from short to long term) ... ".

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<sup>&</sup>lt;sup>39</sup> Electric Kiwi, Flick Electric, Haast Energy Trading and Vocus, Confidence in the market is threatened where supply does not meet demand, despite there being sufficient supply capacity, 3 February 2022.

<sup>&</sup>lt;sup>40</sup> Electricity Authority, Energy transition roadmap, 9 December 2021.

We recognise the potential options in the consultation are initial ideas and the principal focus of the consultation paper is on problem definition and issues identification, but consider a number of these options to be problematic:<sup>41</sup>

- The capacity mechanism option is a solution looking for the wrong problem. The basis MDAG provide for why a capacity mechanism may be needed is the theoretical prospect of artificial price suppression. Introduction of a capacity mechanism wouldn't do anything to address the underlying problems of weak competition and artificially high prices and would likely result in calls for further changes when the underlying problems persist. A move to a capacity-based market could end up as a stepping stone towards more heavily regulated options such as single-buyer market type arrangements.
- We don't understand how watering down the UTS provisions, by effectively adding a 'safe harbour', would qualify as a "[Measure] to increase confidence in spot prices during genuine scarcity". The change would achieve the opposite.

The notion that "determining UTS claims" could be "strengthen[ed] by including "an explicit requirement to consider effects of any decisions on future investment incentives" is unsafe and doesn't distinguish between high prices due to genuine scarcity (unlikely to be a UTS) and high prices due to artificial scarcity, economic withholding, use of market power or market manipulation more generally e.g. unnecessary hydro spill in December 2019. Undesirable Trading Situations are not made desirable by artificially inflating average spot prices to prop up investment returns.

The UTS 'safe harbour' option would shift the UTS provisions closer to that of the trading conduct rules and further increase the overlap between the UTS and trading conduct rules.

- We consider that stress-testing is more useful for enabling the Authority to satisfy itself that market participants are efficiently managing risk than "to ensure market participants are consciously aware of the risks of their hedging choices". We reiterate that we refute any suggestion we are not fully aware of spot market risks and how they should be managed. This is reflected in our strong advocacy of hedge market reform etc to enable us to compete with vertically-integrated incumbents on a level playing field.
- The Authority has already adopted the option to try to "Increase awareness of the necessity of high spot prices when supply is genuinely tight, and the adverse consequences of artificially suppressing prices". The Authority's WMR highlights that greater spot price transparency, when done well, helps identify problems in the market that need to be addressed. Questions continue to be asked, including by the regulator and Government, about whether prices should be as high as they are. The Authority, for example, has not been able to account, on legitimate grounds, for \$38/MW of the average price over the last several years.

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<sup>&</sup>lt;sup>41</sup> Paragraph 7.89(a).

# "Regulatory stability" and protecting the market are two different things

We anticipate MDAG will get push back from incumbent vested-interests bringing out the trope that regulatory stability is needed to provide investment certainty. We have seen this already, for example, in Contact's half-year profit announcement. These arguments aren't new and recycle arguments used by Telecom prior to structural reforms in the telecommunications market.

Protecting the market isn't the same as protecting vested interests.

Protecting the integrity of the electricity market, and the integrity of the price discovery process, requires surety the price discovery process reflects genuine supply and demand conditions.<sup>42</sup> This is needed if we are going to see efficient nodal pricing and investment signals and, looking-forward, for the right environment to become more renewable for electricity and support electrification and decarbonisation of the economy more broadly.

In our joint WMR submission we submitted that:

Care is needed to ensure a desire for "a stable regulatory regime" and "predictable regulatory change" is not a roadblock against needed regulatory reforms or the promotion of competition (including "thriving competition") for the long-term benefit of consumers.

"Regulatory stability" does not, for example, provide a "steady environment for investment" if it favours or entrenches incumbent operators at the expense of investment by new entrant or independent operators.

The durability of current market settings requires that problems with existing regulatory arrangements, including problems anticipated in the future with the transition to 100% renewables, are addressed and not allowed to grow and fester. If market and regulatory settings don't address significant problems they are unlikely to be durable – short to medium-term suppression of regulatory reform can result in more substantial and less predictable regulatory changes or political intervention in the future, such as price regulation or the Single Buyer Market type intervention.

We agree with the MBIE:44

the electricity sector in New Zealand will need to adapt rapidly if it is going to maintain its social license to operate. 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.

<sup>&</sup>lt;sup>42</sup> Sapare, Kieran Murray, Toby Stevenson and Sally Watt, Comments on draft decision of the Electricity Authority: alleged UTS on 26 March 2011, 13 May 2011.

<sup>&</sup>lt;sup>43</sup> The Authority has adopted radical overhaul of the TPM on the grounds it will result in better durability.

<sup>&</sup>lt;sup>44</sup> MBIE, Investigation into electricity supply interruptions of 9 August 2021, 2021: <a href="https://www.mbie.govt.nz/dmsdocument/17988-investigation-into-electricity-supply-interruptions-of-9-august-2021">https://www.mbie.govt.nz/dmsdocument/17988-investigation-into-electricity-supply-interruptions-of-9-august-2021</a>

#### There is no 'free-lunch' in the transition to 100% renewables

We question whether the information MDAG has provided supports the proposition that "there are reasonable grounds to believe that average wholesale electricity prices under 100%RE could be similar in real terms to past levels if the transition is well managed". Our reading of the information MDAG has used, instead suggests the upward step-change in prices we have observed in "recent history" will endure over the transition to 100%RE.

The maintenance of the high prices MDAG forecasts for 2030-50 gives rise to a number of potential policy issues, including: (i) whether electricity prices will encourage or be an impediment to electrification of the economy/the level of growth in electricity demand MDAG has assumed; (ii) whether transitioning to 100% renewables is the lowest cost way for the Government to achieve its climate change ambitions; and (iii) the speed with which New Zealand should transition.

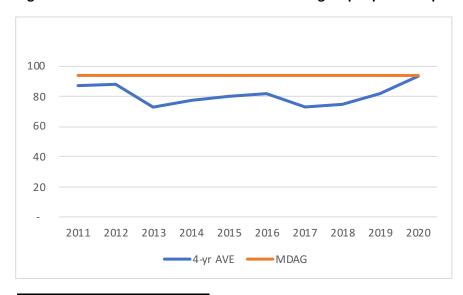
The consultation paper's use of the period 2016-2020 to represent "recent historical average levels" results in an upward biased benchmark of historic spot prices of about \$20/MWh or 27-29.4% (see Figures 1 and 2 below). 45,46 The Electricity Authority determined that "the average spot price from 2009 to the Pohokura outage in 2018 was \$67/MWh", which it has used for its WMR and in a recent presentation to the EDSI Select Committee. 47

Figure 1: MDAG "recent historical average" spot price comparisons

	Benmore	Haywards
2016-2020*	\$89/MWh	\$94/MWh
2014-2018	\$69/MWh	\$74/MWh
2009-2018	\$68/MWh	\$75/MWh
EA pre-2019		

<sup>\*</sup> Date range used by MDAG

Figure 2: MDAG Benmore "recent historical average" spot price comparisons (\$/MWh)



<sup>&</sup>lt;sup>45</sup> Based on the output data provided by MDAG.

<sup>&</sup>lt;sup>46</sup> MDAG could have uses a much longer period, potentially going back to 1996, to provide a perspective on "past levels" of average spot prices. The Electricity Authority's EMI website provides unweighted spot price data from 1996 and demand or generated-weighted data from 2009.

<sup>47</sup> https://www.facebook.com/EDSISCNZ/videos/613768709722915

The date period selected includes two years of very high prices which are substantially higher than long-term historic levels. The Authority's wholesale market review makes it clear the period MDAG is using as a benchmark incorporates a period of "sustained elevated electricity prices". This also includes the period during which the Authority identified a \$38/MWh uplift in prices that is not explained by underlying demand and supply conditions.

The MDAG price projections are also based on an assumed level of competition, including the extent to which the threat of new entry (the LRMC of new entrant generators) disciplines offer prices and spot prices. The 100% renewables scenario pricing could be higher than presented in the consultation paper if competition issues are not addressed adequately.

#### Where to from here?

While we largely agree with the views MDAG have expressed in the consultation paper, we recognise there is a lot more work to be done as the group progresses the renewables project. We consider there should be consideration of:

• How the MDAG project fits with other Authority workstreams; particularly the wholesale market review. MDAG is not an Island. The MDAG project and Authority WMR both highlight the need to promote competition and the appropriate policy prescriptions are likely to be the same or overlapping. Our submissions on both reflect our view that structural reform is needed as well as major reform of current hedge market arrangments.

As it stands, the MDAG consultation paper acknowledges the relevance of the Future Security and Resilience (FSR) project but is silent about the WMR.<sup>48</sup>

#### Healthy competition needs to be allowed to develop and thrive

The state of the market and competition in the here and now: The policy implications from an
increase in market concentration are markedly different if the market is starting from a highly
competitive base, than if there are pre-existing competition and market concentration
problems.

We note MDAG's statement "At this stage there is insufficient information to form any definitive views about competition" and agree "it is a critical issue and it should be considered further". MDAG doesn't have to start from scratch and can draw on, for example, the WMR and UMR surveys we have referenced.

Consideration of the ability of independent retailers (and generators) to hedge is critical; particularly given MDAG's recognition of the "heavy-lifting" the contracts (hedge) market will need to do as part of a successful transition to 100% renewables. MDAG should consider what a 100% renewables scenario would mean for the availability of contracting (hedge) products to manage spot market risk; particularly in the light of the issues MDAG has raised about the potential strengthening of the advantages that vertically-integrated operators have relative to independent retailers and generators.

<sup>&</sup>lt;sup>48</sup> The consultation material states "It will be important to ensure the ongoing results of the FSR project and other related work are integrated into this project, as they will likely affect the conclusions from this project".

MDAG should explore further what is needed to ensure "the required range of [hedge] products, information and liquidity will emerge in a timely manner". Dr Batstone, for example, noted the issues raised by independent retailers about liquidity and that "Participants in both the independent retailer and gentailer cohorts saw an increasing need for cap products in the transition to 100% renewables, as a way of managing peak risk".

#### Workably competitive market outcomes provide an appropriate benchmark

- Price suppression to curb market power is efficient: The consideration of "price suppression"
  would benefit from an explicit distinction between suppression of monopoly pricing/use of
  market power versus suppression of prices below efficient levels.
- What increased price volatility should mean for low prices and not just high prices: MDAG should shift from a sole focus on the role of high prices and concerns about "price suppression" to a recognition that if price volatility means there are going to be high prices this must be counter-balanced with extended periods of low prices. MDAG should be just as concerned about impediments to periods of low prices as it is about "price suppression".

Low prices during periods of plentiful or surplus electricity supply are critical for acceptance of high prices but this isn't mentioned in the MDAG consultation paper.<sup>49</sup> Downward pressure on prices is a good thing and benefits consumers.

- MDAG should consider how existing regulation can inflate prices: The discussion on the impact
  of the UTS provisions and UTS decisions on price needs to also include consideration of price
  floors in the wholesale electricity market (including the prohibition of prices below zero), and
  scarcity pricing provisions under which regulated prices can be raised above market levels. The
  Authority, for example, has estimated that using scarcity pricing in four trading periods on 9
  August 2021 will raise spot prices by \$130m.
- MDAG should consider international experience with rising shares of renewable power. For
  example, the rising share of renewable power in Germany has resulted in spot prices becoming
  more volatile (consistent with MDAG's hypothesis) and resulted in negative prices (banned in
  New Zealand) becoming a more common phenomen.<sup>50</sup>

The occurrence of negative spot pricing has resulted in innovative retail tariff reforms such as Octopus Energy in the UK offering to pay some of its customers to consume electricity in periods of slack demand (using a carrot to reward consumers, rather than the stick of higher peak prices).

#### The extent of market power in different 100% renewable scenarios is worth considering

It might be worthwhile for MDAG to consider the implications of different potential 100% renewable scenarios for market power in the wholesale electricity market and how this market power could manifest in wholesale prices and in closely related (hedge/financial contract) and downstream (retail) markets. This should be considered within the backdrop of a wholesale market which is already highly concentrated.<sup>51</sup>

Electric Kiwi, Flick Electric, Pulse and Vocus – MDAG 100% renewables project

<sup>&</sup>lt;sup>49</sup> There is a brief reference in the Grant Read paper.

<sup>&</sup>lt;sup>50</sup> Negative spot prices can have a number of benefits including providing incentives for electricity generators to make their power stations more responsible to changing market conditions and rewarding demand-side management/consumers that can change the time profile of their electricity usage. Negative spot prices send efficient signals for generators to take generation capacity off the market, and for consumers to ramp up demand.

<sup>&</sup>lt;sup>51</sup> As discussed in the Electricity Authority's wholesale market review.

As Grant Read has noted, different potential 100% renewable scenarios (particularly in relation to battery/storage) could impact the extent to which increased price volatility occurs: "it should be clear that, other things being equal, expanding storage capacity will reduce the incidence of extreme prices, and increase the incidence of moderate prices ...".

The market implications will depend on the nature of potential different 100% renewable scenarios e.g. a scenario where Lake Onslow is built and is owned and operated independently of the existing incumbent generators (Contact, Genesis, Mercury, Meridian and Trustpower) it is likely to result in more competitive market outcomes, and greater downward pressure on prices, than other potential renewable scenarios.

If a 100% renewable scenario evolves organically (with shutdown of Huntly etc, and development of new solar/wind/geothermal opportunities) what we could likely see is market power concentrated in hydro storage (particularly Mercury and Meridian) with other renewable generators largely operating as price-takers. Even a generator as large as Genesis has been clear that it operates Tekapo as a price-taker.

The likely wholesale pricing outcomes under these scenarios could be widely varying. If a 100% renewable scenario emerges in which market power/concentration issues are heightened this would be likely to result in higher electricity prices (dampening or slowing the transition to electrification) and weaker outcomes in the electricity market (including retail) generally.

#### **Concluding remarks**

We agree with the CEO of Genesis that "What the market really needs the regulator to do is to look at this market and say: 'how are we going to get the right settings to create the right environment to become more renewable for electricity and support the decarbonisation of energy more broadly?"<sup>52</sup>

Meridian also articulates well that "Preserving what is good about the market system we have today while aligning behaviours and encouraging market outcomes towards what is achievable should be the goal for regulatory efforts".<sup>53</sup> Likewise, Mercury has been clear it is undesirable for a generator to be able to "exploit" market power "to charge whatever it likes either in the wholesale or hedge markets as a means to artificially boost returns across their portfolio or for an individual station".<sup>54</sup>

"Preserving what is good about the market system" and creating the "right environment" requires a thriving, fully competitive electricity market which delivers efficient and affordable electricity.

MDAG recognise "Competition will be vital".

The Electricity Authority's preliminary wholesale market review finding is that there are substantial competition problems e.g. "The market is dominated by a few large firms, with Meridian needed to meet demand over 90 percent of the time" and there is "evidence to suggest that prices may not have been determined in a competitive environment."

The appalling results from the Electricity Authority's UMR survey into market participant perceptions aligns with the Authority's WMR "preliminary observations" about the competitiveness of the

<sup>52</sup> https://www.nzherald.co.nz/business/genesis-ceo-marc-england-a-not-so-typical-englishman/4J5K22XKIWE3OPNRYAF573TOL4/

<sup>&</sup>lt;sup>53</sup> Meridian, MDAG engagement, The future of the NZ power system with 100% renewables, 23 August 2021.

<sup>&</sup>lt;sup>54</sup> Mercury, UTS on 26 March 2011 - Cross submission in response to Submissions made 13 May 2011, 19 May 2011.

wholesale electricity market and should shake off any complacency about the state of competition e.g. "18% [of market participants] agreed new entrant generators can operate on a level playing field with established generators" and "35% agreed competition between electricity generators ensures wholesale market prices are set at an efficient level".

The work MDAG has undertaken explains well why the competition problems the Authority has identified could get worse rather than better over-time without intervention: "the shift to 100%RE may reduce competition in some areas ... and ... market concentration is likely to increase".

What seems clear from the MDAG work is that if regulatory and policy settings continue an 'incrementalist' path, and current competition problems are not addressed they will get worse in a 100% renewables scenario with the dominance of vertically-integrated incumbent suppliers further entrenched, and the role of independents kept limited and marginalised.

#### Yours sincerely,

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James Stevenson-Wallace Chief Executive Electricity Authority

Dear James,

## The Authority has provided robust evidence of fundamental, structural problems in the wholesale market

It is positive and welcome that the Authority is undertaking the wholesale market review.

The Authority's review helps fill the gap left by the Electricity Price Review which focussed on retail level reforms and did not address the competition problems in the wholesale market, or how these problems can manifest in downstream and closely related markets. The review also fits with the Authority's strategic direction that "Our focus (including our key performance measures) needs to include all parts of the system where competition is possible".<sup>1</sup>

We agree with the CEO of Genesis that "What the market really needs the regulator to do is to look at this market and say: 'how are we going to get the right settings to create the right environment to become more renewable for electricity and support the decarbonisation of energy more broadly?'"<sup>2</sup> The "right environment" requires a thriving, fully competitive electricity market which delivers efficient and affordable electricity.

The Authority's finding that the Tiwai contracts could result in spot prices \$2.6 billion higher than they should be over just 3 years is unsurprising and puts the importance of the review into perspective. The \$2.6 billion over 3 years compares to the the Authority's estimate that "a new TPM will deliver New Zealand consumers a net quantified benefit of \$1.25 billion over 28 years". The TPM review has been treated as the Authority's highest priority over the last decade, but the potential benefits are much smaller than remedying problems in the wholesale market.

We welcome the Authority's intention to progress the wholesale market review with urgency and look forward to engaging in more detail on consideration of policy options to address the substantial problems evident from the review. It seems clear the only solutions that can resolve what are fundamentally structural problems, and allow competition to develop and thrive, are structural.

We urge the Authority to focus on options which address the underlying problem and not just the symptoms. Options such as ban of Tiwai-type contracts would deal with the symptoms of the problem only and act as a stop-gap measure before structural reform could be fully implemented.

We acknowledge the Authority's wholesale market analysis but suggest there is limited consideration of the follow on effect on closely related and downstream markets. It is not the end consumer that is paying, at least at this stage, as residential consumer prices haven't moved to the same extent as wholesale prices (in fact Meridian's CEO said they could beyond current wholesale

 $<sup>^{1}</sup>$  Electricity Authority, Strategy development Final strategy framework, Feedback paper, 7 July 2020.

<sup>&</sup>lt;sup>2</sup> https://www.nzherald.co.nz/business/genesis-ceo-marc-england-a-not-so-typical-englishman/4J5K22XKIWE3OPNRYAFS73TOL4/

<sup>3</sup> https://www.ea.govt.nz/development/work-programme/pricing-cost-allocation/transmission-pricing-review/consultations/#c18989

prices to the long-term).<sup>4</sup> Industrial and commercial customers and independent retailers purchasing from the wholesale market are directly impacted by the lack of wholesale market competition. The Authority must take the next step and analyse the impact of the lack of wholesale market competition on electricity retail market competition. This is essential to ensure the solutions developed deliver benefits across the entire electricity supply chain.

## The tension between a tiny minority of big businesses who abuse market power, and the vast majority who thrive amid competition

We have previously noted "We are at the frontline of abuses of market power in the wholesale electricity market" and that:5

If or when Meridian (ab)uses its market power to raise wholesale electricity prices (including what it euphemistically describes as 'efficiently managing locational risk') it also results in windfall gains (higher spot prices) for Contact, Genesis, Mercury and Trustpower's wholesale businesses. There is no countervailing benefit, only detriments, for independent retailers and, more importantly, consumers. Abuses of market power erode our margins and ability to offer lower and efficient (genuinely cost-reflective) retail prices for consumers".

•••

Consistent with the circumstances we face, the European Union recognises that "Where [a supplier] has significant market power on a specific market, it may also be deemed to have significant market power on a closely related market, where the links between the two markets are such as to allow the market power held in one market to be leveraged into the other market, thereby strengthening the market power of the [supplier]". In short, what this says is that problems of market power in the wholesale electricity market can result in heightened market power problems in the retail market. This is consistent with our observations and experience.

#### We acknowledge the work undertaken by Authority staff

We acknowledge the substantial amount of analysis the Authority and its staff have undertaken for the wholesale market review, following similarly intensive undertakings for the December 2019 UTS. We appreciate the engagement we have had with Authority staff in dealing with our queries etc.

We also commend the Authority on engaging an independent peer review of its draft findings and consultation material.

#### **Process matters**

We consider that it was wholly inappropriate, and an abuse of process, for Meridian to use the Authority's fact checking step as a vehicle for providing early submissions on the draft wholesale market review material, and to attempt to influence or change the "tone" and "choice of language" in the Authority's consultation.<sup>6</sup>

It would certainly not have been appropriate for the Authority to have acquiesced to Meridian's request for "a full copy of the draft Issues and Review Papers ... ahead of their public release".

<sup>&</sup>lt;sup>4</sup> Meridian Investor presentation of 1HFY21 result page 15 Neal Barclay (CEO: ": I think we all look beyond the immediate wholesale market. .... So I think long-term, I would not expect to see significant change in retail pricing in this country because the underlying economics won't take you there." <a href="https://www.meridianenergy.co.nz/assets/Investors/Reports-and-presentations/Investor-presentations/2021-Interim-Results-Livestream-Transcript-with-QandA.pdf">https://www.meridianenergy.co.nz/assets/Investors/Reports-and-presentations/Investor-presentations/2021-Interim-Results-Livestream-Transcript-with-QandA.pdf</a>

 $<sup>^{5}\</sup> https://www.ea.govt.nz/assets/dms-assets/26/26733 Joint-Independent-Retailer-submission-MDAG-HSOTC-discussion-paper.pdf$ 

<sup>6</sup> https://www.ea.govt.nz/assets/dms-assets/29/3-v2.-Meridian-to-EA-24092021-Redacted.pdf

Contrary to Meridian's assertions, this special treatment would have severely undermined "industry and wider sector confidence in the Authority".<sup>7</sup>

The appropriate scope of the pre-consultation engagement was known to Meridian. The Authority, in communication outlining the terms for the engagement, was clear the "fact checking exercise is limited to selected extracts from the papers; it is not an opportunity for pre-consultation nor advance engagement of the review's observations or preliminary policy option set".8

We welcome the Authority's reconfirmation of this Meridian:9

While we have noted the views set out in your letter, as explained in the Authority's previous correspondence, our engagement with Meridian prior to publication is not an opportunity for preconsultation or advance engagement on Meridian's part with the review's observations or methodology. Rather, we sought to provide Meridian (and other generators) with an opportunity to fact-check selected extracts of the draft consultation papers, which were based on information they had provided to us.

The proper forum for Meridian to raise the issues set out in your letter is the upcoming consultation process. We would welcome Meridian's feedback (including on the matters covered by your letter) as part of that process.

Given substantial elements of Meridian's feedback took the form of a submission, we consider this material should be publicly released in full. Notwithstanding the Authority's clear rebuke of Meridian, there may have been potential for their pre-consultation submission material to have influenced the final drafting of the wholesale market review consultation material in ways that were favourable to Meridian. Public release of this material would help provide certainty for other stakeholders whether or not this was the case.

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<sup>&</sup>lt;sup>7</sup> https://www.ea.govt.nz/assets/dms-assets/29/3-v2.-Meridian-to-EA-24092021-Redacted.pdf and https://www.ea.govt.nz/assets/dms-assets/29/7-v2.-Meridian-to-EA-13102021-Redacted.pdf

<sup>8</sup> https://www.ea.govt.nz/assets/dms-assets/29/1-v2.-EA-to-Meridian-17092021-published.pdf

<sup>9</sup> https://www.ea.govt.nz/assets/dms-assets/29/10-v2.-EA-to-Meridian-26102021.pdf

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#### Summary of the independent retailer views on regulatory reform

- While the Authority hasn't "determined its own ... concentration thresholds" or explicitly considered whether there is significant or substantial market power,<sup>10</sup> it is clear the market power problems the Authority has indentified are significant or substantial market power problems. The distinction between market power and significant or substantial market power is important and should be addressed by the Authority. Competitive markets can have some level of market power, even if it isn't significant enough to be a problem or cause harm to consumers. This distinction isn't explicitly made in the Authority's consultation material.
- The wholesale market is very concentrated: The Authority's traffic light assessment (4 red, 14 orange and 2 green), including evidence of high levels of gross pivotal (or other market concentration measures) and offer prices that are well out of kilter with demand and supply conditions, are sufficient to conclude there are substantial problems with competition in the wholesale market.
- Based on the Authority's findings, it seems the wholesale market is operating as a Stackelberg
  Oligopoly with Meridian as the leader, and the other large, incumbent generators following in its
  footsteps.
- We support structural reform of the large, incumbent generators.
- Structural reform is likely to be the only durable option for dealing with the scale and nature of
  the problems the Authority has identified. Structural reform is needed to bring electricity prices
  back under control and ensure affordable pricing can be passed on to New Zealanders.
  - While the Authority has said structural reform is beyond its powers/remit, this doesn't stop it from making a clear, positive recommendation for break-up to the Government.
- We agree with the Authority's Advisory Group, MDAG, that "In principle, [structural separation] is a first-best option for substantially reducing market power". Similarly, we agree with Trustpower that structural solutions are the "gold-standard" approach to addressing market power issues at their source".
- The divestment of Manapouri by Meridian, while important, would not go far enough in
  addressing the problems in the market. The Authority should test different potential changes to
  the size and number of the large incumbent generators against workably competitive market
  benchmarks to determine the optimal arrangements to promote competition to the long-term
  benefit of consumers.

We agree with Genesis, Meridian and Russell McVeigh that a workable competition standard is consistent with the statutory objective in the Electricity Industry Act. 13

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<sup>&</sup>lt;sup>10</sup> The Authority did state that "The market is dominated by a few large firms, with Meridian needed to meet demand over 90 percent of the time".

<sup>11</sup> https://www.ea.govt.nz/assets/dms-assets/26/26404High-Standard-of-Trading-conduct-MDAG-discussion-paper-on-pivotal.pdf

 $<sup>\</sup>frac{12}{\text{https://www.ea.govt.nz/assets/dms-assets/26/26736Trustpower-Submission-MDAG-HSOTC-discussion-paper.pdf}}$ 

<sup>&</sup>lt;sup>13</sup> Submissions in response to MDAG HSOTC consultation: <a href="https://www.ea.govt.nz/assets/dms-assets/26/26469Review-of-impact-of-trading-conduct-enforcement-action-on-spot-prices-addendum.pdf">https://www.ea.govt.nz/assets/dms-assets/26/26469Review-of-impact-of-trading-conduct-enforcement-action-on-spot-prices-addendum.pdf</a>

- Behavioural regulation to deal with structural problems should largely be seen as a stop-gap or 2<sup>nd</sup>-best measure. We consider regulation against Tiwai-type contracts is a pragmatic short-term intervention given the lead-time for structural reform which would ultimately render such regulation unnecessary. Given the large consumer impact of the Tiwai contract (\$863m per annum) it is important to ensure the arrangements do not extend beyond 2024.
- Regardless of whether specific regulation is introduced to preclude Tiwai-type contracts, we support the adoption of non-discrimination and equal access rules. This is a measure that can feasibly be assessed and implemented within a small number of months with low to no unintended consequences. There is plenty of international precedent the Authority can draw on, including in sectors such as telecommunications.<sup>14</sup> Implementing this urgent rule change would then allow greater focus and time to go into considered structural reform.
- The Authority should consider a 'parallel importing' rule which would prohibit generators from preventing their customers from on-selling the electricity they have contracted for.
- It is not valid to reject vertical-separation as an option on the basis "Vertical separation of generation and retail businesses is not considered below because large independent generators would likely have similar incentives to integrated generator—retailers to engage in inefficient price discrimination".
- The Authority should consider the impact of wholesale market power on downstream and closely related markets such as the electricity retail market. The increasingly negative and chilling impact the problems in the wholesale market is having on competition in the electricity retail market, particularly since the Pohokura outage, have been well publicised. We continue to advocate the Authority undertake orthodox price squeeze/Equivalence of Input testing to determine whether the large incumbents are using high wholesale prices and Internal Transfer Prices enabled by vertical-integration to impose price barriers to retail competition.
- Market power could put at risk NZ's climate ambitions: It is important that as part of the management of the transition to a Low Emissions Energy System, and the projected 50% growth in demand by 2030,<sup>15</sup> that current market concentration does not remain entrenched, with the big-5 generators dominating future investment and crowding out other potential operators.
- Responses to the Authority questions are provided in the Appendix to this submission.

#### There are no durable alternatives to structural reform

There are no durable alternatives to structural reform if a thriving and fully competitive wholesale electricity market is going to develop.

The Authority should not shy away from making the call major structural reform is needed to deal with the inherent structural problems in the electricity market, even if it doesn't have the power or remit to introduce such reforms itself. The Authority can follow the approach under Part 4 Commerce Act and the Telecommunications Act where the Commerce Commission makes a

<sup>&</sup>lt;sup>14</sup> Refer, for example, to Vocus' hedge market enhancement submission which references the non-discrimination and equivalence rules in the Telecommunications Act as relevant precedent: Vocus, Hedge Market Enhancements (market making) – Discussion Paper, 2 December 2019 at <a href="https://www.ea.govt.nz/assets/dms-assets/26/26535Vocus-Hedge-Market-Enhancements-submission.pdf">https://www.ea.govt.nz/assets/dms-assets/26/26535Vocus-Hedge-Market-Enhancements-submission.pdf</a>.

<sup>&</sup>lt;sup>15</sup> https://www.ea.govt.nz/development/why-we-work-on-developing-the-electricity-market/roadmap-transition-to-low-emissions-energy-system/

recommendation whether to introduce regulation, but the Minister and the Government ultimately make the decision on whether the regulation is adopted.

Nor should the Authority be concerned the "major generators are publicly listed companies, rather than 100 percent government-owned enterprises" or the reform "would likely result in a loss of good will" of the large generators. This hasn't stopped incumbents such as Contact Energy from advocating structural reforms, nor Trustpower from choosing to follow Telecom precedent and implement structural separation.

An irony of such concerns is that the vertically-integrated Contact, Genesis, Mercury and Meridian were built off the back of horizontal (break-up of ECNZ) and vertical (separation of lines from retail and generation) structural reforms.

#### Protecting the market does not mean protecting vested interests

The wholesale market review is about protecting the integrity of the electricity market and ensuring the price discovery process reflects genuine supply and demand conditions.<sup>17</sup>

This is needed if we are going to see efficient nodal pricing and investment signals and, looking-forward, for the right environment to become more renewable for electricity and support electrification and decarbonisation of the economy more broadly.

There are certain prerequisites for a successful organised market, including symmetric flow of information, a robust settlements system, avoidance of 'artificial pricing' (including "economic withholding") and efficiency of the price discovery process. <sup>18</sup> Market participants should be able to rely on predictable offer behaviour consistent with outcomes in a workably competitive market and reflect cost.

Meridian couldn't it put it better that "Preserving what is good about the market system we have today while aligning behaviours and encouraging market outcomes towards what is achievable should be the goal for regulatory efforts". Likewise, Mercury has been clear it is undesirable for a generator to be able to "exploit" market power "to charge whatever it likes either in the wholesale or hedge markets as a means to artificially boost returns across their portfolio or for an individual station". 20

The review is not about the market being "broken", "throwing the baby out with the bathwater" or "look[ing] backwards, not forwards".<sup>21,22</sup> It is important not to confuse the protection of the market with protection of the large, incumbent market participants' own commercial interests.

It is the continued (and/or increasing) exercise of market power that undermines confidence in the market, not the identification and acknowledgement of the problem. If there is a lack of confidence

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<sup>&</sup>lt;sup>16</sup> This was a concern the Authority raised in relation to hedge market reform: Electricity Authority, Hedge Market Enhancements (market making): Ensuring market making arrangements are fit-for-purpose over time, Discussion paper, November 2019.

<sup>&</sup>lt;sup>17</sup> Sapare, Kieran Murray, Toby Stevenson and Sally Watt, Comments on draft decision of the Electricity Authority: alleged UTS on 26 March 2011. 13 May 2011.

<sup>&</sup>lt;sup>18</sup> Tusk Legal Services (on behalf of Mercury), Claimed Undesirable Trading Situation on 26 March 2011, 7 April 2011.

<sup>&</sup>lt;sup>19</sup> Meridian, MDAG engagement, The future of the NZ power system with 100% renewables, 23 August 2021.

 $<sup>^{20}</sup>$  Mercury, UTS on 26 March 2011 - Cross submission in response to Submissions made 13 May 2011, 19 May 2011.

<sup>21</sup> https://www.nzherald.co.nz/business/genesis-ceo-marc-england-a-not-so-typical-englishman/4J5K22XKIWE3OPNRYAF573TOL4/

<sup>&</sup>lt;sup>22</sup> <a href="https://www.nzherald.co.nz/nz/cameron-burrows-keys-to-sustainable-and-affordable-electricity/ZXRMVCIWNLXSWAQO4WL6C3B4KU/">https://www.nzherald.co.nz/nz/cameron-burrows-keys-to-sustainable-and-affordable-electricity/ZXRMVCIWNLXSWAQO4WL6C3B4KU/</a>

or loss of confidence it can undermine investment, particularly from potential new entrants, and result in further consolidation and protection of incumbency advantages.

The wholesale market review is a significant step forward in recognising the problems of significant or substantial market power in the wholesale market, and that market power is having a significant role in price formation. It gives the industry a chance to put the perpetual cycle of reviews and tinkering with market rules behind us and address the root cause of market power. Acknowledgement of a problem is the first, important, step in resolving the problem and protecting the market.

# Regulatory incrementalism won't resolve fundamental structural problems or deliver a high performing market

The Authority's Statement of Intent helpfully makes more transparent the Authority's thinking on aspects of its strategic principles that are relevant to the wholesale market review.

We support the Authority's desire for "reduced barriers to competition", to "further a competitive industry culture and delivery of intended outcomes for consumers", and "holding industry participants to account".

These are key elements of the Authority's strategic intent to deliver "thriving competition" to the electricity industry.

The Authority's Intent also reflects thinking about the nature of reform and regulatory change that were not developed or included in its strategy reset. This includes the strategic principles for "a stable regulatory regime", "regulatory certainty", "predictable regulatory change" and that "Incremental and consistent regulatory change will support reliable and affordable electricity over the long-term".

Care is needed to ensure a desire for "a stable regulatory regime" and "predictable regulatory change" is not a roadblock against needed regulatory reforms or the promotion of competition (including "thriving competition") for the long-term benefit of consumers.

"Regulatory stability" does not, for example, provide a "steady environment for investment" if it favours or entrenches incumbent operators at the expense of investment by new entrant or independent operators.

Regulatory incrementalism doesn't ensure or guarantee regulatory stability or that the Authority will be able to achieve its strategic ambitions. The market needs to be able rapidly transform to successfully meet our sustainability objectives reliably and cost efficiently. In our view, now is the time for proactive regulation and reform.

If the Authority is successful in eliminating, or substantially reducing, the significant or substantial market power issues it has identified, this will provide the greatest certainty and stability for the current wholesale market arrangements and rules. Structural reform is an obvious and predictable response to the problem that some market participants are too large and have too much market power and control over price setting, but it is not necessarily "incremental".

The Authority has a choice between protecting the market and protecting incumbent operators. It can't do both.

Experience shows that if endemic problems are allowed to grow and fester, confidence in the market and competition can be lost and the matter can rapidly become a political one. Authority inaction could lead to alternative interventions to fill the vacuum such as price regulation or the Single Buyer Market the Labour and Green Parties previously advocated. We agree with the MBIE:<sup>23</sup>

the electricity sector in New Zealand will need to adapt rapidly if it is going to maintain its social license to operate. 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.

#### We can learn from the experience and reforms in telecommunications

If the sector continues to rely on a light-handed approach to significant or substantial market power problems, the inevitable incentive is that the large, dominant generators will become increasingly emboldened and test the limits of what they can get away with. As the Authority points out, it isn't necessarily illegal or a breach of the rules, but it is a response to the incentives in front of them. It seems clear from experience, and the evidence the Authority has provided, that this is precisely what is happening in the electricity sector, with Meridian leading the way as the 'poster boy for bad behaviour' and misconduct.

The impression we get is Meridian's increasing willingness to lash out at the Authority when it tries to call them out for bad behaviour, and at the independent retailers for having the temerity to act as whistleblowers, is the behaviour of a bully showing signs it thinks "anything goes". This is unhealthy for Meridian, the electricity sector, the current market arrangements and New Zealand Inc. Such behaviour is inconsistent with good corporate social responsibility and jeopodises the industry's social licence.

The type of behaviour the Authority has identified directly mirrors the behaviour and attitude that infected Telecom up to the mid-2000s which culminated in overhaul of the Telecommunications Act and a major increase in the level of regulation of Telecom's business, including structural reform and break-up of Telecom. Ultimately, the biggest mistake made in telecommunications was that competition problems evident from CLEAR Communications entry into the market in the early 1990s were allowed to drag on for too long before they were fully addressed.

The electricity industry is now in the same boat as the telecommunications industry was and we can learn from the reforms made to that sector. The previous Labour Government delivered bold and successful wholesale reforms which ultimately resulted in the break-up of Telecom. The Electricity Authority needs to make similarly bold recommendations with Kiwi consumers and the future of the country firmly in view and not shy away from reforms which might hurt certain vested interests.

#### Principles for good regulatory decision-making

We consider that the Authority should be guided by the following decision-making principles:

• The consumer comes first, second and third in promotion of long-term benefit of consumers.

For a consumer it makes no difference whether an improvement in competition reduces prices due to cost efficiency or reduction of monopoly rents. A dollar is a dollar is a dollar.

<sup>&</sup>lt;sup>23</sup> MBIE, Investigation into electricity supply interruptions of 9 August 2021, 2021: <a href="https://www.mbie.govt.nz/dmsdocument/17988-investigation-into-electricity-supply-interruptions-of-9-august-2021">https://www.mbie.govt.nz/dmsdocument/17988-investigation-into-electricity-supply-interruptions-of-9-august-2021</a>

 The Authority should make its decisions (both on policy and regulatory compliance) without fear or favour.

We are uneasy when the Authority adds consideration of the impact on "good will"<sup>24</sup> of large, incumbent market participants or that "the options could have significant implications for [those same] companies".

 Regulatory intervention and reforms should be proportionate to the problems they are intended to address.

It is clear the structure and market concentration in the wholesale market is the biggest problem the Authority has had to address since it was established. Regulatory responses need to be commensurate to the problems they are intended to address.

- Regulatory solutions should be targeted at the underlying problem and not just the symptoms of the problem.
- Regulatory certainty and predictability should take precedence over regulatory "stability" or incrementalism.

If a problem isn't adequately or fully dealt with, or a pressure valve put in place, it can get bigger and bigger necessitating a much more substantive intervention than may otherwise have been needed.

Regulatory certainty and stability can be undermined if regulatory reform is limited to incremental changes when there are major structural problems. This is illustrated by the length of the MBIE Chronology of New Zealand Electricity Reform, and the number of periodic industry reviews that have occurred over the last 3 decades.

#### The independents agree with the Authority's principal findings

We fully expect the large, incumbent generators will try to deflect responsibility for the problems in the electricity industry and blame anything and everything for price increases as long as they don't have to take corporate responsibility themselves.

We agree with Duignan Munro the "overall conclusion" which can reasonably be drawn "is that the evidence provided by analysis of the structure, conduct and performance analysis of the electricity generation market indicates that one (and sometimes more than one) generator has had the ability to exercise substantial market power, as that term is defined in the economic literature, for significant periods since the Pohokura outage ("the outage") in 2018".<sup>25</sup>

We also agree with Duignan Munro that "What can be said with high confidence is that Meridian's agreement to provide NZAS Limited with the CFD described as the Tiwai Agreement in January 2021

<sup>&</sup>lt;sup>24</sup> Electricity Authority, Hedge Market Enhancements (market making): Ensuring market making arrangements are fit-for-purpose over time, Discussion paper, November 2019.

<sup>&</sup>lt;sup>25</sup> Munro Duignan Limited, Review of Electricity Authority paper "Market Monitoring Review of structure, conduct and performance in the wholesale market (since the Pohokura outage in 2018)", 19 October 2021.

implies it expects to have substantial market power during the term of the agreement. Secondly, the Authority's 2019 UTS decision can be viewed as indicating that Meridian exercised market power."<sup>26</sup>

We consider the Authority's principal findings are conservative but sound:

- The wholesale market has a significant or substantial market power problem: "The market is dominated by a few large firms, with Meridian needed to meet demand over 90 percent of the time."
- There is "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."
- **High offer prices don't reflect underlying market conditions:** "There is some evidence of an increased incentive and ability for electricity generators to structure their offers into the market in a way that keeps prices high (economic withholding)."
- "Meridian (Waitaki) has always had a high percentage of offers priced at over \$300/MWh, and
  this proportion has been increasing steadily over the years. This proportion does not change
  with underlying supply conditions as much as for other hydro generators."
- "there is often a large proportion of offers above cost (regardless of the cost estimate used) for some generators ... Some offers do not reflect underlying conditions."
- "the steadily increasing percentage of higher priced offers since 2014 at Meridian's (Waitaki) stations, the only slight decrease in 2020 at Contact's (Clutha) stations, and the quantity of higher priced offers at Mercury's (Waikato) stations since 2018 is not immediately explainable by underlying conditions."
- Wholesale prices are too high: There is "evidence to suggest that prices may not have been determined in a competitive environment."
- "Our economists used a linear regression model, a common statistical framework, to investigate
  the factors that have contributed to elevated prices. This analysis included an unexplained
  dummy variable that indicated that prices were about \$38/MWh higher during the review
  period in addition to the usual factors that influence prices.

"Our analysis confirms that prices have been higher than expected ..."27

- "Concept found that forward prices have been above the cost of new electricity supply by about 50 percent, and this has been the case for longer than we would expect to see in a workably competitive market."
- The Tiwai arrangements are a function of market power: "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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<sup>&</sup>lt;sup>26</sup> Munro Duignan Limited, Review of Electricity Authority paper "Market Monitoring Review of structure, conduct and performance in the wholesale market (since the Pohokura outage in 2018)", 19 October 2021.

<sup>&</sup>lt;sup>27</sup> https://www.linkedin.com/posts/electricity-authority-of-new-zealand\_the-authority-is-currently-consulting-on-activity-6874514213331718144-qcCl

Duignan Munro similarly commented "Meridian can afford to provide NZAS with a large discount from the forward price, and potentially even from the avoidable cost, because NZAS continuing to consume around 13% of total generated power results in the marginal cost of generation, and therefore the spot price, being much higher than Meridian's average cost".<sup>28</sup>

The behaviour and outcomes the Authority has identified are in stark contrast to previous claims by Mercury that ".... there is no evidence to suggest that any limited market power that might be available to participants has raised wholesale prices" and "there does not appear to be evidence of generators being able to use market power to hold-up wholesale prices".<sup>29</sup>

#### There are enduring issues with market concentration

The market share of the largest 4 generators is basically unchanged since the Electricity Authority was established.

The lack of change in the level of market concentration is notable given the Commerce Commission determined in 2009 that "... each of the four largest gentailers - Contact, Genesis, Meridian and Mighty River Power - is likely to have held substantial market power on a recurring basis, particularly during dry years ... Each of these companies has the ability and incentive unilaterally to exercise market power and increase wholesale prices during certain periods ... the gentailers are using that market power to maximise their profits ..."<sup>30</sup>

It is also notable that the market share of the largest 3 generators is in excess of 70% which is a threshold the Commerce Commission uses to determine whether a market is concentrated.

# The health of competition has deteriorated, since the EPR was completed

The Electricity Authority's wholesale market review identifies serious problems in the electricity market which need to be addressed by over-riding the current Meridian et al Tiwai contracts, and break-up of the large dominant generators, particularly Meridian.

The Electricity Authority finding that "The Tiwai Point smelter adds between \$1.6 billion and \$2.6 billion to spot market costs over 3 years", which equates to \$200 per household per annum, highlights how the electricity market is exacerbating poverty issues and could impede the transition to electrification and a low carbon economy. If electricity is too expensive consumers and businesses will be slower to adopt environmentally friendly options that rely on electricity, such as electric vehicles.

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<sup>&</sup>lt;sup>28</sup> Munro Duignan Limited, Review of the Electricity Authority discussion paper "Inefficient Price Discrimination in the wholesale market – issues and options", 22 October 2021.

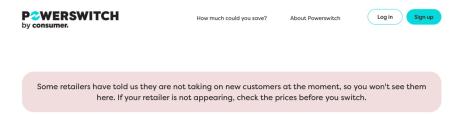
<sup>&</sup>lt;sup>29</sup> https://www.ea.govt.nz/assets/dms-assets/26/26734Mercury-submission-to-MDAG-HSOTC.pdf

<sup>&</sup>lt;sup>30</sup> https://comcom.govt.nz/news-and-media/media-releases/archive/commerce-commission-finds-that-electricity-companies-have-not-breached-the-commerce-act

We agree with the Authority that there has been a step change in wholesale prices which cannot simply be explained by changes in supply and demand conditions, but also reflect market concentration and that problems with abuse of market power are worsening.<sup>31,32</sup>

This has brought to the fore problems with current regulatory settings, including lack of availability of adequate hedging arrangements which would enable small and independent retailers to compete.<sup>33</sup>

The impact of the weak competitive state of the wholesale market is manifesting in the downstream retail market. Some small and independent retailers have exited the market or been purchased by one of the incumbents. A number of small and independent retailers withdrew from powerswitch, the price comparison website operated by the Electricity Authority.



Flick Electric went a step further and did not accept new customers. Potential new retailers such as Octopus have delayed entry for the foreseeable future.

In the last few months, in particular, market concentration in electricity retail worsened in large parts of the country. Waitaki is the only part of the South Island where retail market concentration hasn't deteriorated but that was already the least competitive retail market in the South Island.

These deteriorations should be seen as a warning of things to come, or the 'canary in the coal mine', if urgent action isn't taken to remedy the stressed competitive state of both the generation and retail electricity markets.

## Price squeeze testing is needed to determine wholesale market impacts on closely related and downstream markets

We continue to advocate the Authority undertake orthodox price squeeze/Equivalence of Input testing to determine whether the large incumbents are using high wholesale prices and vertical-integration to impose price barriers to retail competition.<sup>34</sup> The Authority should commission a

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<sup>&</sup>lt;sup>31</sup> e.g. "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)" and "The HHI for generation in New Zealand has been hovering around 2,000 since 2014, with slight decreases when storage has been low (see Figure 20). However, it 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". Source: Electricity Authority, information paper, MARKET MONITORING REVIEW OF STRUCTURE, CONDUCT AND PERFORMANCE IN THE WHOLESALE ELECTRICITY MARKET SINCE THE POHOKURA OUTAGE IN 2018.

<sup>&</sup>lt;sup>32</sup> Electricity Authority, information paper, MARKET MONITORING REVIEW OF STRUCTURE, CONDUCT AND PERFORMANCE IN THE WHOLESALE ELECTRICITY MARKET SINCE THE POHOKURA OUTAGE IN 2018.

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

<sup>&</sup>lt;sup>34</sup> The joint independent retailer submission to the Electricity Authority on internal transfer payments discusses the problems with the transfer payment exercise the Authority has undertaken, including that it is not price squeeze/economic replicability testing and therefore doesn't provide sufficient basis for determining potential problems with vertical-integration in the retail market: Electric Kiwi, Flick Electric and Vocus, The independents support wholesale-retail transfer price and segmented financial disclosures, 18 May 2021 available at: <a href="https://www.ea.govt.nz/assets/dms-assets/28/Independent-retailers-submission-Internal-Transfer-Prices-and-segmented-profitability-reporting.pdf">https://www.ea.govt.nz/assets/dms-assets/28/Independent-retailers-submission-Internal-Transfer-Prices-and-segmented-profitability-reporting.pdf</a>

reputable international expert consultancy which has experience in undertaking price squeeze/economic replicability testing.

This would require the Authority to compare the Internal Transfer Payments the incumbent verticalsuppliers use to set their retail prices with prices that would be reasonably feasible for a prudent and efficient independent retailer to obtain.

Another type of test for economic replicability that exists is whether a vertically-integrated supplier's downstream retail arm could trade profitably on the basis of the upstream wholesale electricity prices charged to (/faced by) its competitors. The Body of European Regulators for Electronic Communication (BEREC)<sup>35</sup> have noted "By setting either wholesale or retail prices (or both), ... vertically integrated firms ... can define the space (margin) between the wholesale and the retail price level. By setting the margin too small, the [vertically-integrated] operator could potentially squeeze other operators out of the market".36

While the Authority has talked about there being "perceived issues of vertical integration or market power"37 and a "perception that dominant generator-retailers may increase cost of rivals, limiting competition and increasing their own profitability",38 it hasn't done the analysis required to make any conclusions about whether these concerns are valid or not.

## The questions around incumbent generator profitability warrant a deeper dive

The Authority analysis narrowly focusses on whether there was a step change in profitability following the Pohokura outage without considering whether profits may have been excessive prior to then. The analysis is also limited to a 4 year period. This doesn't provide a safe basis on which to make a conclusion about excessive or supernormal profits.

For the analysis of incumbent profitability to help inform the investigation, consideration is needed to whether profits have been excessive by too much and/or for too long.

The Commerce Commission has noted the UK Competition and Markets Authority considers that:39

The purpose of conducting profitability analysis, therefore, is to understand whether the levels of profitability (and therefore prices) achieved by the firms in the reference markets are consistent with levels we might expect in a competitive market. If excess profits have been sustained over a relatively long time period, this could indicate limitations in the competitive process.

Consistent with this, and consistent with the Authority's Structure, Conduct and Performance framework, the High Court Part 4 Input Methodologies Merit Appeal decision usefully provides guidance on what workable competition should be expected to look like and what is an excessive profit e.g.:

<sup>35</sup> https://berec.europa.eu/

https://berec.europa.eu/eng/document\_register/subject\_matter/berec/regulatory\_best\_practices/guidelines/4782-berec-guidance-onthe-regulatory-accounting-approach-to-the-economic-replicability-test-ie-ex-antesector-specific-margin-squeeze-tests

<sup>&</sup>lt;sup>37</sup> Electricity Authority, Hedge Market Enhancements Enduring market making approach, Decision Paper, 27 October 2020.

<sup>38</sup> Electricity Authority, Internal transfer pricing and segmented profitability reporting, Consultation Paper Briefing, 29 April 2021. See also Electricity Authority, Internal transfer prices and segmented profitability reporting, Consultation Paper, 8 April 2021.

<sup>39</sup> Competition and Markets Authority "Energy Market Investigation, Approach to Financial and profitability analysis" (8 December 2014) at [8].

A workably competitive market is one that provides outcomes that are reasonably close to those found in strongly competitive markets. Such outcomes are summarised in economic terminology by the term "economic efficiency" with its familiar components: technical efficiency, allocative efficiency and dynamic efficiency. Closely associated with the idea of efficiency is the condition that prices reflect efficient costs (including the cost of capital, and thus a reasonable level of profit).

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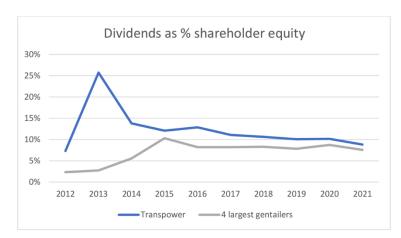
In our view, what matters is that workably competitive markets have a tendency towards generating certain outcomes. These outcomes include the earning by firms of normal rates of return, and the existence of prices that reflect such normal rates of return, after covering the firms' efficient costs.<sup>40</sup>

... outcomes ... are reasonably close to those found in strongly competitive markets. Such outcomes are summarised in economic terminology by the term "economic efficiency" with its familiar components: technical efficiency, allocative efficiency and dynamic efficiency. Closely associated with the idea of efficiency is the condition that prices reflect efficient costs (including the cost of capital, and thus a reasonable level of profit)<sup>41</sup>

prices are not too much or for too long ... above  $costs^{42}$ 

... outcomes include the earning by firms of normal rates of return, and the existence of prices that reflect such normal rates of return, after covering the firms' efficient costs<sup>43</sup>

Contact has also adopted a longer time-frame in an attempt to claim that Contact, Genesis, Mercury and Meridian's returns are lower than Transpower's.<sup>44</sup> Contact's analysis simply highlights that asset revaluations can be used to mask monopoly profits. If the Transpower and gentailer asset valuations were done on a like-for-like basis the results would show the opposite of the Contact graphic.



The PwC profit analysis for Meridian suffers from the same objection about asset revaluations masking monopoly profits.

The profit analysis Meridian  $(PwC)^{45}$  – left hand chart below – and MEUG  $(IWA)^{46}$  – right hand chart – have provided is notable for the consensus that Meridian has been earning supernormal (above WACC) returns for a sustained period of time, though they use different labels for the same thing.

<sup>&</sup>lt;sup>40</sup> WELLINGTON INTERNATIONAL AIRPORT LTD & ORS v COMMERCE COMMISSION [2013] NZHC [11 December 2013].

<sup>&</sup>lt;sup>41</sup> WELLINGTON INTERNATIONAL AIRPORT LTD & ORS v COMMERCE COMMISSION [2013] NZHC [11 December 2013], paragraph [14].

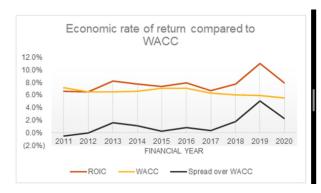
<sup>&</sup>lt;sup>42</sup> WELLINGTON INTERNATIONAL AIRPORT LTD & ORS v COMMERCE COMMISSION [2013] NZHC [11 December 2013], paragraph [15].

<sup>&</sup>lt;sup>43</sup> WELLINGTON INTERNATIONAL AIRPORT LTD & ORS v COMMERCE COMMISSION [2013] NZHC [11 December 2013], paragraph [18].

<sup>&</sup>lt;sup>44</sup> Contact, 2021 Proposed Transmission Pricing Methodology (TPM), 2 December 2021.

<sup>45</sup> https://www.meridianenergy.co.nz/news-and-events/pwc-report-meridian-energy-limited-economic-profit-calculations

http://www.meug.co.nz/node/1160





The main point of difference between MEUG and Meridian comes down to whether the supernormal profits Meridian has extracted are substantial.

It appears that this difference is principally due to MEUG using an earlier asset valuation, which is less 'contaminated' by revaluations than the Meridian (PwC) calculations, and therefore a closer representation of actual 'historic cost'. The Commerce Commission Part 4 Commerce Act precedent illustrates that revaluations should be treated as profits and can otherwise be used to mask excessive/supernormal profits.

We suggest that it would be useful for the Authority to undertake an 'apples with apples' comparison of these two assessments of Meridian's profits from 2002 onwards, using a common asset valuation based on historic cost.

# The Authority's findings should not be surprising given Meridian's views on what is acceptable behaviour

Meridian has provided evidence about its behaviour and strategy, which based on our reading, indicates it considers it can take advantage of its significant market power, and this is part of normal, economically rational behaviour e.g.:<sup>47</sup>

- "Meridian considers its offer strategy to be economically rational behaviour ... there are no requirements to offer based on costs ... Meridian and other generators have implemented these tactics for many years."
- "Spilling and making non-zero price offers is consistent with the normal operation of the wholesale market".
- "generation is highly concentrated regionally ... short-term demand responses are very inelastic at low-to-moderately-high spot prices ... When these features of the spot market are taken into account, it is very predictable that there are times when offer prices will not fall to the low levels that might be "expected" despite spill occurring" [emphasis added].
- "... hydro generators do not offer their generation based on a bottom up assessment of their costs, they ... are economically rational in seeking to generate high volumes at prices the market will support ... Commonplace strategies in this regard include ... non-clearing tranches at high

<sup>&</sup>lt;sup>47</sup> Meridian Submission, Preliminary decision on claim of an undesirable trading situation, 18 August 2020.

<u>prices during periods of spill</u> ... and ... offering some volumes at a price just below that of the next available source of generation from a competitor (this is economically rational behaviour and is to be expected in the New Zealand electricity market ..." [emphasis added].

These comments are consistent with the observations of other market participants.

Nova, for example, has commented "The SI hydro generators are of course expected to offer their generation in a way that maximises their revenues from the available water, but it has been widely understood that no generator should use its market power in a net pivotable situation to hold prices above what might be considered likely in a competitive market".<sup>48</sup>

Similarly, Genesis has commented "Meridian's dominant position on the South Island provides the incentive to raise prices over the long term. It is economically rational to act on this incentive. ... While we note that Meridian's behaviour is rational ... it does not represent the sort of market conduct that is acceptable to consumers or other participants" [emphasis added].<sup>49</sup>

## We share some common ground with the large, incumbent generators

Despite Meridian's above statements, there are a lot of areas where we agree with the large, incumbent generators, including Meridian, in terms of the type of market conduct and outcomes that should be expected in a workably competitive market.

We agree with Contact that structural options should be considered. Where we seem to differ is that we consider structural reform should be used to resolve both competition and environmental issues, whereas Contact's focus appears to be limited to the environment.

We agree with Genesis "generators should not be able to exercise market power when making offers". 50

We agree with Mercury that generators should not "be able to exploit short term transmission constraints to charge whatever it likes either in the wholesale or hedge markets as a means to artificially boost returns across their portfolio or for an individual station". We also agree with Mercury that "situations where participants are in a position of market power and may exploit offers to earn excessive profits ... fundamentally undermine the confidence and integrity of the wholesale electricity market". 52

We also agree with Meridian's (circa 2011) views on spot market pricing e.g.:53

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<sup>&</sup>lt;sup>48</sup> Nova, Re: Consultation on UTS preliminary decision, 19 August 2020.

<sup>&</sup>lt;sup>49</sup> Genesis, Re: Consultation on UTS preliminary decision, 18 August 2020.

<sup>&</sup>lt;sup>50</sup> Genesis, Re: High standard of trading conduct provisions – cross submission, 27 May 2020 at: <a href="https://www.ea.govt.nz/assets/dms-assets/26/26821Genesis.ndf">https://www.ea.govt.nz/assets/dms-assets/26/26821Genesis.ndf</a>.

<sup>&</sup>lt;sup>51</sup> Mercury, UTS on 26 March 2011 - Cross submission in response to Submissions made 13 May 2011, 19 May 2011.

<sup>&</sup>lt;sup>52</sup> Mercury, Cross-submission in relation to the 30 June 2020 UTS preliminary decision, 4 September 2020 at: https://www.ea.govt.nz/assets/dms-assets/27/27392Haast-OJI-+-Independent-Retailers-2019-UTS-Preliminary-Decision-Cross-Submission.PDF

<sup>&</sup>lt;sup>53</sup> Meridian has previously claimed these submissions have been "selectively quoted" and has commented about the age of the submissions. We have included the Meridian submissions in full to avoid any prospect of selective quoting. While Meridian's current position may differ from its circa 2011 public position, the respective views should be evaluated on their merits. The 2011 Meridian quotations in this submission are orthodox and fundamentally sound.

- "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".<sup>54</sup>
- "it is no answer to say that the risk of high spot prices can be managed in the hedge market".55
- "It is ... no answer ... to say that high, very high or excessive prices are a necessary part of an
  efficient spot market because they signal the need for investment and allow generators to
  recover fixed costs. While prices above SMRC are necessary for the recovery of fixed costs, there
  is no reason to think that such prices caused by the taking advantage of transient market power
  are necessary to ensure efficient investment or recovery of costs."56
- "It is odd to suggest that generators with transient market power should have unconstrained ability to take advantage of that power, or that the resulting price outcomes are an essential feature of an efficient spot market. Rather than signalling the need for investment ... such outcomes are likely to result in a loss of dynamic efficiency. That is, there is no reason to think that high prices caused by the illegitimate exercise of transient market power are necessary to ensure efficient investment or recovery of costs. Investment has occurred in New Zealand in the past without the need for any such illegitimate exercise of market power ..."57

## The policy options available for consideration

The independent retailers are of the view that:

- Structural reform of the large, incumbent generators is needed. Structural reform is likely to be
  the only durable option for dealing with the scale and nature of the problems the Authority has
  identified.
- There are a number of potential formulations for structural separation that could be considered.
  The Authority should undertake analysis, benchmarked against workably competitive market
  outcomes, to determine which would best promote competition for the long-term benefit of
  consumers. Improved competition can also be expected to deliver more reliable and improved
  security of supply and dry year management and more efficient operation of the electricity
  industry.
- Behavioural regulation to deal with structural problems should be seen as a stop-gap or 2<sup>nd</sup>-best measure. We consider regulation against Tiwai-type contracts is a pragmatic short-term intervention given the lead-time for structural reform which would ultimately render such regulation unnecessary. Given the large consumer impact of the Tiwai contract (\$863m per annum) it is important to ensure the arrangements do not extend beyond 2024.
- Regardless of whether specific regulation is introduced to preclude Tiwai-type contracts, we support the adoption of non-discrimination and equal access rules. There is plenty of international precedent the Authority can draw on, including in sectors such as telecommunications.<sup>58</sup>

<sup>&</sup>lt;sup>54</sup> Meridian, Draft Decision regarding alleged UTS on 26 March 2011 – Cross Submission, 19 May 2011.

<sup>&</sup>lt;sup>55</sup> Meridian, Draft Decision regarding alleged UTS on 26 March 2011 – Cross Submission, 19 May 2011.

<sup>&</sup>lt;sup>56</sup> Meridian, Draft Decision regarding alleged UTS on 26 March 2011 – Cross Submission, 19 May 2011.

<sup>&</sup>lt;sup>57</sup> Meridian, Draft Decision regarding alleged UTS on 26 March 2011 – Cross Submission, 19 May 2011.

<sup>&</sup>lt;sup>58</sup> Refer, for example, to Vocus' hedge market enhancement submission which references the non-discrimination and equivalence rules in the Telecommunications Act as relevant precedent: Vocus, Hedge Market Enhancements (market making) – Discussion Paper, 2 December 2019 at <a href="https://www.ea.govt.nz/assets/dms-assets/26/26535Vocus-Hedge-Market-Enhancements-submission.pdf">https://www.ea.govt.nz/assets/dms-assets/26/26535Vocus-Hedge-Market-Enhancements-submission.pdf</a>.

• The Authority should consider a 'parallel importing' rule to prevent Tiwai type contracts which would prohibit generators from preventing their customers on-selling the electricity they have contracted for.

#### Comments on the options in the Authority's consultation papers

Our comments on the specific options the Authority has detailed are provided below. We would emphasise that we consider the predominant focus should be on structural solutions.

While some of the behavioural regulation options (2-7 below) have merit, and it may be the case that they should be adopted, behavioural regulation won't eliminate structural problems and is very much a  $2^{nd}$ -best solution.

Options in the Authority's	Independent retailer comments
consultation papers	
(a) limiting the size of generators	This option would be a desirable complement to structural reform.
	The comment that "One difficulty with this proposal is that there may be fixed costs or overheads that create economies of scale, and these economies could be lost" is an argument that was used against the original breakup of ECNZ.
(b) splitting Manapōuri off from Meridian's other assets	We note that this is presented as "a specific example of reducing the size of generators". Splitting Manapouri off from Meridian's other asset should be a requirement under any structural reform option.
	The divestment of Manapouri by Meridian, while important, would not go far enough in addressing the problems in the market.
(c) virtual asset swaps	A virtual asset swap would lock up fixed price variable volume arrangements over the long-term and does not increase competition in the wholesale market.
1. Status quo	One of the things the Authority should consider, when thinking about the status quo, is what this would likely mean for the level of competition in the generation market over-time. The generation market has not even seen the modest improvements in competition measures the retail market has, with the Authority analysis showing some measures, e.g. gross pivotal, getting worse.
	We do not consider it plausible the status quo could be to the long-term benefit of consumers given the size of the problems the Authority has identified in its wholesale market review so far.
	The comments made by Australian retail consultant Nick Hogendijk to the Commerce Commission, in relation to

Options in the Authority's	Independent retailer comments
consultation papers	
	supermarket reform, could just as easily be made in the
	context of the electricity market review:59
	"I'm hearing a lot of about 'unintended consequences'. I'm hearing a lot of scare mongering about how it's all very complicated."
	"But what are the risks if you don't do anything? You need competition to come back into the market to rebase your consumer pricing so the New Zealand community benefits."
2. Prohibit 'use-it-or-lose-it' clauses	The Authority should consider a 'parallel importing' rule which would prohibit generators from preventing their customers on-selling electricity they have contracted for.
3. Electricity Authority pre-	We are particularly interested to understand how the
approval of large contracts	Authority sees this option in the context of its
	observation that it "Must ensure there is no regulatory overlap between the Authority and Commerce Commission" e.g. what would happen if the Authority approved a contract which was potentially in breach of the Commerce Act?
1 Paguira public offering of all (or	
4. Require public offering of all (or some percentage of) hedge contracts	Any regulation would need to both promote and enforce non-discrimination and equal access to forward markets, but in a workably competitive market should not be needed if underlying structural issues are addressed.
5. Require public offering of large	See Q4.
hedge contracts	
6. Extend trading conduct provisions beyond the spot market to hedge markets	The trading conduct rules are designed to address conduct issues that arise in specific trading periods. It is unclear how it would work to extend the rules to address systemic and ongoing market power problems.
7. Non-discriminatory pricing rules	We strongly support the adoption of non-discrimination and equal access rules. There is plenty of international precedent the Authority can draw on, including in sectors such as telecommunications. <sup>60</sup>
8. Hybrid of non-discriminatory	As per our answer to Q3, we do not understand how the
pricing and pre-approval of contracts.	Authority can be involved in pre-approval of contracts. This makes this hybrid option void.

 $<sup>^{59} \, \</sup>underline{\text{https://www.stuff.co.nz/business/opinion-analysis/126878526/will-they-or-wont-they-commerce-commission-faces-stark-choice-on-decomposition} \\$ 

supermarket-breakup

60 Refer, for example, to Vocus' hedge market enhancement submission which references the non-discrimination and equivalence rules in the Telecommunications Act as relevant precedent: Vocus, Hedge Market Enhancements (market making) – Discussion Paper, 2 December 2019 at https://www.ea.govt.nz/assets/dms-assets/26/26535Vocus-Hedge-Market-Enhancements-submission.pdf.

### Statement of Intent performance measures should be updated

The performance measures in the Statement of Intent/last Annual Report should be revised and updated in light of the SCP approach and wholesale market review; in particular:

- The Authority does not need to rely on surveys of "perceptions" about the level of competition, when there are verifiable, quantified competition measures it can use such as gross pivotal, concentration ratios and HHI.
- The wholesale market review appropriately uses gross pivotal, while the Statement of Intent is out-of-date and inappropriately uses net pivotal.
- The "Overall improvement across a suite of statistics on electricity market competition" should include retail and wholesale HHI and Concentration Ratio statistics. The Concentration Ratios should include CR1 and CR3.
- The retail market concentration measures should include national measures and regional markets.
- The Authority should determine, based on international precedent, quantified thresholds for assessing how competitive the electricity markets are. We do not agree that "Concentration in the ancillary services market (HHI of reserves statistic)" is or "has remained low"; given it is above 2,000. The Authority has referenced a number of international precedent that an HHI above 2,000 means the market is concentrated.

## **Concluding remarks**

The electricity industry is facing the potential collision of regulation and structural issues that resulted in the major telecommunications reforms in the 2000s.

The Green Party, National Party and independent retailers have promoted further break-up of the baby ECNZs, which the Minister of Energy hasn't ruled out. Contact has also suggested rejigging the generators assets but more with dry-year management and climate change in mind than competition.

Meridian has also previously noted: "As the main regulator in New Zealand, the Electricity Authority can ... decide if our behaviour has been fair to our competitors and to our customers". The answer is a resounding no! The clear conclusion which can be reached from the Authority's findings is that Meridian's behaviour has not been fair to its competitors or to consumers.

Electric Kiwi, Flick Electric, Pulse and Vocus – Wholesale Market Review

<sup>&</sup>lt;sup>61</sup> Previously stated at: <a href="https://www.meridianenergy.co.nz/who-we-are">https://www.meridianenergy.co.nz/who-we-are</a>

The Authority's findings are consistent with endemic exercise of market power and are far removed from the outcomes that could be expected from a workably competitive market, let alone the "thriving competition" the Authority is seeking as part of its strategic ambitions.

Yours sincerely,

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## Appendix: Responses to the Authority's questions

We have provided limited responses to the Authority's questions below. These are intended to highlight particular points of emphasis, and do not substitute for the more detailed response in the main body of our submission.

#### Question (a)/(b)/(c)

We consider that the structure, conduct, performance (SCP) approach the Authority has undertaken in its investigation has been sufficient to establish that there are major, fundamental structural problems with the wholesale market.

Based on the public comments made by Meridian – and its previous rhetoric in response to the December 2019 UTS – we expect the incumbents will attempt to undermine and discredit the analysis the Authority has undertaken so far.

Details of additional analysis the Authority should undertake as part of the wholesale market review is provided in the sections of the main body of the submission under "Price squeeze testing is needed to determine wholesale market impacts on closely related and downstream markets", and "The questions around incumbent generator profitability warrant a deeper dive".

#### Question (e)

Our submission in response to this consultation, and others on competition policy related matters, reference Concentration Ratio statistics. We consider these complement the gross pivotal and HHI statistics the Authority has used in its investigation.

The issues the Authority has raised about seasonal variation in HHI can be simply resolved by looking at longer-term trends.

#### Question (f)

The Electricity Authority should consider the potential impacts of the issues it has identified in the wholesale market on closely related and downstream markets, including the retail and hedge markets.

It is notable, for example, that the average wholesale price since the Pohokura outage is nearly double its historic average — which obviously has resulted in a substantial increase in wholesale revenues for the large incumbent operators — but the Authority has found limited evidence of increased profits.

This gives rise to a 'missing money' issue. If the substantial increase in wholesale revenues is not reflected in increased profits, then it must either be funding: (i) increased/inefficient costs; (ii) subsidising activities in other markets; and/or (iii) resulting in decreased retail margins/potential price squeeze issues.

The latter two issues have been a long-standing concern for the independent retailers. See the discussion in the main body of the submission under "Price squeeze testing is needed to determine wholesale market impacts on closely related and downstream markets".

#### Question (g)/(8)/(40)/(41)

Our submission reflects that the only options available for fully dealing with the underlying structural problems the Authority has identified are structural i.e. horizontal structural reform of the large incumbents.

The Authority should ensure it is clear about whether policy options are designed to address the underlying structural problems it has identified or just the symptoms e.g. the options for regulating/prohibiting Tiwai-type contracts.

Refer to the sections in the main body of the submission under "<u>There are no durable alternatives</u> to structural reform" and "<u>The policy options available for consideration</u>" for a discussion of the options the Authority should be considering.

#### Question (h)

Given that the red and orange indicators are a consequence of the same underlying problem – the level of significant/substnatial market power/market concentration – it isn't obvious what the Authority may have in mind as "future workstreams ... to transition red and orange indicators ... to green?

#### Question (i)

The Authority should undertake monitoring on the basis of its structure, conduct and performance (SCP) approach and against workably competitive market benchmarks.

We have collectively and individually provided submissions on how the SCP approach the Authority has used could be improved.

As part of the ongoing monitoring work, gross pivotal and market concentration (CR and HHI) measures should be included in EMI. The Authority signalled in 2019 that wholesale market concentration measures would be added to EMI but is yet to do so.

#### **Question 42**

As we have noted previously, it can be useful to adopt an "assessment criteria", or some form of decision-making framework, to the extent to which it helps the Authority:

- make decisions which give effect to the purpose in section 15 of the Electricity Industry Act; and
- explain its decisions and provide predictability to stakeholders.<sup>62</sup>

However, we do not consider that the Authority should create a bespoke set of decision criteria each time it undertakes consultation e.g. the decision-making and economic framework used for TPM, the criteria for "What does a successful solution look like?"/regulatory best practice in relation to hedge market development<sup>63</sup> and the "Proposed criteria to evaluate proposed policy options" contained in the wholesale market review consultation.

 $<sup>\</sup>frac{62}{https://www.ea.govt.nz/assets/dms-assets/26/26944 Independent-retailers-HME-Consultation-Submission-11-06-2020.pdf}$ 

 $<sup>\</sup>frac{63}{\text{https://www.ea.govt.nz/assets/dms-assets/26/26019Hedge-Market-Enhancements-discussion-paper.pdf}}$ 

The more layers there are to the assessment criteria the less useful they will be for helping the Authority make decisions or for providing predictable decision-making that can be explained by the criteria. The use of different decision-making criteria can make Authority decisions less predictable and create regulatory uncertainty.

It is also unclear how the different criteria fits with each other, the Authority's strategic intentions and its statutory objective e.g. there appears to be overlap between the proposed WMR criteria and the Code Amendment Principles in the Consultation Charter, but they are not the same. This results in a confusing mix of criteria that could be used for deciding whether and what reforms should be considered or adopted.

Principles 5 and 6 from the Consultation Charter are particularly relevant to the wholesale market review findings:

*Principle 5 – Preference for Greater Competition:* The Authority and its advisory groups will give preference to Code amendment options that have larger procompetition effects, because greater competition is *likely* to be positive for economic efficiency and reliability of supply.

*Principle 6 – Preference for Market Solutions:* The Authority and its advisory groups will give preference to Code amendment options that directly address the source of the market failure identified under Principle 2, so as to facilitate efficient market arrangements. The Authority and its advisory groups will discount options that subdue or displace efficient market structures.

There are a number of specific issues with the "Proposed criteria to evaluate proposed policy options" that should be unpicked:

- The efficiency criteria the Authority has included in its "proposed criteria" is principally limited to allocative efficiency only ("Highest value use of electricity" and "Addresses inefficient discriminatory pricing"). The criteria under "Competition and reliability" partially alludes to broader forms of efficiency with its references to investment, but again via allocative efficiency ("Reduces potential price mark-ups over cost").
- There seems to be some circulatory between the Authority's Tiwai problem definition which focusses exclusively on allocative efficiency and the proposed efficiency criteria.
- Similarly, we note "Can be addressed before any further contract negotiations" is a Tiwai specific criteria and not a generally applicable criteria for wholesale market reform.
- The criteria should recognise consumers can be harmed by all forms of inefficiency, and wealth transfers due to excessive prices.
- The reference to "Addresses root cause of inefficiency and any competition concerns" is important. Our submission emphasises the need to address the underlying structural problems and not just the symptoms of the problems. We note though that this is not discussed in the evaluation of options, and it is not a "Description" of the criterion "Addresses inefficient discriminatory pricing".
- The reference to "Reduces consequence of market power" contradicts "Addresses root cause of inefficiency and any competition concerns". A policy option which addresses the root cause (underlying problem and not just the symptom) will reduce market power and not just the "consequence of market power".

It is also unclear why the reference to "Reduces consequence of market power" is limited as a description for "Reduces potential for price mark-ups over cost". Market power can manifest in a number of ways and not just in price mark-ups.

- The description for "Supports investment to maintain future reliability" is limited to "certainty"
  which is only one aspect of supporting investment. For example, addressing the problems in the
  electricity market and promoting greater competition are key enablers to support investment.
- The wider consultation material also seems to treat "certainty" and limiting reform to incremental change only as being interchangeable. This is incorrect. Our submission provides some discussion that if problems are not adequately addressed this could result in short to medium term regulatory stability, but ultimately can be unsustainable and give rise to much bigger regulatory changes than may otherwise have been needed. The potential for a Single Buyer Market and examples of retail price control are examples of this, as are some of the reforms made in NZ telecommunications subsequent to the initial introduction of the Telecommunications Act.
- "Within Authority mandate" should not be used as a criteria for evaluating proposed policy
  options. Where the appropriate policy response is outside of the Authority's mandate, we
  consider the Authority should in its capacity as independent regulator 6not feel constrained
  from recommending the Minister/Government adopt these reform options.

See also the discussion in the main body of the submission under "Protecting the market does not mean protecting vested interests", "Regulatory incrementalism won't resolve fundamental structural problems or deliver a high performing market", and "Principles for good regulatory decision-making".



19 May 2011

Carl Hansen Chief Executive Electricity Authority Level 7, 2 Hunter Street Wellington

By email: submissions@ea.govt.nz

#### Dear Carl

#### Draft Decision regarding alleged UTS on 26 March 2011 - Cross Submission

 Meridian welcomes the opportunity to cross-submit on the other party submissions in relation to the Authority's draft decision dated 6 May 2011. Meridian's cross submission comprises this letter and the accompanying memorandum prepared by Professor Lew Evans.

#### In Meridian's view:

- (a) The cross-submissions highlight the fact that, unless a UTS is confirmed in this case, it will be a case of "anything goes" that is, taking advantage of transient market power to set arbitrarily high prices will become an established feature of the electricity market.
- Under an "anything goes" regime, generators would face a completely different set of incentives from those they have previously assumed. It is difficult to predict exactly what the future would hold, but it can safely be assumed that, because being net pivotal would attract economic rents, generators would actively seek that position. That is, being long on generation and earning hedge revenues based on the threat of \$20,000/MWh prices (or \$100,000/MWh prices) would likely be much more profitable than being a balanced gentailer facing competitive retail markets. As a result, net pivotal situations and exercise of market power would be likely to be much more frequent the past would not be a good guide to the future.
- (c) In those circumstances, trading on the wholesale market will be threatened, and orderly trading and proper settlement are likely to be precluded, unless a UTS is confirmed. As set out in our earlier submission and Professor Evans' report:
  - (i) 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.

- (ii) Unless the interim prices are remedied, the reputation of the market may be damaged to the point where trading is threatened and the adverse financial impact on some parties may preclude the orderly trading and the proper settlement of trades.
- (iii) Unless situations such as occurred on 26 March are remedied through the declaration of a UTS, incentives are created for all participants to take advantage of transient market power, resulting in a reduction of the dynamic efficiency and wider credibility of the New Zealand electricity market.
- (d) The issue for the Authority is therefore whether, in the absence of a transient market power mitigation regime in the Code<sup>1</sup>:
  - (i) "anything goes" is an acceptable outcome, or
  - (ii) the UTS regime can act as a "gap filler"

in circumstances where there is no energy or capacity shortage and a net pivotal generator takes advantage of its market power situation without any view to the public interest. Most if not all wholesale electricity markets have mechanisms to moderate the potential illegitimate exercise of market power when a participant could otherwise name its price. However, at the moment the only mechanism available to the Authority is the UTS.

- (e) It is inaccurate to suggest that 26 March was a "normal" outcome where supply and demand were balanced in accordance with market forces. The prices on 26 March did not equilibrate supply and demand in any meaningful sense rather, they were effectively set by Genesis at unprecedented levels.
- It is also no answer to the above to say that high, very high or excessive prices are a necessary part of an efficient spot market because they signal the need for investment and allow generators to recover fixed costs. While prices above SMRC are necessary for the recovery of fixed costs, there is no reason to think that such prices caused by the taking advantage of transient market power are necessary to ensure efficient investment or recovery of costs.
- (g) Similarly, it is no answer to say that the risk of high spot prices can be managed in the hedge market. When high prices result from market power, hedge prices will also reflect market power the same rents are extracted, but in a different way. This is illustrated by the events of 2 April (and now 14 May).
- (h) It is misleading to suggest that there will be no cost implications to retail customers under an "anything goes" regime. If economic rents are being extracted by generators, these will ultimately be passed on to consumers.
- (i) Finally, Meridian agrees with Genesis and other submitters that a price cap is not an appropriate remedy in this case. Rather, and as outlined in our submission, the remedy in this case should be a normalisation of prices, not an investigation into LRMC/cost of demand response that would result in unnecessarily punitive prices for consumers. The issue of whether price caps

<sup>&</sup>lt;sup>1</sup> See comments in paragraph 8(e) of Meridian's 13 May 2011 submission regarding the range of possible regime designs.

or other mitigation measures are appropriate should be left to a Code amendment process.

- 3. The remainder of this submission:
  - (a) comments on the legal framework proposed in the Genesis submission;
  - (b) reviews the justifications advanced by Genesis for its conduct;
  - (c) explores the likely consequences if a UTS is not confirmed in this case; and
  - (d) responds to other submissions in terms of the Authority's proposed remedy.

#### Legal framework

- 4. In order to correctly frame the remainder of this submission, we first briefly comment on the legal framework in relation to the finding of a UTS.
- 5. Clause 5.2(1) of the Code provides that "[i]f the Authority finds that an undesirable trading situation is developing or has developed", the Authority may take any of the steps listed in clause 5.2(2) that it considers necessary to correct the UTS. "Undesirable trading situation" is defined in Part 1 of the Code as any contingency or event:
  - that threatens, or may threaten, trading on the wholesale market for electricity and that would, or would be likely to, preclude the maintenance of orderly trading or proper settlement of trades; and
  - (b) that, in the reasonable opinion of the Authority, cannot satisfactorily be resolved by any other mechanism available under this Code; and
  - (c) includes, without limitation,-
    - (i) manipulative or attempted manipulative trading activity; and
    - conduct in relation to trading that is misleading or deceptive, or likely to mislead or deceive; and
    - (iii) unwarranted speculation or an undesirable practice; and
    - (iv) material breach of any law; and
    - any exceptional or unforeseen circumstance that is at variance with, or that threatens or may threaten, generally accepted principles of trading or the public interest
- 6. Meridian notes that:
  - (a) Clause 5.2 is phrased subjectively rather than objectively if the Authority "finds" that a UTS has developed, it may take any of the steps listed in clause 5.2(2) "that it considers necessary" to correct the UTS. That is, similar to the position with other expert regulatory bodies, it is the Authority's role as decision-maker to weigh the relevant evidence and make the appropriate finding.
  - (b) The definition has a strong prospective element: an event can be a UTS if it "may" threaten trading and "would be likely to" preclude orderly trading or proper settlement.

(c) The Authority has approached the matter on the basis that both paragraphs (a) and (b) must be made out before a UTS is found (see [15] of the draft decision). This may too conservative a view: in particular, paragraph (c) of the definition of UTS appears to contemplate that some conduct may be deemed to be a UTS even though it may not otherwise fall within paragraph (a). However, on any view, paragraph (c) colours the interpretation of paragraph (a): that is, paragraph (c) lists a number of matters likely to result in trading in the wholesale market being threatened and orderly trading and proper settlement being precluded, and therefore acts as a guide to the proper interpretation of paragraph (a).

#### 7. It follows that:

- (a) Statements such as:
  - (i) "the test for a UTS establishes a very high legal threshold" (Genesis, [19]);
  - (ii) "[p]roperly construed, the UTS provisions provide the Authority with a very narrow discretion to intervene with the operation of the market in a very confined set of circumstances" (Genesis, [20]); and
  - (iii) the UTS powers "are only to be used in extraordinary circumstances" (Genesis, [22]),

are not supported by the relevant provisions of the Code. Rather, the Authority has a broad discretion, subject to it being satisfied of the relevant factual matters.

- (b) Similarly, it is incorrect to suggest that the UTS provisions cannot be used with an eye to the future (Genesis, [9-10, 92-98]). The definition of UTS clearly contemplates nipping potential problems in the bud. There is no necessary bright line between what may properly be the subject of a UTS decision and what may properly be the subject of a Code amendment process (compare Genesis [22-25]) rather, the EIA and the Code provide the Authority with a basket of remedies when an undesirable trading situation arises, to be employed in accordance with the EIA and the Code as the Authority sees fit.
- (c) If any of the subparagraphs of paragraph (c) apply, that is a guide to whether paragraph (a) of the definition is made out. Here, the relevant subparagraphs include asking whether Genesis's offer behaviour:
  - (i) constitutes an undesirable practice; or
  - (ii) is an exceptional or unforeseen circumstance that is at variance with, or that threatens or may threaten, generally accepted principles of trading or the public interest.

Consistent with the above, it is for the Authority to reach a conclusion on the relevant factual matters.

#### Relevance of effect on end users

8. In its submission, Genesis suggests that the effects on end users who do not directly participate in the wholesale market cannot be taken into account in deciding whether a UTS has occurred (Genesis, [35-38]).

9. In Merdian's view, this is an artificial approach. While it is true that the UTS definition centres on the effects on the wholesale market, the actions of end-users who are exposed to spot prices is an important facet of the wholesale market (hence the various initiatives to promote demand side participation). To the extent that the Authority is satisfied that that is the case, the effects on end users may properly be taken into account. This is also consistent with the Authority's statutory objective to "promote competition in, reliable supply by, and the efficient operation of, the electricity industry for the long-term benefit of consumers" (EIA 2010 s 15, emphasis added).

High prices and "entirely legitimate" activity cannot constitute a UTS

- 10. It is also inaccurate to suggest that, because the Electricity Commission has previously found that some instances of high prices do not amount to a UTS, it follows that this instance cannot be a UTS (Genesis, [29]). Rather, each case must be approached on its merits, having regard to the words and context of clause 5.2 and the UTS definition and the overall statutory purpose. Previous UTS findings cannot fetter the Authority's discretion particularly where, as here, none of those findings are on all fours with the current case, in that none involved taking advantage of transient market power by a net pivotal generator to this extent in circumstances where there was no energy or capacity shortage.
- 11. It is worthwhile at this point to make the point that the events of 26 March did not just result in "high prices" they resulted in *unprecedented* prices. To illustrate:
  - (a) Vodafone calculated that the cost of the seven-hour price spike exceeded 8% of its historical annual electricity expenditure i.e. it spent more in 7 hours than it typically would in a month (Vodafone, UTS claim).
  - (b) PMP Print submitted that over the price spike it paid 693 times what it would expect to pay for electricity in a normal competitive market situation (PMP Print, UTS claim).
  - (c) Assuming the interim prices stand, the events of 26 March significantly changed the March, and even the Q1, average price at the OTA node. Replacing the 26 March interim prices with the final prices for the previous Saturday results in a drop in the average March price from \$261.87 to \$62.23/MWh, and a drop in the Q1 price from \$121.86 to \$53.10/MWh. Another way of looking at these figures is to note that, for a buyer of a flat load over Q1, electricity provided on 26 March would have represented 57% of their bill for the entire quarter.
  - (d) There was a significant drop in futures market prices when the Authority's draft decision declaring a UTS was released (see paragraph 26 below).
- 12. In Meridian's view, these prices were not just high, but were an abuse of market power. While Meridian accepts that the dividing line between acceptable and unacceptable offers when a party is in a position of transient market power will not always be easy to draw, in this case that line was well and truly crossed.
- 13. Likewise, the submission that the Code does not regulate offer levels, and that "entirely legitimate" market activity cannot be a UTS (Genesis, [6, 100]), is based on a misinterpretation of the UTS definition. If conduct that does not breach the Code cannot be a UTS, then the definition would be of no practical use, particularly in light of paragraph (b) of the UTS definition.

#### Overall result

- 14. The overall decision for the Authority is thus whether, in the absence of a transient market power mitigation regime in the Code, "anything goes" is an acceptable outcome in these circumstances, or whether, as described by Professor Evans, the UTS regime can act as a "gap filler" in circumstances where there is no energy or capacity shortage and a net pivotal generator excessively exercises its market power. Most if not all wholesale electricity markets have mechanisms to moderate the potential exercise of market power when a participant could otherwise name its price. However, at the moment the only mechanism available to the Authority is the UTS.
- 15. In Meridian's view, in light of the above the Authority can and should find a UTS has occurred given that:
  - (a) transient market power has been used in an extreme manner by a net pivotal generator in circumstances where there was no energy or capacity shortage;
  - (b) in the absence of a UTS, participants are likely to lose confidence in the integrity of the market because 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;
  - unless the interim prices are remedied, the reputation of the market may be damaged to the point where trading is threatened and the adverse financial impact on some parties may preclude the orderly trading and the proper settlement of trades;
  - (d) unless a UTS is declared, rent-seeking incentives are created for all participants to take advantage of transient market power, resulting in a reduction of the dynamic efficiency and wider credibility of the New Zealand electricity market; and
  - (e) implicitly sanctioning this kind of behaviour will ultimately lead to higher prices for consumers, because participants will have no choice but to pass on the economic rents collected by net pivotal generators.

#### Analysis of Genesis's submission

- 16. Aside from the legal arguments set out above, Genesis's principal submissions as to why there is no UTS are that:
  - (a) contrary to the draft decision, there was no "price squeeze" ([49-51]);
  - (b) prices on 26 March just reflected the normal operation of supply and demand ([71-72]);
  - (c) price spikes are an essential feature of an efficient spot market and signal the need for investment as well as allowing generators to recover fixed costs ([29]);
  - (d) market participants should have been aware of the risk of higher prices and should have hedged accordingly ([65-67]); and
  - (e) finding a UTS in these circumstances rewards poor risk management, and would have a range of undesirable consequences including risking creating a

moral hazard whereby those exposed to the spot market socialise their losses while retaining their profits.

#### 17. Meridian comments on these submissions as follows:

#### (a) Price squeeze

As we have previously submitted, the concept of a price squeeze is not a necessary part of or a substitute for the application of the UTS test in the Code. The technical requirements of a price squeeze are not relevant in this case.

#### (b) Normal operation

Although the prices of 26 March resulted in a technical sense from the interaction of supply and demand, in an economic sense they resulted from a situation where a participant could name its price and (as set out in paragraph 11) choose to offer at an unprecedented level. It is this exercise of transient market power that lies at the heart of the reason 26 March was a UTS.

#### (c) Price spikes an essential feature

The issue in this case is not whether price spikes are an essential feature of an efficient spot market, but whether price spikes caused by the exercise of transient market power with no view to the public interest, integrity and reputation of the wholesale electricity market are necessary to ensure efficient investment or recovery of costs. As discussed above, this was not a "normal" price spike as might result (for example) from natural risks such as weather events or fuel availability, but was rather the result of extreme use of transient market power.

It is odd to suggest that generators with transient market power should have unconstrained ability to take advantage of that power, or that the resulting price outcomes are an essential feature of an efficient spot market. Rather than signalling the need for investment, as set out by Professor Evans such outcomes are likely to result in a loss of dynamic efficiency. That is, there is no reason to think that high prices caused by the illegitimate exercise of transient market power are necessary to ensure efficient investment or recovery of costs. Investment has occurred in New Zealand in the past without the need for any such illegitimate exercise of market power, and many overseas countries have market power mitigation regimes.

#### (d) Buyers should have hedged

Meridian disagrees that market participants should have been aware of the risk of higher prices. Based on the information observable at the time, until it was too late there appeared to be little more occurring than adjustments to offers that may or may not have constituted real intent. That is, Genesis did nothing other than submit its offers and remain quiet. Although the events of 26 March are obvious to all with the benefit of hindsight, and (as Meridian has previously submitted) advance warning is not relevant in any case, it is worth pointing out that market participants had no reason to believe that Genesis was about to take advantage of its market power in the unprecedented manner that it did. For example, Contact's actions in withdrawing Stratford presumably show that it cannot have thought that prices were going to be as high.

<sup>&</sup>lt;sup>2</sup> We note that offers at \$20,000/MWh extended to e3p as well as Huntly units 1-4.

Meridian also rejects Genesis's suggestion that it is imprudent for end-users to have spot market exposure and that such customers are somehow at fault for electing supply that is priced in this way. The reality is that customers have a right to choose the products that best fit their business model. All customers can possibly be blamed for is expecting spot market participants to act reasonably and not abuse any transient market power they may have.

In any case, it is no answer to say that the risk of high spot prices can be managed in the hedge market when those high prices are a result of transient market power. When high prices result from market power, hedge prices will also reflect market power - the same rents are extracted, but in a different way. This is illustrated by:

- (i) the hedge prices offered by Genesis to Meridian mid-afternoon on 26 March (\$10,000/MWh) noting that both Genesis and Contact had earlier refused to offer Meridian hedges at all; and
- (ii) the events of 2 April (and now 14 May), which show that Genesis has been collecting rents by offering hedge cover, allowing it potentially to lock in premium prices on 100% of its Huntly capacity (in place of achieving a higher spot price but on a smaller portion of its capacity).

That is, it makes little sense to suggest that it is prudent, efficient or reasonable practice to hedge with the party that could and in this instance did set excessive prices.

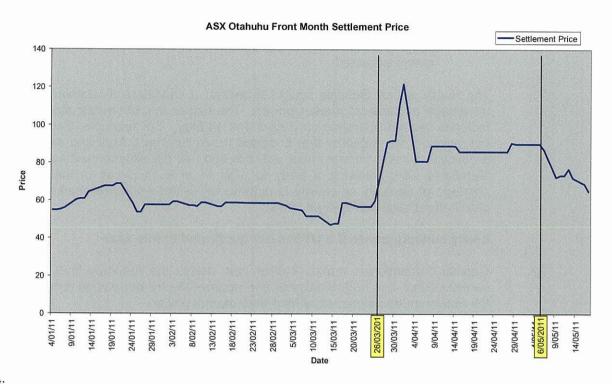
- 18. In terms of the final submission, Genesis asserts that finding a UTS in these circumstances:
  - (a) rewards poor risk management and reduces incentives to hedge;
  - (b) risks creating a moral hazard whereby those exposed to the spot market socialise their losses while retaining their profits;
  - (c) creates uncertainty by setting a "low bar" for a UTS; and
  - (d) will potentially have an adverse effect on new investment in peaking plant.
- 19. In Meridian's view, these submissions carry little weight:
  - (a) As above, it makes little sense to suggest that it is prudent to hedge against excessive prices, and therefore little sense to suggest that prudent risk management practices will be affected if a UTS is declared.
  - (b) Similarly, there can be no "moral hazard" created by mitigation of market power. That is analogous to suggesting that burglars should not be jailed, because otherwise homeowners won't be security conscious.
  - (c) Any uncertainty about what is or is not a UTS going forward will be limited to a consideration of what offer prices are appropriate when a generator is net pivotal. If that results in uncertainty, then it is uncertainty that falls only on the generator with the market power. Previous market prices will provide guidance, and, in the period before any Code amendments are developed, any uncertainty is likely to be of limited consequence.
  - (d) There is no reason to think that efficient new investment will be deterred by this ruling.

- 20. In summary, Meridian does not consider that the events of 26 March represented "normal" trading. In Meridian's view:
  - (a) the ability to set an arbitrarily high price cannot be said to be an equilibration of supply and demand in any meaningful sense;
  - (b) similarly, there is no economic justification for spot-exposed end users to face the risk of incurring a month's worth of average electricity charges in a 7 hour period in the absence of any shortage of capacity or energy; and
  - (c) hedging does not avoid the problem, but merely shifts the means by which the rent is extracted.
- 21. The reality is that Genesis sought to extract a considerable economic rent by taking advantage of transient market power. The risk of this behaviour recurring meant that factories ceased operation on 2 April and 14 May. For example, Goodward Industries has advised the Authority that it closed production on 2 April and will not commence production outside normal hours until advised that the situation will not occur again. In Meridian's view, allowing a party to offer in at such prices in the absence of any shortage of capacity or energy is detrimental to the wholesale market New Zealand can ill afford such deadweight losses.

#### Likely consequences if a UTS is not confirmed in this case

- 22. Genesis's submission makes it clear that, unless the Authority finds a UTS, Genesis considers that it is both legitimate and appropriate for net pivotal generators to extract the maximum economic rental from their market power.
- 23. In Meridian's view, it follows that, should a UTS not be declared, it will be a case of "anything goes" that is, extreme use of transient market power will become an established feature of the electricity market. If there is no consequence for such behaviour, then it would be irrational for generators not to consider doing so, particularly when they would be feeling the pinch from being charged economic rents by other participants in that position.
- 24. It is difficult to predict exactly what the future would hold in this scenario, but it can safely be assumed that, because being net pivotal would attract economic rents, generators would actively seek that position. This could result in bidding strategies designed to increase the prospect of being net pivotal, or more structural changes where generators seek to shed customers in order to improve their chances of being net pivotal. As noted in the draft decision (Box 1 after [107]), it is relatively common for a generator to be pivotal currently, being net pivotal is less common, but that could easily change if there are rents to be extracted.
- 25. Situations such as appeared to be the case between Contact and Genesis on 2 April where both offered upper North Island generation at prices close to \$20,000/MWh could also become more common. That is, it may become increasingly common to see behaviour that would not be expected to be observed in workably competitive markets. This would be an extremely negative development for both competition in and the efficiency of the New Zealand electricity market.
- 26. Whatever the outcome, it is clear that:
  - (a) it would be unsafe to assume that the relative frequency of net pivotal situations in the past would be repeated in the future generators would have every incentive to engineer situations of transient market power; and

(b) the economic costs would be borne by consumers, either through higher spot prices or higher hedge or contract prices. In this regard, it is relevant to note that, when the Authority's draft decision was released on 6 May, there was an immediate and significant drop in OTA ASX futures contract prices (see graph below) - clearly indicating that the market's view is that restrictions on inappropriate exercise of transient market power via the UTS regime are likely to result in lower spot prices.



#### Note that:

- (i) the price rise following the events of 26 March was even more abrupt than shown on the chart, which is a piecewise linear plot linking daily settlement prices;
- (ii) the apparent fall in price on 1 April was caused by the change of front month contract (i.e. from the March 2011 to the June 2011 contract).

#### Proposed remedy

- 27. As set out in our previous submission, Meridian would support a remedy which normalises prices for the relevant trading periods.
- 28. Genesis's position is that:
  - (a) the remedy proposed by the Authority would set a precedent that effectively amounts to a price cap, which would be contrary to the Authority's statutory purpose;
  - (b) the Authority should not cap prices or administer offers when there was no manifest error and the market operated in accordance with the Code, and no inappropriate conduct from participants (to do so would cause uncertainty in the operation of the markets in the future);
  - (c) the uncertainty of outcome and absence of opportunity to change offers may turn net producers to net buyers, who would incur significant penalties; and

- (d) the price range proposed by the Authority is significantly lower than the \$20,000 VoLL used in the grid investment test.
- 29. Meridian agrees with Genesis that, in the context of a UTS investigation, the Authority should refrain from setting prices at what the Authority considers the "right" level or prescriptively describing the boundary between acceptable and unacceptable offers.
- 30. However, in Meridian's view:
  - (a) It would be inappropriate to refer to VoLL as suggested by Genesis given that the current UTS investigation deals with issues and situations which are quite distinct from those being considered in the Authority's scarcity pricing consultation.
  - (b) In addition, the use of VoLL or LRMC would be unnecessarily punitive to customers given that there was no energy or capacity shortage. Meridian is not suggesting that the Authority speculate what prices would have been. While participants may not be able to change offers in response to the proposed reset Huntly offers, there is a need for a workable and practical solution that does not encourage similar situations in the future. Normalising prices by adjusting the offers of the participant causing the UTS would be a simple remedy to the "mischief".
- 31. Meridian maintains that prices should be reset to something close to what they would have been under normal trading at the relevant nodes. Normalising prices in such a way would not be setting a price cap it would just be returning to an outcome consistent with a competitive market.
- 32. If you have any questions regarding this cross submission please contact either myself or Gillian Blythe (<a href="mailto:gillian.blythe@meridianenergy.co.nz">gillian.blythe@meridianenergy.co.nz</a>, mobile 021 388 469).

Yours sincerely

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