Electricity Authority
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Submission on Preliminary Decision – Undesirable Trading Situation – 12 December 2019

Mercury strongly agrees that confidence and integrity in the wholesale market is important and supports the Authority addressing any conduct issues as they arise to ensure confidence in New Zealand's electricity market is maintained. This is particularly critical as the sector enters a new phase of long-term investment growth driven by the need to electrify emissions intensive sectors of the economy to support New Zealand's carbon emissions reduction targets at 2050.

New Zealand is internationally recognised as "a world leading example of a well-functioning energy market which continues to work effectively"[1], with the electricity sector achieving balanced outcomes in terms of energy security, energy equity and environmental sustainability.

New Zealand's stable regulatory and political environment and long-term commitment to the competitive electricity market has given confidence for significant investment. Around $10bn has been invested in new generation since 1996 when the market commenced. More recently, market signals have given Mercury confidence to invest in New Zealand's largest windfarm at Turitea, near Palmerston North and around $1bn is currently being invested in 380MW of new wind and geothermal generation.

The market has delivered efficient generation retirement outcomes with emissions falling by 60% since 2005 due to the replacement of thermal generation with renewables. The electricity sector is among the largest contributor to emissions reduction from any sector of the economy over this period.

Nor have the above outcomes come at the expense of higher consumer prices. Recent MBIE data indicates that increased competition among retailers has resulted in the average annual household electricity bill, in real terms, being as low as it was in 2009.

The role of efficient prices signals and risk management in the electricity market

The strong performance of the New Zealand electricity market reflects the commitment from successive governments to shift investment and operational risks to the market through efficient price signals.

New Zealand operates an energy-only electricity market based on a series of pricing nodes located around the country. This establishes a merit order of generation based on marginal pricing at each node and provides price signals to allow for the efficient investment in generation, transmission and load demand. The risk of supply shortfalls due to generation and/or transmission outages or transmission capacity constraints is managed by co-optimising energy with reserve generation in each trading period to provide the lowest cost solution for consumers. Pricing differences between nodes is not uncommon

[1] International Energy Agency, Energy Policies of IEA Countries: NZ 2017 Review

in New Zealand and the co-optimisation process between reserves and energy can at times also lead to price separation.

The use of financial products to hedge transmission risks

Participants in the electricity market manage nodal price and price separation risk through a mixture of physical market offers and/or financial products. The latter includes products to manage absolute price at individual nodes such as over-the-counter (OTC), contracts-for-difference and exchange traded instruments (ASX Futures). While these arrangements are effective, the Authority published a review of the electricity spot market in 2015 which concluded that around five percent of wholesale market price risk could not be covered by financial products[2].

Financial Transmission Rights (FTRs) have also been introduced as specific financial instruments to manage price separation risks between pairs of nodes (so-called basis risk) to enable greater retail competition. Mercury views FTRs as a valuable addition to the market, enabling participants with previously unmanageable basis exposure to hedge or partially hedge their positions. While valuable for many classes of participant, FTRs are not available at all nodes and are subject to scaling[3] which is a particular risk large scale, nationwide generator/retailers must manage. It is appropriate, and has been a feature of the New Zealand market from design, for generators to adjust offers to manage absolute price and basis risk exposures.

Participants need to be able to manage their portfolio specific risks

The inability to perfectly hedge all price and basis risk through financial instruments means the use of physical market offers to manage transmission constraints is an important element of risk management for participants. This is particularly the case in response to infrequent, short duration market events which are unable to be hedged in real-time. For example, a large consumer with spot exposure can hedge some or all of its load with financial products, and always retains the ability to use physical assets (shut off some or all of its processes) to manage its risks.

The use of market offers to manage such risks is aligned with promoting competition, reliability and efficiency in the electricity market. Without this ability, the only alternatives available to participants are to reduce retail competition in regions where they are exposed to price or basis risk or, in the case of hydro generators, inefficiently spill water. In the case of large nation-wide integrated generator/retailers it is necessary and efficient to manage price and basis exposure through a combination of physical and financial risk management products. For example, if Mercury (and all other generator/retailers) only relied on FTRs to manage basis risk, the increased demand for FTR capacity would drive the price up for all participants for all periods; with the resulting increased costs being passed through to consumers. It is far more efficient for generator/retailers to manage high volume exposure to basis risk through adjusting generation volumes when transmission constraints signal lines are at capacity.

The only way a generator can reduce generation is by increasing its offer price to the market so that another unconstrained generator can be dispatched. While this may influence the price in the constrained part of the transmission network higher (or lower) than it might otherwise have been, other participants exposed to those prices would not be impacted as they would have chosen to hedge their price and basis exposure using financial products appropriate to their business. While no hedging is perfect, households are hedged against pricing outcomes through fixed price variable volume contracts with retailers, while larger participants are able to balance their risk through a mixture of both financial and physical means.

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[2] Options to Improve Retail Competition: Findings of the Spot Market Review, Electricity Authority, 12 February 2015

[3] Due to their being insufficient revenue from the loss and constraint excess generated from the market settlement process

Because pricing impacts from managing transmission constraint risks only happens for very few trading periods a year, this is an efficient outcome for the market overall. If it were to happen frequently, it would signal that investment in the transmission grid was required. There are many examples in the history of the market where such price signals have led to transmission investment (for example the Tokaanu/Whakamaru upgrade, Wairakei ring and the North Island Grid Upgrade Project). More recently the Clutha and Upper Waitaki upgrade planned by Transpower will address transmission constraints to deliver market benefits with the exit of the Tiwai smelter.

Distinction between managing risk and exploiting market power

In Mercury's view the use of physical market offers to manage transmission constraint risks to avoid significant economic loss can be aligned with the long-term interests of consumers, particularly given the inability to consistently hedge market risks solely through financial products.

However, we would stress that this is highly distinct from situations where participants are in a position of market power and may exploit offers to earn excessive profits. Situations such as these are exceedingly rare in New Zealand but fundamentally undermine the confidence and integrity of the wholesale electricity market. Mercury supports such behaviour being addressed through clear conduct provisions backed with sanction for contravention.

Focus on addressing conduct and improving transparency

Since the release of the Authority's draft decision on the UTS some market participants and commentators have called for wide-ranging market interventions to address perceived issues of market power. While government and regulators always have the ability to intervene in the market, Mercury urges the Authority give careful consideration to potential unintended consequences from significant interventions that could have the effect of undermining the competition, reliability and efficiency of the market over the longer term.

In Mercury's view, the UTS claim raises questions around the appropriate conduct for market participants, rather than indicating wider systemic issues or market failure. The initial claim prior to the UTS was a breach of the high standard of trading conduct provisions. An investigation of this breach is still underway. If it concludes the actions of participants breached the provisions, then Mercury fully supports that behaviour being dealt with appropriately using the full remedies available to the regulator under the Code. Mercury does not consider the UTS provisions are the most appropriate arrangements to address issues of market conduct compared to transparent and effective conduct provisions. We note the Code only defines a UTS if no other remedies are available in the Code. In our view a thorough investigation of appropriate trading conduct would have been more appropriate prior to the current draft decision being issued.

Further enhancements to improve transparency to the market will also assist to improve current trading arrangements and reduce the potential for any future trading conduct issues. Mercury strongly supports the Authority and Gas Industry Company's processes to enhance thermal disclosures. Disclosures have also historically been provided by hydro generators to classify any spill events and provide this information to the market. These provisions could usefully be re-established with generators required to publicly notify when and why they spill in real time. Mercury would welcome the Authority investigating such an option.

In summary, Mercury agrees with the Authority that confidence and integrity in the electricity wholesale market is important. Mercury considers that the events related to the UTS represent a trading conduct issue which rightly should be investigated under the high standard of trading conduct provisions. Care should be taken in considering potential remedies and market reforms to ensure that they promote competition, reliability and efficiency as well as supporting the right balance for participants in managing the physical and financial risks associated with the wholesale electricity market.

Please direct any questions or feedback on this submission to me at nick.wilson@mercury.co.nz.

Yours sincerely,

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