16 June 2020

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## Submission on Hedge Market Enhancements Consultation

### Introduction

1. This is Vector Limited's (Vector) submission on the Electricity Authority's (the Authority) *Hedge Market Enhancements – Market Making* consultation paper, dated 21 April 2020.

2. Vector considers a robust hedge market as core to the development of broader market opportunities for the long-term benefit of consumers. The certainty and confidence in forward prices are important for emerging prosumers, just as it is retailers and generators, both existing and future.

3. After ~22 years of waiting for a liquid forward market to emerge, it is time for the Authority to act.

### History of Hedge Market Evolution

4. Over the evolution of the electricity market, various participants and regulators have sought to improve the efficiency of the market for spot price risk management products (Hedging products).

5. The spot market commenced in 1996 to 1998 with well capitalised parties as both physical suppliers and purchasers, with limited CFDs or swap positions, significant natural hedging (though the purchase of retailers) and limited trading. The hedge market sophistication was low and with only marginal competition in the retail market the expectation was that the market for risk management products would evolve over time.

6. Several "buyside" participants initially worked with the New Zealand Futures and Option Exchange and launched an electricity futures contract (Mercury, Pacific Energy, ECNZ and others) and developed the now commonly used ISDA contract form adapted for the New Zealand electricity market (Mercury). The initial futures contract ended ~1997/98 due to lack of support from the natural sell side (generators), while the ISDA contract form is commonly used.

7. It is interesting to reflect over how long the lack of a liquid hedge market has been discussed. Using the MBIE chronology of NZ Electricity Market Reform (2015) we can identify the following references:

    - **February 1993** – WEMS critique, further work on tradeable contracts**.**
    - **June 1993** – WEMDG, not in the chronology, but forward markets were discussed, including day-ahead and other derivative contracts.
    - **1993 -** M-Co, commenced an on-line secondary market for trading ECNZ hedges.

- **August 1994 -** WEMG report to Government, Sale of most electricity expected to be under long-term tradeable contracts.
- **October 1996** – Spot market commenced and was supplemented by (limited) trading of longer-term hedge contracts.
- **September 2001** – Post-winter review, some participants were significantly under-hedged, but it was expected that sophisticated (and liquid) hedge and contracting arrangements would emerge.
- **July 2002** – Hedge Index, an initiative from the GPS, designed to provide some means for establishing a forward price curve.
- **December 2002** – GPS on FTRs, the Government required an FTR market to be developed.
- **October 2004** – New GPS, improving hedge market transparency and liquidity a requirement.
- **October 2007** – NZ Energy Strategy, fair and efficient prices for current and future generation (by inference a reference to forward price setting).
- **December 2009** – Outcome of the Ministerial Review of the Electricity Market, asset swaps and the requirement for virtual asset swaps, to improve competition and requiring all major electricity generators to put in place an accessible electricity hedge market.
- **June 2010** – Establishment of liquid hedge market, the six largest generators jointly entered into an agreement with the ASX (note Trustpower is not a market maker) for NZ electricity futures and options (this replaced the "generator only" trading platform).
- **May 2012** – Stress Testing Regime introduced, to address lack of hedging and consequential lobbying.
- **January 2020** – Mandatory Market Making, fall back provisions, after a collapse in confidence in the ASX liquidity.

8. This is not a complete record of the debates, changes and concerns. A liquid contracts market was an expectation of the market design and has been continually raised as an area that requires further development. It has not organically developed as envisaged and there are some fundamental drivers that have limited its natural development.

9. Each step of the hedge market evolution has been addressed by the main gentailers proposing a "least change" outcome. For example, they initially responding by introducing a "closed reference" market. This attempt at a reference price setting approach ultimately ended as it did not provide access to liquidity for other market participants.

10. The second implementation of exchange traded futures contracts followed, with the five largest gentailers choosing the ASX, but with only four undertaking contractual market making (with beneficial exchange costs), but also with "portfolio stress" opt-out. Only certain contracts and durations require market making and this has now been supplemented by a mandatory fallback due to market confidence and liquidity concerns.

## Vector's Comments on Proposed Models

11. The industry is now approximately 22 years into its evolving operation. The "self-managed" moves by the large gentailers towards a liquid forward market have only been of limited success. If they had been successful, we would not have the fallback mandatory requirements now in the Electricity Industry Participation Code or this consultation.

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12. While the ASX futures have increased confidence in forward price setting, it has not addressed the fundamental lack of liquidity. The fact that the market making is only for 30 minutes per day is an indication of how seriously this market is taken by the market makers – they view it as a distraction that they reluctantly participate in to avoid being forced to do more. Equally, the fact that the market makers publicly insist that this is not a core part of their business and that it costs them money, also speaks to their lack of focus on market making as a genuine business activity and opportunity.

13. While the Authority is consulting on a range of potential models, the above chronology and lack of progress over many voluntary or self-managed attempts, should immediately rule out any voluntary approaches.

14. In addition, the Authority does not appear to consider the fundamental nature of the market and why the risks may be different for different market participants and potential market makers.

15. Unlike financial product markets such as interest rates/currency swaps or government bonds and their associated futures/derivatives, electricity is physically constrained and in New Zealand's case has no physical international interconnection.

16. There are both physical and financial reasons why this is important:

    - While the Authority records ~74 generators, with 26 having unknown capacity, the "big six", Meridian, Contact, Mercury, Genesis, Trustpower and Todd represent ~92% of installed capacity.
    - The spot price is unconstrained and New Zealand has full security constrained dispatch and nodal pricing.

17. Participants with generation plant have embedded physical options, that is they can elect how and when they operate their plant, subject to competitive pressures. In addition, there is a significant asymmetry of information in relation to shorter term operating decisions. It is a complex system of co-ordination, both physical and commercial, well suited to a market. However, the best capitalised participants, have the greatest capability and generally superior information.

18. As the generators hold a natural long position, they are the natural seller of contracts. Adding external market makers does not change this. Essentially the generators control the "supply" of hedging products subject to their own risk management limits and business structures (degree of internal hedging).

19. This means that generators have a significant position that they can play against any market maker. This is not a zero-sum game and former non-generator participants have exited (ANZ etc) or reduced their activities. Conversely if generators are market makers, they have similar embedded physical optionality. They are naturally sellers of forward contracts, have similar market understanding, financial capability and their meaningful participation is likely to encourage more price constructive behaviour and lower risk premiums for all participants.

20. It is also worth reflecting on how the five largest generators came into existence. They all either acquired their significant starting asset bases from the Crown or from previous monopoly businesses. These companies were created to bring competition to the market, and they have to a significant degree.

21. They started from privileged positions and were deliberately structured to ensure their financial viability to ensure the goal of a competitive market was achieved. The reality is that they started from privileged positions that new entrants generally do not.

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22. For them to argue that they do not have a duty of care to provide access to a functioning derivatives market is from a strict business perspective true. But from a regulatory perspective, given the original aspirations and expectations of the market formation, its 22 years of operation and the future benefit to consumers, the Authority must act to compensate for the privileged financial position and market asymmetry the big generators enjoy.

23. This should not be seen as requiring the big generators to support emerging businesses that will not survive, some won't. Nor should it be seen as an obligation that should necessarily be permanent or that other parties can't enter to offer market making services. But until the Authority is certain that the asymmetry has been significantly moderated, mandated market making obligations at a scale, that make the focus on market making a business necessity, rather than a regulatory risk strategy of the five or six largest are required. Until the Authority does that, the path to a non-mandated future will never emerge, as evidenced by the last 22 years.

24. Based on the above arguments Vector would not recommend:

    - A voluntary approach – this has failed already
    - A voluntary approach with a mandatory backstop – this does not address the materiality of the incentives, mixes uncertainty of outcomes with potential gaming to seek the least cost behaviour to avoid the mandatory outcome, and will continue to encourage value destroying lobbying across the industry.

25. Vector would recommend in order of likelihood to achieve the Authority's and longer-term market objectives and in order of preference:

    - A mandatory - commercial approach,
    - A mandatory approach.

26. We do not recommend a mandatory approach with transferable providers initially. While this may encourage a lower cost solution to the provision of market making, it also fails to leverage a core capability of the existing generators, that is risk management. It is likely guaranteed to be more expensive than the mandatory – commercial approach, assuming no compensation to the large gentailers.

27. Linked to our above recommendations is a consideration of costs. As outlined earlier, the existing large generators inherited and have added to their well-capitalised, privileged starting position. Their existing cost of market making is small relative to their overall profitability, balance sheets and cashflow volatility.

28. To place the cost of market making on them for a period time, whilst compensating any commercial entity to enter would seem to be a reasonable trade-off. If no commercial entities enter or their required compensation is too high, then we have confirmation of either the asymmetry issue or lack of attractiveness of the NZ electricity derivatives market. This will then confirm the ongoing necessity of the existing large gentailers (or new large generators) to provide market making services.

29. Allowing the existing large gentailers to contract out of their position, where the cost then falls on the balance of participants (including themselves) allows them to maintain a significant portion of their privileged position, whilst requiring other participants to "pay their way to prosperity" and forces entry costs on newer participants that the dominant players never faced.

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**Transition approach and obligations:**

30. We recommend a phased transition of approximately one year to significantly larger and broader market making obligations. Whilst this will disturb the market makers' existing natural and traded portfolio positions, i.e. force them to adjust, that will of itself create some liquidity. It will also allow them to add any systems and capabilities that they may deem are necessary.

31. While the Authority has spent considerable time in the past investigating the addition of other hedging products, we recommend that the following key market making parameters are expanded rather than adding products:

    - Duration – monthly market making should cover the current (spot) plus 12 months. This provides portfolio shaping that is not possible using the quarterly products.
    - Contracts – market making should be required across all quarterly contracts with the quantity declining with duration. Market making should be required in the peak contracts for at least two forward years. A key physical option held by the large generators is their ability to peak and this "product" should be accessible to participants outside of those with physical plant (at a price).
    - Depth – the Authority should carefully consider the effect of expanding obligations too broadly across other generators or retailers. The scale of plant, people, capabilities and flexibility decline significantly outside of the six largest gentailers and the cost to benefit ratio will undoubtedly decline significantly.
    - Spreads – other participants will have better views on appropriate spreads.

**Concluding comments**

32. It is clear that waiting 22 years for the assumed and required liquid hedge market to emerge is long enough and the Authority should act decisively.

33. The large gentailers will continue to protect their privileged positions and seek to create costs for newer entrants that they never faced themselves, while they continue to enjoy the significant embedded options and profitability that they inherited.

34. The Authority should introduce a mandatory – commercial approach and expand the obligations of the market makers. This course of action does not preclude the Authority from adjusting its course as the future unfolds. This aspect of the market should no longer be left to the large generators to evolve; their objective in this regard is not aligned with the market and the longer-term interests of consumers.

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Yours sincerely

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