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Submission on Inefficient Price Discrimination in Very Large Electricity Contracts – Proposed Code Amendment

1. This is Vector Limited's (Vector) submission on the Electricity Authority's (the Authority) consultation paper on *Inefficient Price Discrimination in very large electricity contracts - Proposed Code Amendment*, published on 18 August 2022.

Vector welcomes the Authority addressing a long-standing industry issue

2. Vector is strongly supportive of the Authority's focus on addressing very large contracts such as the 2021 contracts between New Zealand Aluminium Smelters, Meridian Energy, and Contact Energy ("the Tiwai contracts"). Ensuring electricity remains affordable to consumers through the energy transition is one of Vector's highest priorities. A workably competitive wholesale market will be critical to achieving that.

3. In our view, in a workably competitive market, striking potentially inefficient contracts would not be possible. Electricity generators would not be able (profitably), or motivated, to sell contracts to any party at a price materially below the market price, and/or at a price not accessible to other consumers or retailers. In other words, contracts that result in 'inefficient price discrimination' would not be possible in a workably competitive market.

4. Therefore, in Vector's view, rather than solely addressing a *symptom* of a lack of competition (as the Tiwai contracts could be described), the Authority must continue to prioritise addressing the potential *causes*: conditions on the supply side that enabled the Tiwai contracts to be struck in the first place.

5. The Authority's proposals to benchmark such contracts against the ASX are critical. Further, the prices and conditions of such contracts should be published so they can be subject to appropriate scrutiny, building confidence in the market.

6. We therefore support and welcome the Authority's proposal to make permanent the provisions in the *Electricity Industry Participation Code 2010* regarding large electricity contracts, which were introduced under urgency earlier this year (the "Code amendment"). The proposed Code amendment prohibits generators from giving effect to large contracts that raise the prospect of "inefficient price discrimination", requires generators to disclose materially large contracts, and establishes a voluntary clearance regime for such contracts.

7. Indeed, we would support a *mandatory* requirement for the Authority to clear such contracts, and, going further, would include a requirement for the Commerce Commission's competition branch to give clearance for very large contractual arrangements involving more than one generator on the sell side.

Addressing inefficient price discrimination is at the heart of the Authority's statutory objective, and critical to efficient decarbonisation

8. As mentioned above, however, the Code amendment only addresses a *symptom* of potential ineffectiveness of the current level of competition. The Authority should continue to prioritise its ongoing Wholesale Market Review (WMR), to address root causes and increase consumers' confidence that the market is delivering outcomes aligned with their interests.

9. Promoting competition is the first limb of 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*"

10. "Thriving competition" is also one of the Authority's five strategic ambitions for the sector[1]. Effective competition is a prerequisite to markets being able to deliver to the long-term interests of consumers – interests which include the need for our sector to decarbonise efficiently. "Low-emissions energy" is another of the Authority's strategic ambitions, and we are pleased that the Authority has explicitly linked the need to address inefficient price discrimination with the efficient transition to a low-emissions energy system. An efficient transition is clearly consistent with the long-term benefits of consumers.

11. In summary, in Vector's view, making adjustments to the current regime appears warranted in the interests of promoting competition, given the status quo has led to:

- one specific entity paying relatively little for its electricity, compared to:
  i. the forward price
  ii. the price paid by all other consumers (noting that the smelter consumes as much electricity per year as at least half a million households)
  iii. the price paid by other retailers; and
- the sellers of the Tiwai contracts being motivated to enter into such arrangements without facing significant negative impacts on their profitability.

Workable competition is critical to enhancing energy affordability

12. The Authority's WMR observed that the Tiwai contracts "raised a concern about the way the market is operating, by striking a contract with one large consumer that potentially caused a sustained increase in wholesale spot and future prices for other consumers".[2]

13. The Authority estimated the Tiwai contracts risked potential efficiency losses of $57m - $117m per year.[3] We support the use of urgent Code amendment by the Authority in this instance, and consider the scale of the potential problem to be more than sufficient justification to make the temporary Code amendment permanent.

14. The adverse effects of future Tiwai-type contracts on consumers will only exacerbate energy affordability issues. End consumers will be facing higher prices than they otherwise would in the absence of large-scale inefficient price discrimination.

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[1] https://www.ea.govt.nz/about-us/strategic-planning-and-reporting/statement-of-intent

[2] https://www.ea.govt.nz/assets/4-Monitoring/Issues-Paper-Promoting-competition-in-the-wholesale-electricity-market-in-the-transition-toward-100-renewable-electricity.pdf, page 2

[3] *Ibid.*

15. Unaffordable electricity prices can undermine consumer confidence in the electricity sector and generate negative sentiment, or even consumer backlash, across the country. This could limit consumer participation in existing and emerging energy markets, such as demand response programmes. It could chill investment in more renewable generation, compromising the energy sector's efficient transition to a low-carbon future. As posited by the Authority in the WMR Issues Paper, released on 12 October 2022, "the transition toward 100% renewable electricity may increase market power".[4]

16. We therefore agree with the prohibition of Tiwai-type discriminatory contracts that artificially suppress the cost of electricity to any large consumer at the expense of residential and small business consumers across the country, particularly those in Auckland.

Forward prices and long-run marginal costs are now far out of sync

17. In the past two years, prices in the electricity futures market have diverged materially from the long-run marginal costs (LRMC) of new generation. While futures prices at any point in time will rarely, if ever, exactly equal LRMC, the theory underpinning the wholesale market suggests prices are expected to tend towards LRMC over time.

18. LRMC itself is a nebulous concept, being project-specific and depending on many factors. A more generalised, "firm" LRMC for a particular form of generation also includes consideration of the generator's operating profile and any backup requirements. Firm LRMCs are more appropriate comparators to baseload futures prices than the costs of an individual project.

19. Futures prices would be expected to oscillate around LRMC over time. Analysis undertaken for the first report of the Electricity Price Review (EPR) in 2018[5] showed that this has broadly been the case for much of the past two decades, and prices were probably below LRMC for the middle part of the last decade.

20. However, expanding out the chart developed by the EPR in 2018, including monthly-average long-dated futures prices to October 2022[6] and recent LRMC data points[7], gives a very different picture. This is shown below in Figure 1[8] (page 5). This same chart has also been published recently in a report by Concept Consulting for the Authority[9]. Figure 1 also includes an indication of the price reportedly paid by Tiwai in its current contract[10], for comparison.

21. Since the EPR was undertaken, the difference between futures prices and LRMC has expanded materially. The current difference between long-dated futures prices (which are circa $190/MWh at today's prices), and recently-reported levelised costs of current, low-cost

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4 https://www.ea.govt.nz/assets/4-Monitoring/Issues-Paper-Promoting-competition-in-the-wholesale-electricity-market-in-the-transition-toward-100-renewable-electricity.pdf, page i

5 See https://www.mbie.govt.nz/dmsdocument/3757-first-report-electricity-price-review-pdf, p. 33

6 Sourced from the Authority's EMI website. Those plotted have been averaged by month.

7 Recent LRMC estimates are available at numerous online sources, including Contact Energy's February 2021 presentation, *Tauhara investment and capital management plan*, available online at https://www.nzx.com/announcements/367535 (slide 10). As noted above we acknowledge, however, that the relevant comparison is a "firmed" LRMC, not necessarily the raw levelised cost of building an intermittent generator like a wind or solar farm. Geothermal LRMCs can be considered relatively "firm", given their operating characteristics, but differences in the location of the project versus the ASX pricing nodes also need to be accounted for in any comparison.

8 Note that the chart developed in the EPR is in 2018 dollars. The recent futures prices and LRMC estimates have also been adjusted to 2018 dollars to allow comparison.

9 Available on slide 5 of the report at https://www.ea.govt.nz/assets/4-Monitoring/Information-paper-Generation-Investment-Survey-2022-Concept-Consulting-report-for-the-Electricity-Authority.pdf

10 Potential contract prices have been reported by a number of media outlets, including https://www.newsroom.co.nz/tiwai-point-smelter-owner-refuses-to-give-power-back-to-the-people

development projects (in the order of $60-70/MWh, in 2021), is now well over $100/MWh. The WMR's Issues Paper acknowledges the uncertainty in the investment environment that may be impeding development at this time. It is right for the Authority to focus on the importance of ensuring new investment can happen in a timely and efficient manner, in order that forward prices can begin to trend down as swiftly as possible. While high prices create a strong incentive to invest, they also create real risks to efficient electrification of the demand side.

22. In the context of this submission, the EPR recommended that the Authority report regularly on the relationship between observed futures prices and LRMC (Recommendation D4: "*Monitoring contract prices and new generation costs more closely*"), but we have yet to see anything published by the Authority in this regard[11]. We feel that this reporting is essential in the context of the ongoing WMR, and for scrutinising the strike prices on large contracts more specifically.

Materially large electricity contracts must meet specific requirements

23. Vector agrees with the proposed targeted Code amendment prohibiting generators from giving effect to a contract that could result in inefficient price discrimination unless at least one of the following is true:

    - The buyer is able to on-sell any unused electricity.
    - The net value of the contract is positive, i.e. the direct value to the generator of the contract exceeds the value of the generator's best alternative or 'opportunity cost' (proxied by ASX forward prices).
    - The Authority has provided clearance of the large contract.

24. We agree with the use of ASX forward prices in determining the opportunity cost of large contracts. Set by the market, forward prices are established/easily available, transparent, and would be less prone to disputes compared to calculated or administratively set prices. An alternative method would be to benchmark on some measure of LRMC, and as discussed above, report regularly on how and why the ASX forward curve may be deviating from LRMC.

25. We find the targeted definition of a "materially large contract" to be reasonable – a contract related to the physical consumption of electricity that is above 150MW less any MW consumed from new generation asset built as a consequence of the contract ("net 150MW").

26. The Code change should also explicitly include the criterion that the contract price is subsidy-free.

[11] The Authority's website states that the first release will be "mid-2022". See https://www.ea.govt.nz/consumers/the-electricity-price-review-epr/.

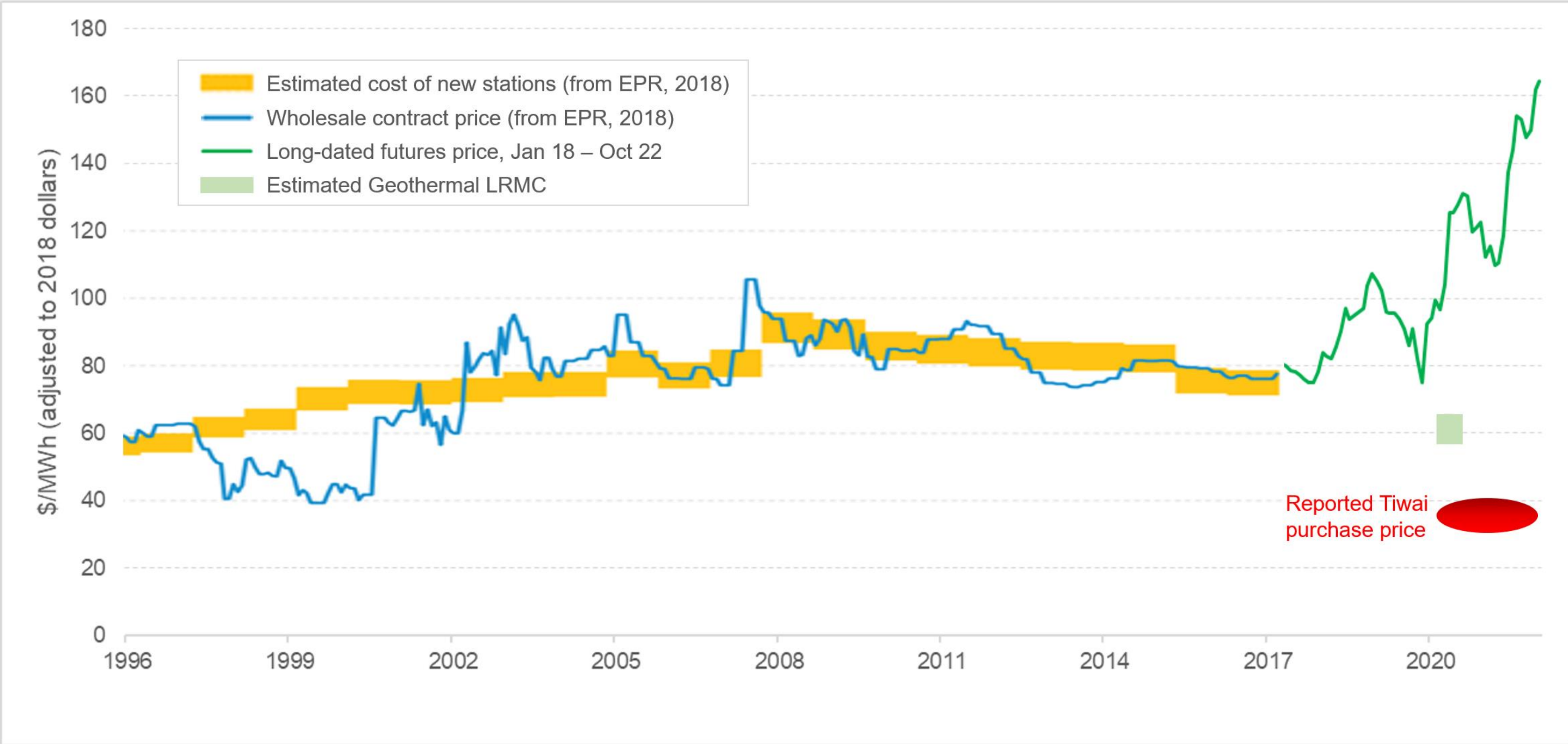

Figure 1: Wholesale contract prices versus costs of building new power stations, in 2018 dollars (Sources: Electricity Price Review, EA Electricity Market Information (EMI), Contact Energy). A reported Tiwai purchase price is also shown.

Proposed information disclosure arrangements

27. Vector also supports the proposed positive obligation on generators to disclose materially large contracts. We agree that generators be required to also submit supporting information, including the rationale underpinning pricing, the implications of resale conditions, and forecast impacts of the contract on a generator's group-level financial performance. This would provide the Authority with greater visibility of large contracts for monitoring and compliance purposes.

28. Importantly, the above proposal would increase transparency of large contracts that could result in inappropriate wealth transfers from consumers to generators. There is already a high level of transparency in generators' offers to the spot market, which are published every day.

29. We note the Authority's description of the cost to generators of providing the above information to be minimal, given "this information is at hand". Further, hedge disclosure is already an established requirement for market participants.

30. The above proposal would also complement recent moves to improve transparency in the wholesale electricity market (e.g. the *Revised guidelines for participants on wholesale market information disclosure obligations*, issued on 2 March 2022) and the wholesale gas market (e.g. the *Gas (Facilities Outage Information Disclosure) Rules 2022*) developed by the Gas Industry Company).

Proposed clearance regime for large electricity contracts

31. Vector further supports the proposed Code amendment that would provide generators the option to de-risk very large contracts by obtaining clearance of their draft contracts or signed contracts that are conditional on clearance. Under this proposal, the Authority generally has 45 business days to make a clearance decision, and a generator would need to enter the contract within 20 business days of it being 'cleared'; otherwise, the clearance lapses. The clearance will remain effective and applicable unless key aspects of the contract are changed post-clearance, or the information provided by the generator in support of the clearance is later shown to be incomplete or inaccurate.

32. We agree that this process will provide generators the opportunity to assess and balance the risks of entering a very large contract which may subsequently be undone if it is found to be in breach of the prohibition clause. It also provides the assurance that once a contract is 'cleared', the Authority can no longer pursue the relevant party (or parties) for breach of the prohibition clause. In fact, this process will be so beneficial to the market that we suggest that it could be made mandatory.

33. In the interest of market transparency, and to address any 'information asymmetry' concerns, we suggest that the Authority publish clearance applications for large contracts (with commercially sensitive information redacted, where necessary), in the same manner that the Commerce Commission (the Commission) publishes applications for mergers and acquisitions on its website.

34. The Authority should also publish its draft and final decisions on any large contract clearance applications. As part of this publication, the Authority should confirm that the contract meets its criteria above, is subsidy-free, and is therefore not adversely impacting other consumer groups, or indeed New Zealand's transition to a low-emissions energy system.

35. Further, given the expertise within the Commission itself, in its competition branch, having both the Authority and Commission review and give clearance to each large contract would add a further level of assurance to consumers. Clearance by the Commission should be

mandatory in situations in which more than one generator is involved on the sell side of the contract.

A more holistic consideration of the wholesale market

36. Vector supports the development of longer-term and durable solutions to wholesale market inefficiencies that harm end consumers. Prohibiting inefficient price discrimination in future large contracts (that are expected to be rare) is a significant step in the right direction and is but one part of the journey to ensuring the wholesale market will be fit for a future of 100% renewable electricity supply. As reflected in the Authority's WMR Issues Paper, there are multiple options that can be considered and implemented by various agencies, in parallel. For instance, as mentioned at the start of this submission, the Authority should continue to focus on promoting workable competition in the wholesale market to ensure conditions do not support inefficient large contracts to be struck in the future.

37. The Authority's market monitoring review from 2019 to mid-2021 found "some evidence of market power being used".[12] And while the review "concluded that prices over the review period had, at least to some extent, reflected underlying supply and demand conditions", it also found that "the sustained upward shift in the average price level was not fully explained by gas supply uncertainty or other underlying demand and supply conditions being controlled for".[13] We support curbing any exercise of market power by generators that could result in prices above competitive levels, which is not in the long-term interest of consumers.

38. The multi-dimensional nature of the ongoing WMR highlights the importance of considering more holistic and enduring reforms, in anticipation of a future with 100% renewable power supply. As indicated in Vector's March 2022 submission to the Authority on price discovery under 100% renewables:[14]

> . . .The future price of electricity will be a function of choices and costs across the whole supply chain – including, critically, in new renewable generation. As consumers rely more on electricity as part of a low-emissions energy system, we must take a whole-of-system approach to future investment.
>
> We want to ensure that market conditions are in place to encourage electricity system growth and evolution that will increase our reliance on renewables as efficiently, and securely, as possible, without compromising the level of service New Zealand's consumers expect. In the case of new generation, this requires us to unlock the potential of localised and diverse sources of renewable generation and consider the total system cost of new investments. This can help support affordability for our consumers and support New Zealand's emerging independent generation market.
>
> . . .While New Zealand has always had a relatively high penetration of renewable generation, complete removal of fossil-fuelled generation from the system would represent a significant shift away from the paradigm contemplated when the original generations of wholesale market design – from dispatch to new investment – were developed internationally in the 1990s.
>
> Given the magnitude of the transition it is vital that we continue to ask deep and probing questions of this design, and openly question whether it will deliver efficient investment in the large quantities of renewable generation required – which is the real prize for

[12] https://www.ea.govt.nz/assets/4-Monitoring/Issues-Paper-Promoting-competition-in-the-wholesale-electricity-market-in-the-transition-toward-100-renewable-electricity.pdf, page i

[13] *Ibid.*

[14] https://blob-static.vector.co.nz/blob/vector/media/vector-2022/vector-mdag-100re-issues-submission-cleaned.pdf, pages 1-2

consumers – as well as efficient operation of the system. We owe it to our consumers to do more than look back at what the existing market has achieved, or to compare its performance to inferior models internationally. Rather, we need to look forward to the future and to the model that will deliver the best outcomes for generations of New Zealand energy consumers to come.

39. We cannot overstate the criticality of getting the market settings and governance of the wholesale market right because of their significant impact on downstream markets and practically the entire energy sector, and ultimately end consumers.

Concluding comments

40. We look forward to productive engagements with the Authority on issues relating to materially large contracts and broader issues as part of the WMR, particularly on their implications for the energy transition. Please contact me anytime at james.tipping@vector.co.nz.

41. No part of this submission is confidential, and we are happy for the Authority to publish it in its entirety.

Yours sincerely
For and on behalf of Vector Limited

J. Tipping

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