Submission to Electricity Price Review – Options Paper for Discussion: Section D

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1. Submission Summary

- 1.1 Waitaki Power Trust does not consider that Options D1 to D4 presented in Section D: Reinforcing Competition in the Wholesale Market, will, if implemented, reinforce competition in the wholesale market.
- 1.2 Hence, Trustees put forward the following recommendations.

1.3 **RECOMMENDATION ONE**

Waitaki Power Trust respectfully urges the Electricity Price Review Expert Advisory Panel

- to review their support for Options D1 to D4 in Section D: Reinforcing wholesale market competition;
 - to give due consideration to Waitaki Power Trust's reasons for supporting the disestablishment of vertically integrated electricity companies which both generate and retail electricity;
 - to reconsider their lack of support for Option D5; and
 - to acknowledge that splitting gentailers' generation and retail business activity into two fully and completely separate businesses would facilitate real competition and thus would enhance efficiency and be in the best interest of consumers, especially with respect to fair and affordable electricity prices.

1.4 **RECOMMENDATION TWO**

Waitaki Power Trust recommends that the Expert Advisory Panel puts the following recommendation through to the Minister of Energy:

That the Minister takes all steps necessary to prohibit vertically integrated companies from participating in New Zealand's electricity sector.

1.5 The two recommendations are based on reasoned arguments presented under the subheadings as follows:

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2. Section D: Reinforcing Wholesale Market Competition

- 2.1 The obvious question is: Why does the wholesale electricity market need reinforcing?
- 2.2 The EAP considers there are "two main problems with the wholesale market. Firstly, contract price signals between buyers and sellers can be muffled Secondly, the contract market is fragile". (Electricity Price Review Options Paper, p. 18).
- 2.3 Trustees consider the simple answer is because neither the wholesale spot market nor the wholesale hedge contracts market are fully or genuinely competitive.
- 2.4 Electricity is not like items sold at an auction sale or furniture or farm equipment markets; neither can it be stored in large quantities either in terms of volume or voltage.
- 2.5 In simple terms, the wholesale spot market consists of **offers** made by generation companies, to provide a specific volume of electricity, at a specific price, for a particular period of time.
- 2.6 It is essential also to note that the electricity generation companies offer through the wholesale spot market, electricity which is surplus to what is required to meet the terms and conditions of contracts which have been negotiated either with large industrial customers or are hedge contracts with businesses which buy electricity through the spot market.

- 2.7 As the transmission grid operator, the Code under which Transpower operates, requires that the cheapest offer available each half hour is to be dispatched.
- 2.8 The fact that generation companies that retail electricity, such as, Contact, Genesis, Mercury, Meridian and Trustpower, can independently determine when, and the extent to which, electricity generated is traded
 - by direct negotiation with major industrial users;
 - or through the wholesale spot market; and
 - or through the wholesale hedge or futures market

and the ratio of electricity produced to be sold either through the company's retail arm or the wholesale or contract markets, creates a situation whereby a generation company individually, or in collusion, even though that collusion is likely to be tacit, in a market dominated by a few players, can manipulate the market prices by varying the ratio of the quantity of electricity generated which is allocated to the wholesale spot, contract, hedge or retail markets.

2.9 The situation whereby the big generation companies have a multiplicity of selling options needs to change.

3. Is there Evidence that Contact, Genesis, Mercury and Meridian have Manipulated the Electricity Markets?

- 3.1 The short answer is 'yes'.
- 3.2 Events involving anti-competitive behaviour are outlined in the Electricity Price Review, First Report.
- 3.3 For example

"In earlier years some generators and wholesale buyers adopted **risky buying and selling strategies** that drained reservoirs. These happened in 2001, 2003 and 2008" (Electricity Price Review, First Report, p. 31),

resulting in threatened brown-outs and black-outs to residential consumers and small businesses if they did not save electricity.

3.4 Then, in 2009 the Commerce Commission released its investigatory report on

"whether parties in the electricity industry may have breached the Commerce Act by taking advantage of a substantial degree of market power for an anti-competitive purpose or, by entering into arrangements that had the purpose or effect of substantially lessening completion" (Commerce Commission Investigation Report, 21 May 2009, p. 6).

3.5 The Commerce Commission defined market power in wholesale electricity markets at paragraph 242 of the Commission's 2009 Investigation Report as follows:

"Market power is typically defined as the ability to profitably alter prices away from competitive levels. Unilateral market power has been defined for wholesale electricity markets as the ability to reduce output or increase offer prices in order to change the market price. The exercise of unilateral market power may take the form of physical withholding (offering the same amount of supply as under competitive conditions, but at a higher price" (ibid, p. 60).

- 3.6 Because of the complex nature of the analysis required, the Commission engaged Professor Frank Wolak to undertake an independent assessment.
- 3.7 The analysis covered a five year period and specifically looked at wholesale market inputs and outputs relating to mid-2001, early 2003 and early 2006.
- 3.8 The Commission's report on Professor Wolak's findings is particularly worrisome.
- 3.9 For example, the Commerce Commission accepted Professor Wolak's findings that

"the quantitative evidence strongly suggests that when each of the four largest generators has the ability and incentive to unilaterally exercise market power, they do so, by offering into the market at higher priced offers to supply, and so cause an increase in wholesale market prices. This behavior is found to be sustained, on average, during long time periods" (ibid, p. 63).

3.10 And, again

"The findings strongly suggest that each of **Contact, Genesis, Meridian and Mighty River Power have market power**, and that when conditions are such that they have the incentive to exercise market power, they do so. **The exercise of market power is found to be both recurring and substantial**" (ibid, p. 65).

3.11 Furthermore recent studies by Stephen Poletti from Auckland University revealed the same sort of result as Professor Wolack in that, Stephen Poletti's study found excessive profits by the generators in New Zealand of \$4.3b. over 6 years between 2010 and 2016.

3.12 The Commerce Commission makes it clear that

"an increase in market power is the same as lessening of competition" (ibid, p. 7)

- 3.13 The so-called Undesirable Trading Situation put before the Electricity Authority in November last year also suggests that both the wholesale spot and wholesale contract or futures market continue to be manipulated or at least subject to forceful use of market power that is incompatible with a reasonably competitive market.
- 3.14 The Electricity Authority defines an undesirable trading situation (UTS) as

"a situation outside the normal operation of the electricity market that threatens, or may threaten confidence in or the integrity of the wholesale market A UTS is a situation that has or may have, serious consequences for the market" (The Electricity Authority decision, released 28 February 2019, p. 2).

3.15 The UTS claim alleged, among other things that the

"Code relating to informed disclosure obligations" (ibid, p. 2),

had been breached.

3.16 Although the Authority

"found there was no evidence the high spot prices were caused by collusion or undesirable behavior" (ibid, p. 2),

it did not investigate in detail, the charge that the Code relating to information disclosure obligations had been breached.

- 3.17 The Electricity Authority's failure to complete its investigation even though it acknowledges 'there was a problem', is unhelpful.
- 3.18 It has created a situation where the **perception** of a situation is at odds with a proposed **evidential account.**
- 3.19 In terms of public perception of the manner in which the wholesale spot and contracts future markets operate, public perception has an even more likely adverse impact on consumer confidence that the wholesale market is truly competitive.

4. Options Paper Section D: Solutions Favoured by the Expert Advisory Panel

- 4.1 To address problems resulting from investigations such as those referred to above, **only some of which were selectively reported on in the First Report,** the EAP put forward five options in Section D to facilitate and thereby reinforce competition in the wholesale market.
- 4.2 The finding by the First Report that the contract market is fragile is most significant.
- 4.3 Since the contract or futures market operates behind closed doors, so to speak, price signals between buyers and sellers are not generally available, as release of that information relies on the

"four biggest generator retailers voluntarily quoting buy and sell prices" (Electricity Price Review, Options Paper, p. 18)

- 4.4 To resolve problems of that nature the EAP put forward five options, four of which they identified as favourable solutions to strengthen or reinforce competition in the wholesale electricity market.
- 4.5 The favoured options are:
 - D1: Toughen rules on disclosing wholesale market information;
 - D2: Introduce mandatory market making obligations
 - D3: Make generator-retailers release information about the profitability of their retailing activities; and
 - D4: Monitor contract prices and generation costs more closely (see ibid, pp 18-20)

5. Operationalising Options D1 to D4

5.1 The following points illustrate the manner in which the EAP considers Options D1 to D4 are to be operationalized and implemented:

"D1: Toughen rules on disclosing wholesale market information. The **Electricity Authority** would vigorously enforce We favour this option.

D2: Introduce mandatory market-making obligations. The **Electricity Authority** would impose mandatory market-making obligations on vertically integrated companies We favour this option.

D3: Make generator-retailers release information about the profitability of their retailing activities.

New information disclosures rules developed by the **Electricity Authority** We favour this option.

D4: Monitor contract prices and generation costs more closely.

The **Electricity Authority** would periodically compare wholesale contract prices with new generation costs for evidence by generators We favour this option." (ibid, pp 18-21).

- 5.2 Clearly, in the context of endeavouring to establish sustainable competitive market outcomes for the benefit of consumers, Expert Advisory Panel members have failed to see the elephant in the room.
- 5.3 There is significant difference between real competition under free market conditions and the introduction of regulatory provisions designed to endeavor to mimic the effect of competition in an unregulated market.
- 5.4 As we will see below, the Expert Advisory Panel's decision to strengthen the wholesale market by regulation is remarkable because the Panel does elsewhere acknowledge the importance of competitive markets.
- 5.5 It is the view of Trustees that the EAP needs to re-think how true competition not only can be facilitated, but also can be seen to be a fully operative component of each step in the electricity supply chain.

6. The Importance of Competition in Markets Selling or Buying Electricity

- 6.1 It is generally accepted that where goods and services are bought and sold under unregulated free market circumstances that competition enhances the **efficient operation of companies selling into the market,** in particular.
- 6.2 When speaking at a power industry reform conference in Wellington almost 25 years ago, the Hon John Luxton, Minister of Energy added a further significant factor

"I believe that New Zealand will also need **real competition in generation** if correct pricing signals are to be sent and correct investment decisions made within the industry." (Hon John Luxton, address to 1991 Conference, Electricity Supply Association of New Zealand, p. 17).

6.3 Additionally, at the same conference, the President of the Electricity Supply Association noted that

"true competition in generation *is* the most important determinant of future prices" (M Sweetman, ibid, p. 29, word in italics our addition).

6.4 And further, in 1991 when the future design of the electricity industry was being discussed we are told that

"decisions about supply of electricity should be driven by the needs of consumers. Competition is the best guarantee of consumers' interests." (E. Chefneux, ibid, p. 49).

- 6.5 Further comments from those driving New Zealand's electricity reforms of the early 1990s are relevant.
- 6.6 The most pertinent is the proposal to establish competitive generation through the introduction of a 'power pool'.

"It was pivotal, we said, that competitive generation should be established The key entity in that is the power pool If we don't get anything else right in this whole restructuring exercise, we must, get the market for bulk power right." (M. Sweetman, ibid, p. 24)

6.7 Further, as was also understood by those driving the early 1990s restructuring of New Zealand's electricity supply away from control by Electrocorp, it was also essential that the status of Transpower needed to be changed, from a subsidiary of Electrocorp to a transmission business, totally separate from generation.

"My key message here today, both to the Minister and officials ... is this: to have true competition in generation ... we must have a Trans Power totally separate from generation. Why? The grid code, the rule book ... is the most important tool in creating the market or the pool" (M Sweetman, ibid, p. 29).

- 6.8 It is somewhat unfortunate that the wider benefits of competition in unregulated markets, obvious to those associated with the electricity reforms of the early 1990s, have been lost sight of with the more recent focus on business practices relating to the efficiency and financial performance of electricity companies.
- 6.9 It is worth noting that the reforms of the 1990s were being driven by those associated with electricity distribution companies, the majority of which, traditionally, have a greater focus on consumer benefit.
- 6.10 The following points are also noteworthy.
- 6.11 It is clear that the EAP too, recognizes the significance of competition.
- 6.12 The Electricity Price Review Expert Advisory Panel (EAP) notes the significance of free market competition in unregulated markets as follows:

"strong competition is perhaps the vital ingredient in an efficiently operating market. Power must be reliable ... as competitively priced". (Electricity Price Review, First Report, page 31)

- 6.13 Further, the EAP included in the First Electricity Price Review Report discussion of the results from its examination of:
 - the competitiveness of generation;
 - barriers to generation competition;
 - whether the wholesale contract market was competitive;

- detailed a comparative process for assessing the degree of competition in the wholesale or spot electricity market; and
- considered whether, and to what extent
- 6.14 With respect to the significance of competition in electricity markets elsewhere in the First Report, we are told that competition and efficiency are established ways of determining whether the electricity sector is working as it should,

"The assumption is that a competitive market is generally an efficient one and therefore good for business and consumers" (ibid, p. 12)

- 6.15 And according to Mr R (Bob) Thomson who took part in the electricity reforms of the 1990s it took only nine months to
 - establish Transpower as a corporate business separate from Electrocorp; and
 - put in place a wholesale electricity market as outlined in the quotations above at paragraph 6.3, 6.6 and 6.7.
- 6.16 The Electricity Authority's Chief Executive James Stevenson Wallace, as quoted in Appendix 1, that estimated some of the changes proposed by the EAP in the Options Paper Section D could take two to three years to implement. We submit that he needs to learn how to mimic the speed at which earlier reformers operated.

7. The Options Paper Section D: How Secure is the Expert Advisory Panel's Endorsement of Options D1 to D4?

- 7.1 We saw above that the Electricity Authority (EA) chose **not to investigate** the charge that the Code relating to information disclosure by generators putting offers to the wholesale spot market, had been breached.
- 7.2 However according to the EA

"it did find some indications of behavior that requires further information *and that* our compliance team and the UTS investigation team are liaising regarding alleged non-compliance with information disclosure obligations in the Code" (ibid, p. 2, words in italics our addition).

7.3 It is thus pertinent to ask: what confidence can the Expert Advisory Panel have, that the proposed regulatory backed Options D1 to D4, which generally require public release of information by the generators, will be adhered to, given the most recent performance indicators the Electricity Authority has identified above.

7.4 Secondly, in Section D the EAP acknowledges that

"Some industry participants, especially smaller retailers, said we had underestimated the seriousness of the problems, particularly the scope for companies with generation and retailing operations (vertically integrated companies) to inhibit competition." (Electricity Price Review, Options Paper, p. 18)

- 7.5 The EAP acknowledges that there are problems with the way in which the wholesale electricity market currently operates, including the fact that under particular circumstances contract prices, especially between the big four generators as sellers, and those who are buying, can be unclear.
- 7.6 That situation is more critical when the buyer is another generator because

"Quoted prices for benchmark contracts are the basis for companies to negotiate supply contracts with one another" (ibid. p. 18).

7.7 Hence, the EAP openly acknowledges that they

"share the view there are problems" (ibid, p. 18)

- 7.8 Indeed, given the result of the Commerce Commission's investigation it is moot as to whether competition occurs in the wholesale market at all and, further, as we saw above, whether competition is anything other than a transient factor that intermittently occurs when offers made by generators, who have a 90% market share, are put forward.
- 7.9 Nor can the Expert Advisory Panel take comfort from the finding by Concept Consulting's Investigation of the difference between the wholesale contract price of electricity between 1996 and 2017 and the estimated cost of building new power stations during the same time line.
- 7.10 According to Concept Consulting

"The comparison suggests competition has been effective in restraining prices" (Electricity Price Review, First Report, p. 32).

7.11 However, perusal of the assessment method on which the comparison is based, as outlined in the Technical Paper that accompanies the First Report, shows that the actual data has been massaged in various ways in order to standardize it, (see First Report Technical Paper, p. 4).

7.12 Further, in the First Report, Concept Consulting acknowledges that

"results can also be sensitive to the methodology and assumptions used to estimate short-run marginal costs" (Electricity Price Review, First Report, p. 32)

7.13 It is clear that the only guarantee there is for achieving a fully competitive wholesale market is complete separation of wholesale and retail businesses owned by the generation company.

8. Section D5: Prohibit Vertically Integrated Companies

- 8.1 Section D5 Option **Prohibiting vertically integrated companies** would prevent generation companies from owning both a wholesale and a retail business.
- 8.2 That is the only option in Section D which can guarantee that the wholesale market will be truly competitive.
- 8.3 Full competition is guaranteed by the plain fact that the operational Code, under which Transpower operates in dispatching electricity from the wholesale market pool, requires that it **must dispatch the cheapest offer to sell made each half hour,** a key point made by those during the reforms of the early 1990s.
- 8.4 Given the complete separation of a generation company's wholesale retail business, in circumstances where generation output is greater than what is required to meet the terms and conditions on a generator's hedge contract sales portfolio, the generator would have no option but to either offer excess production to the wholesale market, or cease generating.
- 8.5 A sharp pencil would be required for an offer to be successful, especially if hydro storage lakes were full, requiring water to be spilled to meet resource consent conditions.
- 8.6 However, thought may also need to be given as to whether both **wholesale spot market and wholesale hedge or so-called wholesale futures contracts**, are necessary.
- 8.7 A better option may be that **all** wholesale electricity sales are contract based.
- 8.8 Under that circumstance 'bald' spot market offers would also be tied to transparent contracts which all retailers, including generators, would be eligible to bid for.
- 8.9 A competitive wholesale market along those lines, to service only the retail electricity market, would ensure that the starting price for a unit of electricity for small businesses and households would not only minimize risk to the retailer, but also assure householders that price gouging could not occur.

9. Advantages of Complete Separation of Wholesale and Retail Business Activity

- 9.1 It was noted above that in combination, the five biggest electricity generation/retail companies in New Zealand, namely Contact, Genesis, Mercury, Meridian and Trustpower, have at least 90% share of New Zealand's electricity market.
- 9.2 Clearly the type of business practices adopted by each of those companies will have significant downstream effects for small businesses and New Zealand households, in particular, including those who are most vulnerable and already experience energy hardship.
- 9.3 The unremitting effect of competition in electricity markets is that **the buyer and not the seller controls the outcome** which in electricity market terms, is the cost of a unit of electricity.
- 9.4 For that reason, so-called 'gaming' of the market, such as the exercise of market power, is prevented.
- 9.5 Further, there is a very real difference between true competition and regulation.
- 9.6 Whereas penalties accrue if regulations are breached, businesses can breach regulations in various subtle covert ways, in order to gain an advantage, if they choose.
- 9.7 The consequence of a penalty is that a business will pay the price, whatever that is, if it is caught by the regulator.
- 9.8 When a market is competitive, businesses that want to be successful may need to make overt changes in their practices and product.
- 9.9 In short, while a regulated market can result in consumers being disadvantaged, where competition operates, consumers are the winners.
- 9.10 Paradoxically, despite the Expert Advisory Panel's
 - recognition of the importance of competition for an efficiently operating market;
 - acknowledgement that contract prices between buyers and sellers can be unclear so that information to competitors and investors is unhelpful; and
 - the fact that the Panel elsewhere endorses the option that a distributor's monopoly regulated business and any competitive activity needs to be completely separate in order to prevent a distributor inhibiting competition in "emerging markets" and using revenue from

"monopoly services to subsidise competitive services" (Second Report Options Paper, p. 30).

The Expert Advisory Panel declared with respect to Option D5

"Prohibit vertically integrated companies We do not favour this option" (ibid, p. 21)

- 9.11 The Expert Advisory Panels reasons include:
 - "Forced separation would substantially change New Zealand's electricity market and disrupt many businesses" (ibid, D5, p. 21);
 - "As far as we are aware, no country has required separation of generation and retailing" (ibid, D5, p. 21); and
 - "We don't favour this because separation will be unnecessary if the other four options are successful" (ibid, p. 18).
- 9.12 The Expert Advisory Panel's inability to adopt a consistent position, in combination with stepping aside from basic principles which had been adopted the importance of competition, is a prime example is again of major concern.

10. Conclusion

- 10.1 In a competitive wholesale market electricity consumers determine the price they pay for a unit of electricity, whereas reinforcing the wholesale market by regulation would load monitoring costs on to electricity consumers.
- 10.2 The Electricity Authority agrees.
- 10.3 In a recent press release under the heading "Maintain Voluntary Market-making : EA", the Authority states that regulatory intervention in the wholesale electricity market

"as proposed by the electricity price review (would) impose the additional levy costs on consumers that a mandatory scheme would bring (Otago Daily Times. 4 March 2019, p. 29, words in brackets added, see Appendix 1).

- 10.4 What the EA leaves unsaid is that the additional regulatory costs would only be picked up by consumers serviced through the retail electricity market, that is, small businesses and New Zealand households.
- 10.5 Trustees of Waitaki Power Trust do not accept that the addition of new costs to the retail price of electricity was either predicted nor is it acceptable.
- 10.6 Surely the Expert Advisory Panel needs to find another way to provide fair and affordable prices for us all.
- 10.7 The only guarantee of cheaper electricity prices that there is, is to open the door to competition at the wholesale electricity market level.

10.8 Effective wholesale market competition will be dependent on the creation of orthodox buyer-seller tensions between wholesalers (generators) and buyers (retailers). Without this, consumers will still be exposed to the imposed rent taking that Professor Wolak and others have identified.

Dr Helen Brookes Chairman Waitaki Power Trust

18 March 2019

Appendix 1

Maintain voluntary marketmaking: EA

Otago Daily Times, page 2 -- 4 Mar 2019 - GAVIN EVANS

WELLINGTON: All the benefits available from voluntary market-making arrangements in the electricity futures market should be exhausted before new structures are considered, the Electricity Authority says.

Moving to a mandatory market as proposed by the electricity price review, or adopting an incentivised scheme like that operated in Singapore, could take two to three years, authority chief executive James Stevenson Wallace said.

While all models had their pros and cons, there might be quicker gains available from extending the existing four participant model to include five or six players, he said. Other "wraparound" enhancements might also be possible, including initiatives to improve general

liquidity, without imposing the additional levy costs on consumers that a mandatory scheme would bring.

"I would favour doing as much as possible with the voluntary market," he told Business Desk.

The futures market, operated by ASX, is key to enabling retailers without their own generation to compete by providing them a fixed price on power. Establishment of an "active" hedge market was a legislated requirement when the Electricity Authority was set

up in 2010 and it has been subject to ongoing reviews since then.

The authority is planning another round of work in the 201920 year.

While volumes and pricing in the futures market have improved over time, independent retailers said there was still not enough liquidity in contracts two or more years out. Pricing also tended to blow out at times of market stress — as it did during the price spikes in September through November.

In 2012, the authority looked at adding Trustpower, the country's fifth largest retailer, as a market-maker, but decided against it.

In 2015, participants again considered whether the futures mar ket could be improved, with the EA deciding to develop a new cap product with the ASX. That is expected to be available this year.

Generators were split then on whether the voluntary market-making could be sustained as new products developed. Contact Energy and Trustpower favoured a move to incentivisation if there was to be a change.

Mercury, which was the firmest advocate of the voluntary scheme then, earlier this week said the cost of market-making should be either met by the entire market, or all participants should be required to participate, either directly or through an agent.

The Government's electricity price review last month said it favoured moving to mandatory market-making, which operated in the UK market and was being introduced in parts of Australia.

It argued that the level of obligation could be graduated based on a generator-retailer's size and the extent of their vertical integration.



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21 March 2019

Dame Miriam Dean, CNZM, QC Chair Electricity Price Review Expert Advisory Panel

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Dear Ms Dean

Waitaki Power Trust, which is a member of Energy Trusts of New Zealand (ETNZ) and 100% shareholder of an electricity distribution business, Network Waitaki Limited, writes in support of the points raised in ETNZ's submission on the Electricity Price Review Options Paper.

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Yours sincerely

Dr Helen Brookes Chairman Waitaki Power Trust

Member of Energy Trusts of New Zealand Inc *