

## **Appendix E** Format for submissions

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	* Submission made in this capacity, and not on behalf of any other party, with no warranty, express or implied, to any party relying on this submission.

Questions	Comments

## $\label{lem:competition} \textbf{Problem definition} - \textbf{competition concerns from Gentailer vertical integration}$

Q1. What are the benefits of vertical integration between generation and retail? Do you have any evidence to better specify and quantify these benefits? In particular, we are interested in benefits that would be realised by New Zealand's electricity consumers.

The benefits of vertical integration – especially prominent in the case of electricity sectors – are set out in my 2021 survey commissioned by ERANZ of the relevant economics literatures (as cited in the EA's February 2025 options paper at footnote 17).<sup>1</sup>

By way of summary, vertical integration in electricity sectors – relative to vertical separation:

- Is far more effective than contract-based approaches for hedging wholesale price risks, resulting in lower cost of capital and associated improved investment;
- Otherwise results in higher investment;
- Reduces incentives for the exercise of market power;
- Avoids pricing inefficiencies i.e. eliminates double marginalisation; and
- As a result of all of the above, benefits consumers.

<sup>1</sup> Meade, R., 2021, *Review of the Economics Literature on the Pros and Cons of Vertical Integration and Vertical Separation in Electricity Sectors*, report commissioned by the Electricity Retailers' Association of New Zealand, October.



Q2. Do you agree with our description of the competition concerns that can arise from the combination of Gentailer vertical integration and market power? Why/why not? Do you have any evidence to better specify and quantify the competition risks of vertical integration?	No. First and foremost this description of competition concerns fails to account for how vertical integration also benefits consumers – even if the competition concerns the EA raises are real and material, this does not mean that they outweigh the consumer benefits of vertical integration.  Just as fundamentally, the EA identifies only "risks" of competition concerns, rather than presents solid evidence that they are actually occurring (and sufficiently harming consumers that the benefits of vertical integration have been eliminated).
Q3. To what extent does vertical integration of smaller gentailers, such as Nova and Pulse, raise competition concerns? Should these smaller gentailers be subject to any proposed Level Playing Field measures?	No comment.
Q4. Are there other specific areas (other than access to hedges) where Gentailer market power and vertical integration are causing competition concerns?	No comment.
Q5. Do you agree with our preliminary view that the evidence indicates there may be good reasons to introduce a proportionate Level Playing Field measure to address the competition risks in relation to hedging/firming? Why/why not?	<ul> <li>First, for the reasons above, I consider the EA has failed to establish that there is a problem that needs addressing.</li> <li>Second, no evidence is provided that the proposed solution will address the supposed competition concerns – the door is left well open to the proposed measure backfiring (i.e. leading to higher prices for all, rather than lower prices for separated retailers); and</li> <li>Third, my own electricity system modelling indicates that the proposed measure benefits separated retailers but harms all other industry parties, notably consumers.</li> <li>As to the second point, non-discriminatory pricing measures will not result in gentailers offering hedge contracts to rival companies at cost. No competitive business makes investments just so they can hand their competitive advantage to their rivals:cont'd</li> </ul>



Q5 (cont'd). Do you agree with our preliminary view that the evidence indicates there may be good reasons to introduce a proportionate Level Playing Field measure to address the competition risks in relation to hedging/firming? Why/why not?

 Instead, based on my experience in modelling and otherwise researching the dynamics of imperfect competition in electricity sectors featuring asymmetric (i.e. partial) vertical integration,<sup>2</sup> non-discriminatory pricing is likely to induce a suite of changes across firm behaviours in forward and spot wholesale markets, and retail markets, with hard to predict (without the benefit of structured and detailed analysis) consequences.

Further to both this and my third point above, for this submission I revisited unpublished doctoral research that I undertook in 2013, analysing the effects of "level playing field" regulation in the context of an electricity industry featuring a single gentailer competing against one rival separated generator and one rival separated retailer, in forward and spot wholesale markets, and a retail market.<sup>3</sup>

In that research, non-discriminatory pricing – or "level playing field" regulation – was implemented by assuming that the retailing division of the gentailer behaved as if it was vertically separated (i.e. as under legal unbundling, vs ownership unbundling per se). This meant it procured its supply on forward and spot wholesale markets on the same terms (i.e. "level playing field") as its separated retailer rival, rather than accessing energy generated by its firm's upstream (i.e. generation) division at cost.<sup>4</sup>

However, while the retailing division of the gentailer was assumed to act independently of the rest of its firm, the upstream division of its firm is assumed able to account for how its forward and spot wholesale market decisions affect the profit of its retailing division (and should wish to do so, given both divisions remain parts of the same firm).

Based on this modelling, I found that "level playing field" regulation, compared with unregulated duopoly behaviour involving asymmetric vertical integration, resulted in:

- Equal rather than unequal retail market shares for both the separated retailer and retail division of the integrated firm – hence a lower retail concentration (HHI) index;
- Less retail output and higher retail price hence, lower consumer surplus (despite lower retail market concentration/HHI, highlighting the limitations of that particular retail competition measure, especially in the context of vertical industries);
- Elimination of both the:

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<sup>&</sup>lt;sup>2</sup> Evans, L. and R. Meade, 2005, *Alternating Currents or Counter-Revolution? Contemporary Electricity Reform in New Zealand*, Victoria University Press; Meade, R., 2005, "Electricity Investment and Security of



Q5 (cont'd). Do you agree with our preliminary view that the evidence indicates there may be good reasons to introduce a proportionate Level Playing Field measure to address the competition risks in relation to hedging/firming? Why/why not?

- "Raising rivals costs" strategy (RRC) i.e. the gentailer buying rather than selling on the spot wholesale market in order to increase the input cost of its separated retailer rival; and
- "Strategic forward overbuying" strategy (SFO) i.e. the separated retailer buying more on the forward wholesale market than is needed to meet its retail sales, and selling its surplus supply at the elevated spot price;<sup>5</sup>
- Lower spot and forward prices though, as above, not translating into a lower retail price;
- Higher firm profits overall, despite lower profits for the gentailer and separated generator, due to higher profits for the separated retailer; and
- Lower total surplus (i.e. sum of consumer surplus and firm profits) all the same, with higher firm profits insufficient to offset lower consumer surplus.

In short, while "level playing field" regulation is shown to benefit the separated retailer, it hurts the gentailer and separated generator – and consumers – with consumer losses outweighing overall increased profits. Whether or not the intervention leads to a level playing field for firms, my modelling indicates it does not benefit consumers.

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Supply in Liberalized Electricity Systems", in Mielczarski, W. (ed.), Development of Electricity Markets, Technical University of Łódż; Hogan, S. and R. Meade, 2007, Vertical Integration and Market Power in Electricity Markets, February; Howell, B., Meade, R. and S. O'Connor, 2010, "Structural Separation versus Vertical Integration: Lessons for Telecommunications from Electricity Reforms", Telecommunications Policy, 34, 392-403; Meade, R. and S. O'Connor, 2011, "Comparison of Long-Term Contracts and Vertical Integration in Decentralised Electricity Markets", in Glachant, J.-M., Finon, D. and A. De Hauteclocque (eds.), Competition, Contracts and Electricity Markets: A New Perspective, Edward Elgar; Meade, R., 2011, The Effects of Vertical Integration, Forward Trading and Competition, on Investment and Welfare, in an Imperfectly Competitive Industry, September; Meade, R., 2012, Vertical Integration vs Vertical Separation in an Imperfectly Competitive Industry, such as Electricity, with Retail, Wholesale and Forward Markets, October; Meade, R., 2014, Strategic Forward Overbuying as a Counterstrategy against Raising Rivals' Costs, May; Meade, R., 2018, Preparing Electricity Regulation for Disruptive Technologies, Business Models and Players - In the Long-Term Interests of Consumers, white paper commissioned by the Electricity Retailers' Association of New Zealand, August; Meade, R., 2021, Review of the Economics Literature on the Pros and Cons of Vertical Integration and Vertical Separation in Electricity Sectors, report commissioned by the Electricity Retailers' Association of New Zealand, October.

<sup>&</sup>lt;sup>3</sup> This analysis, for the unregulated benchmark case to be compared with level playing field regulation, used the basic framework described in Meade, R., 2012, *Vertical Integration vs Vertical Separation in an Imperfectly Competitive Industry, such as Electricity, with Retail, Wholesale and Forward Markets*, October.

<sup>&</sup>lt;sup>4</sup> This level playing field implementation followed that proposed in Cremer, H., Cremer, J. and P. De Donder, 2006, *Legal vs Ownership Unbundling in Network Industries*, July. While this is formally equivalent to the EA's Option 4, for present purposes it is functionally equivalent to the EA's Option 2. <sup>5</sup> While the RRC strategy is well known in the economics literature on imperfectly competitive vertical industries in which only some firms are vertically integrated, the SFO strategy is a novel strategy first



Q5 (cont'd). Do you agree with our preliminary view that the evidence indicates there may be good reasons to introduce a proportionate Level Playing Field measure to address the competition risks in relation to hedging/firming? Why/why not?

Hence, based on this analysis, "level playing field" regulation is less desirable from a consumer welfare perspective than unregulated asymmetric vertical integration (which features strategies like RRC and SFO).6

Modelling of the sort used here complements other systemlevel modelling, capturing in particular how changes in industry structure or conduct induce often unexpected or counter-intuitive changes across related markets (here, forward and spot wholesale markets, and the retail market):

 It helps to underscore the importance of assessing regulatory proposals at a systemic level, rather than assuming changes can be made in one part of a system without inducing unintended, unwanted, or even contradictory changes in other parts of that system.

As always, modelling involves simplifying assumptions and abstraction to draw attention to key mechanisms, without seeking to explain all possible relevant phenomena. For present purposes, my modelling could be extended to a more general oligopoly setting, incorporate risk, and/or include investment and capacity considerations:

- It would be relatively straightforward to extend my "level playing field" analysis to an oligopoly setting;
- It would also be relatively straightforward to extend my existing research (showing when vertical integration results in higher investment) to explore how "level playing field" regulation affects investment;<sup>7</sup>
- Risk considerations could be explored with greater effort – all of these refinements are left to future work.

That said, my analysis indicates that – given existing capacity – "level playing field" regulation risks harming consumers (even if it might benefit separated retailers). Hence, if it is being introduced simply because of a "risk" of vertical integration leading to competitive harms, further analysis would be required – of the sort described here – to demonstrate that both:

- The competitive harms are real and material; and
- The proposed intervention improves rather than harms consumer outcomes.

identified in my 2012 study cited above. These two strategies, and their welfare effects, are explored in detail in Meade, R., 2014, *Strategic Forward Overbuying as a Counterstrategy against Raising Rivals'* Costs, May.

<sup>&</sup>lt;sup>6</sup> Alternative regulatory interventions, including one which eliminates both RRC and SFO while improving consumer welfare, are discussed in Meade, R., 2014, *Strategic Forward Overbuying as a Counterstrategy against Raising Rivals' Costs*, May.

<sup>&</sup>lt;sup>7</sup> Meade, R., 2011, The Effects of Vertical Integration, Forward Trading and Competition, on Investment and Welfare, in an Imperfectly Competitive Industry, September.



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Level Playing Field options we have	identified	
Q6. Have we focused on the right Level Playing Field options? Are there other options that we should add or remove to the list in paragraph 4.1?	No comment.	
Q7. Are there any other important factors we should consider when identifying options (see paragraphs 4.2 to 4.5)?	No comment.	
Q8. Are there other key features, pros or cons we should consider in our description of the four Level Playing Field options?	No comment.	
Our assessment of Level Playing Field options		
Q9. Have we identified the right criteria for assessing Level Playing Field options (Figure 6)? Is there anything we should add or remove?	No comment.	
Q10. Do you agree with our application of the assessment criteria (Table 5)? Are changes needed to the colour coding or reasoning?	No comment.	
Q11. Are there any other material benefits or risks that should be considered (but are currently not) in our assessment of options?	Yes. As discussed above, the EA's problem definition highlights only a risk of possible competitive harms of vertical integration without establishing that they are real or material, fails to account for the inherent consumer benefits of vertical integration in electricity systems, and does not demonstrate that the proposed intervention will benefit consumers. In contrast, the modelling discussed in my response to Q5 highlights a risk of consumer harms from the proposed intervention. That risk has not been adequately considered by the EA.	
Q12. Do you agree with our selection of non-discrimination obligations as our preferred Level Playing Field measure? Why/why not?	No comment.	
Roadmap for implementing non-discrimination obligations		
Q13. What are your views on our proposed roadmap for the implementation of non-discrimination obligations?	No comment.	



Q14. Which products should any non-discrimination obligations apply to? Should all hedge contracts be captured, or should the rules be focused on super-peak hedges only? Are there are other interactions between Gentailers and their competitors which would benefit from non-discrimination rules?	No comment.
Q15. Do you have any feedback on the indicative draft non-discrimination principles (and guidance) set out in Appendix B? Without limiting your feedback, we would be particularly interested in your views on the following questions:	No comment.
a. Have we got the level of detail/prescription right? For example, do you consider that the principles and guidance will lead to economically meaningful Gentailer ITPs being put in place? What would be the costs and benefits of instead applying a more prescriptive ITP methodology?	
b. How far should the allowance in the principles for different treatment where there is a "cost-based, objectively justifiable reason" extend? Do you agree with the guidance that this allowance should not be extended to volume (at paragraph 13 of Appendix B)?	
Q16. Do you agree that escalation options are needed if principles-based non-discrimination obligations are implemented initially? Why/why not?	No comment.
Q17. Are prescribed non-discrimination requirements and mandatory trading of Gentailer hedges via a common platform suitable escalations given the liquidity, competitive pricing and even-handedness outcomes we are seeking? Why/why not? What alternatives would you suggest (if any)?	No comment.



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Q18. What costs and benefits are likely to be involved in setting more prescriptive regulatory accounting rules which detail how ITPs should be calculated? What would be appropriate triggers for introducing more prescriptive requirements for ITPs?	No comment.	
Q19. Do you have any views on how the non-discrimination requirements should best be implemented to ensure that Gentailers are no longer able to allocate uncontracted hedge volumes to their own retail function in preference to third parties? What are the key issues and trade-offs?	No comment.	
Q20. Do you have any views on the triggers for implementing the stronger regulation proposed in our roadmap?	Yes. As above, any "level playing field regulation" should only be introduced if there is a clear expectation – based on analysis (not belief, or simply intention or desire) – that it will improve consumer outcomes. The same is true of any stronger regulations.  Further, even the threat of escalating regulatory mechanisms could have a chilling effect on investment, and therefore he self defeating. If any such interventions	
	and therefore be self-defeating. If any such interventions are clearly beneficial to consumers, they should be committed to in advance (to minimise investment uncertainty).	
	Finally, any regulatory intervention that is irreversible should only be applied if the expected benefits are sufficiently greater than the intervention's costs to warrant abandoning the valuable option to wait (e.g. to gather better information before implementing the intervention).8	
Our current thinking on virtual disaggregation		
Q21. Does our proposed approach to implementing non-discrimination obligations (as set out in the roadmap in Figure 7) sufficiently address the underlying issue that originally led to MDAG recommending virtual disaggregation?	No comment.	

<sup>&</sup>lt;sup>8</sup> Boyle, G. and R. Meade, 2008, "Intra-Country Regulation of Share Markets: Does One Size Fit All?", *European Journal of Law and Economics*, 25, 151-165.



Q22. Do you have any views on whether virtual disaggregation provides a useful response to the competition risks we have identified (relative to the proposed roadmap) and, if it does, how it should be best applied?

No comment

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