

## Appendix E      Format for submissions

Submitter	Geoff Henderson, F.ENZ, PE (Calif)
Questions	Comments
<b>Problem definition — competition concerns from Gentailer vertical integration</b>	
<p>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.</p>	<p>There are benefits but they go against the benefits of competition. And the main competition concern is not simply vertical integration – it arises because of the oligopoly that has been created around ownership of the country's main hydro lakes which were tax-payer funded in the 20<sup>th</sup> century but which are now privately owned and used to enhance market power and gaming of WEM prices. If the arguments for vertical integration (which generally amount to economies of scale and the perennial issue of New Zealand's small population) are accepted, I would say that they should be run to their logical conclusion and the generators should be renationalised and combined as they were in the ECNZ days. But I'm not saying I accept those arguments. The main case for "going back to the 1990s" is that the incumbent power, which comes with owning the lakes, has been abused. The proposals around disclosure of long-term forward hedging prices go a long way towards addressing this issue.</p>
<p>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?</p>	<p>Yes. My experience (as founder of Windflow Technology and NZ Windfarms Ltd) is that the market power that comes with owning the hydro lakes has been abused to make life difficult for new entrants:</p> <ul style="list-style-type: none"> <li>• When the big incumbents are threatened by one or more new entrant generators, they can keep the WEM price <b>low</b> (while paying themselves a completely different price) so as to push the competition to withdraw (as is now finally happening with the takeover of NZ Windfarms by Meridian)</li> <li>• When the big incumbents are threatened by one or more new entrant retailers, they can keep the WEM price <b>high</b> (while paying themselves a completely different price) so as to push the competition to withdraw.</li> </ul>

<p>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?</p>	<p>Yes, they should be subject to any proposed Level Playing Field measures, except perhaps if they do not own any hydro lakes.</p>
<p>Q4. Are there other specific areas (other than access to hedges) where Gentailer market power and vertical integration are causing competition concerns?</p>	<p>Yes, simply in the management of the hydro lakes. It is very clear from looking at the daily graphs of storage that they are being held just below the long-term average trend. This is even after periods of heavy rain, which makes it clear that they are spilling water rather than allowing the lakes to fill. This enables higher prices than if the levels are held just above the long-term average trend. Furthermore, the practice increases the risk of a dry year shortage. Before 2000, it used to be the regular practice that the lakes would be allowed to fill up in the summer and autumn so that the country would go into the winter with full lakes.</p>
<p>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?</p>	<p>Yes. The original objectives of the WEMS and WEMDG processes in the 1990s were:</p> <ul style="list-style-type: none"> <li>a) Macro-economic efficiency by stimulating competition to build the next power station</li> <li>b) New entrants and innovative technologies being stimulated</li> <li>c) Sustainability (lowering CO2 emissions).</li> </ul> <p>But a common issue in the electricity markets of Europe, Britain, Australia and New Zealand is that the short-term clearing price is still being set by the most expensive form of generation, which is generally a fossil-fuelled power station. As the penetration of renewables grows, and fossil fuels are phased out, that clearing price will increase. This creates at least the perception that renewable energy is driving up the price of electricity, when in fact that, in a transition to zero-net emissions, is a perverse outcome of the market design.</p> <p>It also masks the actual costs of renewable energy in a perverse outcome for macro-economic efficiency. In the transition to zero-net, it should be important if one renewable technology or one wind turbine design is fundamentally more cost-effective than another. But when the electricity market only “discovers” short-term marginal costs, is it really stimulating the macro-economic efficiency that competition should deliver? There needs to be a healthy market for long-term hedges so as to discover the least-cost way to build the next unit of generation. To the extent that the Level Playing Field will achieve this, it is at least a step in the right direction.</p>

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?	No comment.
Q12. Do you agree with our selection of non-discrimination obligations as our preferred Level Playing Field measure? Why/why not?	Yes, but it needs to be enforced strictly if it is being used as an alternative to separation of the generators and retailers. There needs to be an institutional memory that the gentailers are being “cut some slack” in not going for separation, and that the quid pro quo needs to be serious controls on the anti-competitive practices enabled in the current WEM.
Roadmap for implementing non-discrimination obligations	
Q13. What are your views on our proposed roadmap for the implementation of non-discrimination obligations?	I can see the rationale and it makes sense, but it would benefit from greater clarity about the criteria for determining that “the risk of competition issues persists”, or that it does not and thus the next step can be avoided or deferred.

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?

All hedge contracts should be captured, so that the original goal of the WEM (macro-economic efficiency) can be realised.

Some new entrants will build generation more cheaply than the incumbents tend to do. For example, NZ Windfarms built its 46 MW wind farm, Te Rere Hau, using NZ-made Windflow turbines that are still running nearly 20 years later. In capital cost terms Te Rere Hau was about 65% of the cost per kW of foreign-made wind farms at the time, and on a par in terms of cost per kWh. This was remarkable given that it was the first production run of Windflow turbines, competing against established Danish manufacturers.

Importantly in this context, NZ Windfarms was the only significant independent wind farm developer and suffered for more than a decade from the low WEM prices that competing wind farms were insulated from by their incumbent gentailer owners. To be clear, Windflow played in an unsubsidised market against subsidised Danish turbines, and NZ Windfarms struggled to make a respectable return from the "spot market" for a decade while the gentailers cross-subsidised themselves.

As a result, Windflow ultimately went out of business and NZ Windfarms is heading for takeover by Meridian. Thus the existing WEM has played no small part in the demise of a locally manufactured turbine option for New Zealand.

<p>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:</p> <p>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?</p> <p>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)?</p>	<p>The phrase “without a cost-based, objectively justifiable reason” (Principle 1) seems to provide a get-out clause for the gentailers which will undermine the objectives of the principles. Combined with the fact that cross-subsidies by gentailers are allowed (with only a reporting requirement under Principle 7e, but no requirement to provide the same subsidy to independent generators or retailers), this has the potential to make life very complicated for independents. If one cries “foul”, what process will it have to go through to get a remedy?</p> <p>The guidance about volume similarly seems to introduce ambiguity. The six factors which may be taken into account (“load factors, conditions of interruptibility, plant commitments, prudential requirements, time of contracting, and duration of the relevant agreement”) introduce abundant wiggle room for a gentailer to vary its offers based on volume while offering an obscure explanation as to how one or more of those factors is the real reason.</p> <p>If a serious reform is contemplated, cross-subsidies need to be banned. Also, the regulator needs to get into the business of the gentailers sufficiently to be able to set clear rules for independents, such as a volume threshold such that, if you are contracting above X GWh/year, you will get exactly the same price as its internal business.</p>
<p>Q16. Do you agree that escalation options are needed if principles-based non-discrimination obligations are implemented initially? Why/why not?</p>	<p>Yes – see Q 15 above.</p>
<p>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)?</p>	<p>Possibly – but see also suggestion under Q 15 above.</p>
<p>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?</p>	<p>No comment.</p>

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?	No comment.
<b>Our current thinking on virtual disaggregation</b>	
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.
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.