At the request of Bell Gully, we have reviewed the 21 April 2015 report by Professor Graeme Guthrie. We are continuing to analyse the issues raised by Professor Guthrie, but set out in this note our preliminary reactions.

In summary, the points Professor Guthrie makes in respect of efficiency detriments are quite theoretical, and we query how applicable they are to the present transaction in a practical sense. We also disagree with Professor Guthrie's treatment of foreign ownership.

Guthrie argument	Page number	NERA preliminary response/comment
A higher cost of capital (20%) should be used in the entry model, to account for the loss of a real option when entry occurs. This implies a maximum assumed post-merger price increase of 25%, and therefore higher allocative efficiency detriments than modelled by the Commission.	1-4	As set out in our 21 April 2015 report, the binding constraint is the threat of exporting greasy wool, not entry. We demonstrated in that report why even a 20% price increase is too high. It is important to note that the cost of capital we use in our base case entry model is already 15% real, post-tax, which corresponds to 17% nominal, post-tax and 24% nominal, pre-tax.[1] Professor Guthrie's proposed cost of capital of 20% real, post-tax is 22% nominal post-tax and 31% nominal pre-tax. While we do not dispute the literature Professor Guthrie cites, from a practical perspective his report does not apply the literature carefully to the present case. For example, we note Professor Guthrie does not acknowledge that our entry modelling assumes the entry investment would be underwritten (by contract or vertical integration) – this addresses squarely Professor Guthrie's "winner-take-all"/stranding risk argument (page 2). Furthermore, the irreversibility or sunkness that gives rise to the real option is mitigated in the present case by the saleability of land and the second-hand market for plant.

1 The nominal adjustment is calculated using the midpoint (2%) of the Reserve Bank's inflation targeting range of 1-3%.

The existence of the option for Lempriere to buy out Direct Capital and ACC results in a conflict of incentives between Lempriere and Direct Capital/ACC. This will in turn result in less pressure to be productively and dynamically efficient than was the case for the transaction authorised by *Decision 725*.	4-8	It is theoretically correct that the option would introduce a conflict of incentives. However, query whether in a practical sense there would be any material conflict, or any material impact on decision-making. In the context of productive inefficiency (as opposed to business strategy) it is likely both parties would have the incentive to ensure the firm is productively efficient. This is an issue of monitoring. Regarding dynamic efficiency, it is worth keeping in mind that the merged entity would be a firm that cleans wool, which can then be used for further processing by other firms. It is not clear how much scope there is for a distinction between “high-risk business strategies” and “low-risk business strategies”. It is also not clear how analogous the option holder/shareholder situation is to the shareholder/bondholder and manager/shareholder literature Professor Guthrie refers to. It is important to note that with a 45 percent shareholding, Lempriere would not be able to unilaterally choose business strategies that disadvantage the other shareholders, and nor would the other shareholders, because control would be split. Furthermore, Professor Guthrie’s analysis does not appear to account for the exercise price of the option. The value of a call option decreases as the strike price gets larger.[2] At a minimum,

[2] See, e.g., equation 13 of Black, F and Scholes, M. (1973), “The Pricing of Options and Corporate Liabilities”, *The Journal of Political Economy*, Vol. 81, No. 3, pp637-654.”

		the strike price would be $14 per share,[3] compared to the share price of $[**REDACTED**] for the merger.[4] Therefore the strike price is materially higher than the merger share price. Since *Decision 725*, the threat from overseas scouring has increased, justifying the Commission using 1% for productive efficiency detriments rather than the 3% last time.
There are flaws with performance-based incentive schemes. Therefore productive efficiency will not be higher under the factual than under the counterfactual.	6-7	No doubt incentive schemes are seldom perfect, but they are still likely to be better than having no incentive scheme. We have to assume that the firm designs (and adapts) the scheme it thinks will work best. The Commission does not claim that the incentive mechanisms will be better under the factual than the counterfactual. Rather the Commission's claim is that incentive mechanisms will restrict the degree of productive inefficiency under the factual.
The sale of land and plant will take some time, and accordingly the valuations should be discounted.	8-11	The Commission has already considered this issue (paragraph 384 of *Decision 725*), and that detriments may also take time to occur. The Commission's approach is the most practical and appropriate.

3 Clause 9 of the Shareholders' Agreement.

4 Advice from Direct Capital.

Merger synergies will increase surplus in the wool scouring market, to be divided between consumer and producer surplus. A significant part of this increased surplus will flow to foreigners, which should not be counted as a benefit.	11-15	This increased surplus results from cost savings and investment. Accordingly it is "functional", as opposed to the surplus transferred by merger-facilitated price increases (above the competitive level). The resources (e.g., gas, labour and land) can be freed up for higher value uses in New Zealand, and accordingly the surplus is appropriately considered as a measurement of the social benefit to New Zealand, regardless of where it flows. At the extreme, Professor Guthrie's suggested approach implies that there would be no benefit to the New Zealand economy by a rationalisation that frees up New Zealand resources for higher value use in New Zealand if the rationalising parties and their customers were foreign-owned. Put another way, the test proposed would be likely to preclude the restructuring of inefficient sectors of the economy in situations with substantial foreign ownership.[5] As a final comment, we think is important to carefully review footnote 15 of Professor Guthrie's report. The most important thing to note is that Professor Guthrie is actually downplaying the more extreme of his public benefit results set out on page 18, because at least some of the benefits would be captured by New Zealand residents if the option is exercised. We made the point in our 22 December 2014 memo that the option

5 In this respect, we think that Professor Guthrie omits a fourth possible outcome in his bullets on pages 14 to 15, being that not counting benefits to foreigners could result in a "good merger" not occurring.

does not increase the transfer overseas. We do not agree with Professor Guthrie's argument that this is mitigated by the exercise price being set "far in advance", partly because we are not sure that would matter anyway, but also because we do not think the exercise price is necessarily set "far in advance" – in fact, three out of four of the pricing methods set out in clause 9 of the Shareholders Agreement would determine the price at the time of exercise.