

**BOARD OF INQUIRY**  
**HAUĀURU MĀ RAKI WIND FARM PROPOSAL**

In the matter of the Resource Management Act 1991

And

In the matter of resource consent applications by Contact Wind Limited in respect of the Hauāuru mā raki Wind Farm Proposal

And

In the matter of notices of requirement and a resource consent application by Contact Energy Limited for transmission infrastructure related to the Hauāuru mā raki Wind Farm Proposal

---

**REBUTTAL EVIDENCE OF RONALD JAMES LOCKWOOD**

---

**Counsel Instructed:**  
**Trevor Robinson**  
Wellington

Tel 64-4-472 1755. Fax 64-4-472 1766. PO Box 8018 Wellington  
[trobinson@xtra.co.nz](mailto:trobinson@xtra.co.nz)

**Solicitor Acting:**  
**H Rosemary Dixon**  
Contact Energy Limited

Telephone 64-4-462 1284. PO Box 10742, Wellington  
[rosemary.dixon@contact-energy.co.nz](mailto:rosemary.dixon@contact-energy.co.nz)

## Introduction

1. My name is **RONALD JAMES LOCKWOOD**. I am a Director of Ashworth Lockwood Ltd, Registered Valuers and Agricultural Consultants, based in Hamilton.
2. I have the following qualifications and experience relevant to the evidence I shall give:
  - (a) My formal qualifications are a Diploma in Agriculture and a Diploma in Valuation & Farm Management;
  - (b) I am a fully qualified Registered Valuer and have been so since 1973;
  - (c) I am a Registered Agricultural Consultant and have been so since 1982;
  - (d) I am a full member of the New Zealand Institute of Valuers, The New Zealand Property Institute, and the New Zealand Institute of Primary Industry Management (formerly the New Zealand Society of Farm Management).
  - (e) My work experience has included working for 10 years for the Rural Bank & Finance Corporation and 5 years for the AMP Society involving assessing the values and profitability of various farm properties in the Greater Waikato & Central North Island Region.
  - (f) For the past 18 years I have been a private Registered Valuer & Farm Consultant in Ashworth Lockwood Limited completing mainly rural property valuations and offering a range of agricultural advisory services.
  - (g) My experience in transmission lines has been primarily in the valuation of a number of farm properties in the Waikato Region, and the assessment of compensation for individual farming properties affected by the proposed 400kV Transpower transmission lines.
3. I confirm that I have read the "Code of Conduct for Expert Witnesses" contained in the Environment Court Consolidated Practice Note 2006. My evidence has been prepared in compliance with that Code in the same way as I would if giving evidence in the Environment Court. In particular, unless I state otherwise, this evidence is within my sphere of expertise and I have not omitted to consider material facts known to me that might alter or detract from the opinions I express.
4. The purpose of this brief of evidence is to respond to the evidence of Jan Ball (on behalf of both her and her husband Gavin Ball), Dr Philip McDermott (for Mr and Mrs Walter), Richard Gemmell, Eric Allan, and Stephen Markham as far as those briefs relate to the effects of the transmission lines and associated easement on farming practices.
5. In responding to this evidence I have made every attempt to identify the relevant issues accurately raised by various parties. I note however that it has not been possible to undertake a personal onsite inspection of all of the affected properties. I have made

roadside inspections of some properties, and detailed aerial photographs of some properties have been supplied to me to identify the exact route of the proposed line.

6. I note that I am not giving evidence on effects on property value, or on animal and human health and safety: those issues are covered in the evidence of Mr Crighton and Dr Black respectively.
7. I address the evidence of each submitter in turn below.

### **Gavin and Jan Ball**

8. I have read the brief of evidence of Mr and Mrs Ball relating to the effects on farming practices. At paragraph 8 of their evidence, Mr and Mrs Ball state:

“The proposed easement on our property extend for approx 4kms with ten pylons up to 32-48 metres high. Mr. Mills states that Contact is planning for a designated corridor of up to 400 metres in width.”

9. In reference to the 400 metre corridor cited above, Mr and Mrs Ball then state at paragraph 10:

“In our view the excessive width of Contact’s proposed corridor, over and above any reasonable width is totally unacceptable.”

10. They then state at paragraph 11:

“If the designated corridor on our property was 400 metres wide potentially that would be 160 hectares or one third of our farm.”

11. Based on information provided to me in the evidence of Ms Yorke, the 400 metre width land corridor represents an initial selection of a wider land corridor to allow for flexibility in the final placement of the transmission line. Following further consultation and study, I am advised that the width has been reduced to 200 metres in most places (including over the Ball’s property). I am also advised that the final easement width for the transmission line will typically be 42 metres, with a maximum width of 60 metres. My response to the submission of Mr and Mrs Ball (and also to the submission of Dr McDermott) is therefore based on there being an indicative 200 metre wide easement until final design is undertaken. From that point, and following construction of the transmission line, my evidence is based on a ‘worst case’ 60 metre wide easement being in place.

12. Mr and Mrs Ball detail what they consider will be the adverse effects of the transmission line easement on their farming practices, at paragraphs 12 to 22. These include:

- (a) Placement of pylons over paddocks, including “an important holding paddock, in the middle of access tracks. They traverse over main sheep yards making farm management and operational tasks impossible.”<sup>1</sup> “The lines transverse over working sheep yards also highlighting health issues to the farmer and animals. We

---

<sup>1</sup> Paragraph 12.

are also concerned with the possibility of lines falling down on the yards below, especially if there are sheep being held there.”<sup>2</sup>

- (b) Placement of pylons “on narrow ridges, making stock movement unworkable and vehicle access dangerous and over the top of a fence line.”<sup>3</sup>
- (c) There is only one access from Wairamarama Road to the Ball property. That access is necessary for moving “sheep to the woolshed for shearing, dagging and drenching. Also to move all stock going to sales or ‘the works’ loading them onto trucks at the entrance to our property on Wairamarama Rd.”<sup>4</sup> Mr and Mrs Ball “foresee major farm management problems” arising from the need for access through this entrance to build and maintain the transmission lines.

#### *Placement of pylons over paddocks and lines over yards*

- 13. The concern relates to the main set of sheep yards and cattleyards with associated adjoining holding paddocks located within the proposed route of the transmission line. There are other secondary sheep and cattle yards, but these particular yards are the main ones for stock handling on the property. The photographs supplied to me by Contact indicate that the proposed towers appear to be situated a reasonable distance from the yards. Moreover, I understand from information obtained by Beca that the proposed height of the towers will vary between 34 and 46 metres, and that the lowest of the overhead lines would be expected to be between 7.5 metres and 15.5 metres from the ground, depending on the distance from each tower.
- 14. I do not agree that under these circumstances normal stock management would be impossible. Livestock movement to, from, and within the yards, and stock handling, will not be impeded as there will be no immediate ground obstacles. In my opinion, stock management effects will be minor and can be managed to ensure present use of the yards continue.

#### *Placement of pylons on ridges*

- 15. The affected ridges provide some access (although not all the access) for livestock and motorbikes or 4-wheel drive vehicles. . From a total farming point of view I do not consider the placement of the towers on some of the ridges to impose a severe access restriction, as there are some existing access tracks. Moreover, it is unlikely that the pylons will completely restrict access along the ridges, as there will be room to move under and around the pylons. However, if required, some provision could be made for the construction of access tracks to bypass the new tower sites.

#### *Wairamarama Road access*

- 16. Because of the steeper contour along the road frontage of the property, the main existing formed road access appears the most practical access for line construction. This

---

<sup>2</sup> Paragraph 14.

<sup>3</sup> Paragraph 13.

<sup>4</sup> Paragraph 19.

assumes that there is no other alternative site for a new separate suitable access road to be formed, and that no suitable access can be made through an adjoining property, both of which may be possibilities after further site investigation.

17. The existing access off Wairamarama Road is the main access for livestock to the woolshed and a second set of yards, and to a further set of yards at the main road frontage which is used for loading and unloading of stock for transport purposes for either sale and/or purchase. I note further that construction of the pylons may bring positive aspects, including improved farm road access to the yards.
18. Overall I consider that while there may be some adverse effects related to the Wairamarama Road access these can be largely avoided, and those that are not avoided can be appropriately managed.

#### *Construction effects*

19. During the construction period there will be disruptions to normal farming activities and, at the very least, some inconvenience to the Balls. However, this disruption and inconvenience can be managed by Contact informing the Balls in advance and discussing times and dates for construction. Mutual cooperation and good communication will be necessary to reduce this inconvenience.
20. Because each farm in the area undertakes its key operations at slightly different times of the year, Contact will be able to minimise disruption to all farmers by staggering construction times with each landowner. I am of the view that this approach will overcome the problems for shearing and stock transport. I consider that the Balls could avoid issues surrounding lambing by carrying out lambing in paddocks away from the proposed line route. However, if that is not practical, as mentioned above, effects can be managed by a staggered construction timetable.
21. There will be some negative effects during construction through the disturbance of grazing pasture and fences, both of which affects farm management. However, Contact will restore all affected improvements after construction is completed. Overall, I consider that construction effects on farming practices can be appropriately managed.

#### **Dr Philip McDermott (for Mr and Mrs Walter)**

16. I have read the brief of evidence of Dr McDermott relating to the effects on farming practices at the Walter property. At paragraph 23 of his evidence, Dr McDermott states:

“The requirement for an easement for Contact Energy’s transmission line through the Walter farm is under discussion. Preliminary plans indicate the presence of 6 pylons occupying a corridor of 2.7km by 200m in the development phase, reducing to 2.7km by 40m when completed. This implies a disruption of between 54ha initially, reducing to around 10ha in perpetuity. Between on third and one half of this 10ha comprises some of the easier country on the farm, reducing the share of the highest quality pasture by at least 10%. In reality, there may be some variation

around the extent of disruption depending on how farm management is modified in response to the presence of transmission lines.”

17. At paragraph 24, Dr McDermott details what he considers will be the adverse effects of the transmission line easement on farming operations at the Walter property. These are:
- (a) “*The uncertainty now facing farm management.* The contingent nature of the project, its timing and progress depend on movements in the electricity prices and relative generating costs that Contact indicates it cannot predict. This raises questions over what levels of investment and stocking to undertake in the short-term and is likely to lead to even more conservative (and less remunerative) farming practices whether or not the project goes ahead.”
  - (b) “*The disruption to farming from construction.* This will involve a period of intrusion on to the farm by third parties to build the pylons and hang the transmission lines. It will, in turn, require modification to farm operations (and recreational activities) and additional inputs to maintain safety and security (for stock as well as contractors). It will also place important areas of grazing either “out of reach” or under pressure from construction.”
  - (c) “*The long-term impact of transmission lines.* While there is debate over the impact of transmission lines on stock in the corridor (which may or may not be confined to the 40m easement), a precautionary approach and conservative farming practice suggest a reasonable degree of separation should be observed for calving and lambing purposes. The land that will be affected has a significant role to place in these important activities which will be compromised as a result.”

*This implies a disruption of between 54ha initially reducing to around 10ha in perpetuity*

18. Dr McDermott’s statement as to affected areas implies that there will be quite significant restrictions to the farming of the land in the easement area. It is my view that this will not be the case. The reduction in grazing of the pasture area may only be restricted to a very minor degree around the base of the pylons - which only involves a very minor land area. I understand that, as for other transmission lines, grazing will be able to continue under the pylons, which will not be fenced off.
19. As discussed above, an initial larger land corridor is allowed for during the development phase to allow flexibility for the final placement of the transmission line, while the final width of the easement will be between 42 and 60 metres.
20. From a practical farm management point of view, I do not consider there will be significant disruption to the farm management activities on the land beneath the transmission lines, and that all but an insignificant portion of these areas (being those small areas constituting the foundations of the pylons) can continue to be grazed as they are at present.

*The uncertainty now facing farm management*

21. Dr McDermott indicates that there is uncertainty as to future stocking levels and farming practice on the property due to the timing of the proposed transmission line development not being able to be exactly confirmed at this time.
22. It is my view that this is more of a perceived problem rather than an actual problem, in practical farming terms. I can see no reason why normal farming practices cannot continue until the proposed transmission line development is undertaken. The land and pastures will remain as they are at present until development commences, and Contact will restore the land as near as possible to its original condition and make good any damage caused by Contact.
23. Under these circumstances I therefore do not see any need to alter the existing stocking levels or farming policy. The only material effects on farm management will occur during the construction period. However, as I have already mentioned, even these effects will be able to be planned for and mitigated, as Contact will give at least three months' notice to the Walters and other landowners prior to construction of the transmission lines.

*The disruption to farming from construction*

24. As discussed above, there will be some disruption to the farming activities over the construction period. The extent of that disruption will depend on the timing and when the development is undertaken. Again, as discussed above, Contact will coordinate with landowners to establish the most appropriate construction schedule. Affected improvements will be restored, and there may be some benefits such as better road access to the landowner. As mentioned above, in my view, the effects of construction on farm management can be appropriately managed.

*The long-term impact of transmission lines*

25. The potential effects of transmission lines on animal health and safety are discussed in the evidence of Dr Black. My experience is that there are a large number of farms with existing pylons on where livestock graze beneath transmission lines with no apparent adverse affect. Given these circumstances, I consider there is no valid reason why normal farm management cannot continue after the transmission line has been completed, and any improvements affected during the development period restored by Contact.

**Richard Gemmell**

26. I have read the brief of evidence of Mr Gemmell relating to the effects on farming practices. At paragraph 10 of his evidence, Mr Gemmell states:

“Overhead transmission lines and the pylons clearly interfere with farming operations on the affected properties. Any restrictions on aerial fertilizing and spraying will have a negative effect. .... Other potential negative effects in the future are:

- a) Cultivation is less efficient where pylons are located.

b) Location of new buildings will be restricted.

...

d) Forestry planting will be restricted.

27. Mr Gemmell raises a range of issues and restrictions regarding the proposed transmission line development, but only in general terms without specific reference to any particular property. I would therefore comment briefly on the various issues in general terms only as follows:

#### *Fertiliser & Spraying*

28. Aerial fertiliser and spraying restrictions can be overcome by the use of ground application. If this is not practical due to contour, aerial applications can normally still be undertaken but from a safety aspect, it may need to be from a greater height than previously.

#### *Cultivation*

29. The area of land occupied by the towers themselves is not able to be cultivated. However, as I have already mentioned, this involves a very minor area of land. The degree of impact will vary from farm to farm and is dependent on contour and the type of crop being planted. I consider this to be a very minor matter in this particular farming district, which is more aligned to grassland farming.

#### *Buildings*

30. The erection of new buildings will not be able to be undertaken within the easement area. The impact of this depends on the location of the proposed transmission line on a particular farm. However, the easement area normally only forms a minor part of the total farm area, so the restriction is minimal. Under these circumstances therefore there would normally be a number of other suitable sites to locate buildings on.

#### *Forestry*

31. Forestry plantings would not normally be allowed within the easement area. I would expect any farm in this district to only be partially planted under any forestry development rather than totally planted. An easement area would normally only occupy a minor area of the total farm so relocation of any proposed forestry development would, under these circumstances, not be of significance.

#### **Eric Allan and Stephen Markham**

32. I have read the brief of evidence of Mr Allan and Mr Markham relating to the effects on farming practices. Mr Allen (at pages 3 to 4 of this evidence) and Mr Markham (at paragraphs 5(a) to 5(e) of his evidence) both focus on the effects on aerial topdressing of their respective farms, and of the farm leased by Mr Markham's daughter Adele. At

present, the Allans and Markhams share the use of an airstrip partly located on both properties. Both Mr Allen and Mr Markham state that the transmission lines will make the airstrip inoperable. Mr Allen and Mr Markham state that Contact has offered the use of an airstrip on another property, which would be shared with other farmers.

33. Mr Allen and Mr Markham state that the extra distance to the proposed airstrip will create farm management problems for them. They also both emphasise their good and well established working relationship, and both state that having to share an airstrip with other farmers will create timing, maintenance, and administrative problems.
34. Mr Allen also states that the presence of the pylons will require increased flying time and affect the ability to spread fertiliser near the pylons.
35. As stated in the evidence of Mr Mills, Contact will cover the incremental costs of fuel and aircraft time required to travel to the new airstrip. As an alternative, if travel to the new airstrip is not possible, Contact would meet the incremental costs of helicopter spraying for affected properties.
36. The evidence of Mr Mills also states that Contact will ensure there are appropriate fertiliser and equipment storage areas, and working areas, for the number of users of the airstrip. Contact will also take responsibility for the maintenance and administration of the airstrip. In particular, Contact's site manager will be responsible for maintaining and scheduling use of the airstrip.
37. It is not unusual for airstrips to be used by multiple users. Generally, efficiency of shared airstrip usage is improved where one individual takes responsibility for the management including such things as arranging fertiliser delivery and application times for other individual farmers. There can also be various financial arrangements whereby each user would pay an agreed amount per tonne of fertiliser applied and these additional funds could be utilised to meet costs such as maintenance of the air strip facility.
38. In this case, Contact will take responsibility, and meet the costs, of maintenance and administration of the airstrip.
39. Contact indicates that the number of users of the airstrip will be about 5, depending on final arrangements. In my view, and given that Contact will take responsibility for and meet the costs of maintenance and administration of the airstrip, the overall effects of the change in airstrip arrangements for the Allans and Markhams will be no more than minor, and will provide appropriate facilities for their ongoing fertiliser requirements.

**R J Lockwood**