

**BEFORE THE BOARD OF INQUIRY**

**IN THE MATTER** of the Resource  
Management Act 1991

**AND**

**IN THE MATTER** of applications for  
resource consent and  
notices of requirement  
by Transpower  
New Zealand Limited for  
the North Island Grid  
Upgrade Project

---

**STATEMENT OF EVIDENCE OF KEVIN MICHAEL ROONEY  
FOR TRANSPOWER NEW ZEALAND LIMITED IN REBUTTAL  
(Animal health issues)**

---

---

SIMPSON GRIERSON  
D J S LAING / J G A WINCHESTER  
TELEPHONE: +64-4-499 4599  
FACSIMILE: +64-4-472 6986  
DX SX11174: PO BOX 2402  
SOLICITORS  
WELLINGTON

J S KÓS QC  
STOUT STREET CHAMBERS  
TELEPHONE: +64-4-472 9026  
FACSIMILE: +64-4-472 9027  
PO BOX 117  
WELLINGTON

## Introduction

1. **MY** name is Kevin Michael Rooney. I wish to present rebuttal evidence to the statements of evidence of:
  - (a) Mr Gary Orbell, on behalf of Matamata Piako District Council (**MPDC**); and
  - (b) Mr Geoff Copstick and Ms Kate Brennan.
2. I address the evidence of these submitters below.

### **Gary Orbell (MPDC) (Submission number 1113)**

3. **IN** Mr Gary Orbell's evidence, at paragraph 5.6, he queries the effect of electromagnetic radiation on the quality of produce from the affected area.
4. **THERE** is no evidence to support the suggestion that EMF is stored in an animal after exposure. Physically it is impossible – animals have no mechanism for this. There is also no evidence that changes occur at cellular level to animals exposed to EMF. For products in the food chain to be affected, EMF would have to be stored in cells or tissues within the animal. There is no physical way that this type of energy could be stored and then reappear at a later date in a food product of meat or milk.
5. **THE** meat inspection service in the slaughter premises in New Zealand is considered to be one of the best and strictest in the world. Animal carcasses are thoroughly inspected before being certified as fit for human consumption. Detection of any disease lesions in a carcass results in either part, or all, of that carcass being condemned, thereby preventing it from entering the food chain.
6. **THERE** is also no evidence to support causal effects between exposure to EMF and changes to animal tissues. If tissue changes did in fact occur, the resultant lesions would almost certainly be detected during the meat inspection process.

7. **IN** summary, the facts do not support any suggestion that product that will be derived from animals grazing under or close to the proposed transmission lines pose any danger for human consumption.

**Mr Geoff Copstick and Ms Kate Brennan (Submission numbers 0405 and 0406)**

8. **MR** Geoff Copstick and Ms Kate Brennan state in their submission, at page 17, paragraph 78, that there is no mention of goats, alpacas, donkeys, emus, pigs, chickens or domestic pets in my evidence and that there is a failure to understand that lifestyle blocks are productive land.
9. I agree that lifestyle blocks can be productive units. Lifestyle blocks have generally originated from prime farms, mainly dairy farms, that were located close to urban centres. The original farms were generally highly maintained units that were subjected to high fertiliser applications. While there is much criticism of farms close to urban centres being subdivided into smaller blocks, the owners of these smaller units are often hard workers and have high standards of animal and land care.
10. **THERE** is potential for disruption to any agricultural enterprise during the construction phase of the transmission lines and towers, and this potential was addressed in paragraph 69 in my evidence in chief. Lifestyle blocks are productive and important units in our rural communities and economies. During the construction phase, a highly stocked lifestyle block will be in a similar situation to a highly stocked larger farm.
11. **WHILE** on larger farms, planned management of pasture feed reserves leading up to the construction date can reduce the impact. Lifestyle blocks will generally not have the same feed reserve capability and will probably have to make provision to procure "off-farm" feed for animals under their care during the time of construction.
12. **GOATS** and alpaca have similar physiologies to that of dairy cows. They all ingest plant material, or feed product derived from plant material, which undergoes the initial digestion in their fore-stomachs before proceeding to the gastric stomach and then into the intestines. They are herd animals and respond well to human attention.

13. **ANY** EMF effects on goats and alpacas would be expected to be very similar to that on dairy cows. The probability of animals on a lifestyle block grazing and resting continuously directly and under the proposed transmission line is highly unlikely. I consider that the proposed transmission line would have no effect on the health of goats or alpacas.
14. **DONKEYS** are in the *Equidae* family and are closely related to horses. Generally, donkeys are considered to be more docile than horses. The effects on horses are addressed in paragraphs 51 to 60 in my evidence in chief. I have commented on the potential impacts for the proposed transmission line crossing through an established thoroughbred breeding farm. This is likely to be due to the temperament of young thoroughbreds and their reactions if subjected to noise created by the lines and structures during adverse weather conditions.
15. **ON** other properties, where horses or donkeys will be kept under or close to the proposed transmission line, there could also be the potential for horses or donkeys to be similarly affected. However, it would be less likely to impact due to the lower stock rate on other farms, including lifestyle blocks and, as a generalisation, the quieter nature of horses kept on these types of property compared to those on thoroughbred breeding farms, and the quiet nature of donkeys.
16. **HOUSED** animal enterprises such as pigs and poultry will not be allowed in the designation corridor of the proposed transmission line. Free-range animals, including emus, are highly unlikely to constantly graze and rest directly under the proposed transmission line. If the shape and size of paddocks prevents the movement of animals away from an area directly beneath the proposed transmission line the low electromagnetic field they will be exposed to is highly unlikely to affect their health and well-being.
17. **DOMESTIC** pets, due to their inquisitive and wandering nature, are also unlikely to spend much of their time directly under the proposed transmission line.
18. **ANIMALS** graze under existing transmission lines without any apparent detrimental affects. The estimated EMF levels under the proposed transmission line are given in paragraph 27 of my evidence in chief and are

well within the ICNIRP guidelines for humans, and the assumption is made that these guidelines could also be applied to animals.

19. **IT** is my opinion that the proposed transmission lines are unlikely to cause any health or welfare issues for goats, alpacas, donkeys, emus, pigs, chickens or domestic pets.

**Kevin Michael Rooney**

**13 May 2008**