

**SUBMISSION TO BOARD OF INQUIRY INTO UPPER NORTH
ISLAND GRID UPGRADE PROPOSAL
(From Submitter Reference 0409)**

1. INTRODUCTION:

- 1.1 My name is Grant Stewart Milne. I currently live on the North Shore in Auckland and work for the Board of Airline Representatives of New Zealand Inc (BARNZ) where I have been the Executive Director since 1998. Prior to that I worked in the Public Service (MOT) where my last position was Secretary for Transport.
- 1.2 I initially became interested in this grid upgrade proposal because of a member of our wider family being affected. That alerted me to media reports and to the emerging views of significant organisations such as ARC, MCC, MEUG and Federated Farmers.
- 1.3 This in turn led to me accessing the Section 42A report (Mitchell January 2008) as well as the minority view of Commissioner Pinnell and other views.
- 1.4 I am making this submission not as an expert on the electrical power needs of the Upper North Island nor as a person with any in-depth understanding of the transmission options.
- 1.5 This submission is based on my experience as a person who has been involved whilst in the Public Service in seeking approval for major projects and in the private sector (working for airlines) in looking at the justification and timing for large scale airport projects.
- 1.6 This submission is also based on my great pride and love of this country of ours and the wish not to see it despoiled by what to me appear to be unnecessary and grossly obtrusive structures which are being proposed without the certainty that they are needed, that they will be used and useful and that there is no feasible option to them.

2. NEED FOR GRID UPGRADE:

- 2.1 From my reading there appears to be general acceptance that additional transmission capacity is required.
- 2.2 There is the matter of whether additional generating capacity will be installed in and around Auckland, when that will occur and to what extent this will affect the timing of additional transmission requirements. However, there does seem to be some degree of consensus that installing additional transmission capacity is needed and that this should be in place over the next 6 to 7 years.
- 2.3 The issue appears to be whether 70 metre high pylons with the possible future capability of operating at 400kV or whether standard sized pylons operating at 220kV should be erected over the next few years.

3. PROVIDING INFRASTRUCTURE FOR THE FUTURE:

3.1 Over the years that I have been involved with transport I have seen examples and effects of:

- Insufficient provision for transport infrastructure.
- Over-provision of transport infrastructure.
- Inadequate utilisation of transport infrastructure.
- Inadequate maintenance of transport infrastructure.

3.2 From my experience the under-provision has tended to be where funding is difficult to achieve or where there has been lethargy.

3.3 Over-provision has tended to occur where a monopoly provider can pass on costs to users – ie in cases where gold plating or over-provision is not penalised but in fact results in the ability to “justify” an increase in prices based on return of and on capital invested.

4. COMMENT:

4.1 As I see it, this proposal to build 70 metre high towers which may be needed for 400kV transmission in 20 or 30 years time is a classical case of over-provision.

4.2 Proceeding with this infrastructure at this time given the many uncertainties as to whether or when it will become used for what it is being designed for appears to me to be most unwise.

4.3 I presume that the thinking behind this proposal has been a mixture of:

- We must provide for the future electricity needs of the Upper North Island and particularly for Auckland.
- We must avoid any repetition of power failures for Auckland.

4.4 I suspect however that the spectre of looming infrastructure inadequacy and the risk of criticism if transmission capacity proves to be inadequate at some time in the future with the possibility of blackouts has led to a “let’s fix it for the long term” approach.

4.5 In my view, and in the view of many people much more expert than me, this approach is entirely inappropriate given the uncertainty over so many of the factors that will apply over the next 2 or 3 decades. In this context I am thinking of the demand and the development of generation capacity closer to Auckland as well as the development of technology.

4.6 Eggs in One Basket:

If as some are forecasting the demand will justify 400kV transmission in 20 or 30 years time, the question remains whether that will be the best option. The experience with transport networks here in New Zealand is that options and alternatives are essential. A single super highway is vulnerable and in the case of the 400kV option I read that there would be a risk of double circuit failure.

4.7 What is Needed:

I cannot help wondering whether the result of what was bordering on the criminal neglect of maintenance on a shackle at the Otahuhu station has contributed to this “let’s fix it for the long term” approach which is quite inappropriate in the circumstances of this situation. I believe that what is needed is to make a decision that will address the current known need, given the situation as we understand it today, in the knowledge that the whole matter can be revisited in 20 years time when substantial additional, relevant information will be available to aid in the making of a sound decision..

5. VISUAL EFFECTS:

If the proposal under consideration was to build a greatly extended airport runway for an aircraft that forecasts showed might be needing to use it in 20 or 30 years time BARNZ would strongly oppose it. The airport, like Transpower, is a monopoly provider and could decide to go ahead anyway and impose the costs on current users who do not need it.

There is a similarity between the extended runway scenario and the 70 metre pylons, but there is no similarity in the effect. The runway is on the ground. It may project into the harbour and have some adverse environmental effects but these would be insignificant in comparison to the grossly intrusive effects that the 70 metre high pylons will have over a 200 kilometre length of New Zealand. Furthermore, we are told that this could set the precedent for electrical power distribution in this country for the future.

Once they are built these structures will have a lasting hugely detrimental effect on the New Zealand landscape and on the properties which they traverse.

6. HEALTH EFFECTS:

This appears to be another area of uncertainty with differing expert opinions on the safe distance for residences from 400kV lines. Be that as it may, there is no doubt that the higher the voltage the greater the health risk and there is also no doubt that international research along with technological developments will continue and that within the next decade the position will be clearer.

7. CONCLUSION:

As a New Zealander with some experience of the way that infrastructure decisions are taken and the approach that monopoly organisations take to making these decisions, I feel bound to submit my strongly held view that it would be wrong to decide now to proceed with the construction of these 70 metre pylons. I base this on the following points:

- This size of pylon and degree of kV capacity is not needed for at least the next 20 years.
- It is not clear and definite that 70 metre high pylons will be used and useful at their maximum capacity in the next 30 years - or even longer - or ever.

- To create infrastructure so far in advance with the attendant uncertainties is not good practice.
- To develop infrastructure that is so grossly obtrusive so long before it may be needed and with the knowledge that its visual environmental effects are so harmful is to my mind irresponsible.

I recommend that this project not proceed and that it be replaced with a 220kV transmission line.

I confirm my request to have the opportunity to present this submission to the Board of Inquiry.

Stewart Milne

25 February 2008