

# SUBMISSION ON TRANSPOWER'S NOTICES OF REQUIREMENT AND APPLICATIONS FOR RESOURCE CONSENTS

Section 145 of the Resource Management Act 1991

RECEIVED ON

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Submit to BOTH:

Minister for the Environment  
 Freepost Grid Upgrade Submissions  
 PO Box 4405  
 Hamilton East  
 HAMILTON 3247  
 Email: [tpcallin@me.govt.nz](mailto:tpcallin@me.govt.nz)  
 Fax: 04 439 7700

And Transpower  
 Freepost 182915  
 PO Box 1021  
 WELLINGTON  
 Email: [submissions@transpower.co.nz](mailto:submissions@transpower.co.nz)  
 Fax: 04 819 7524

Please note: you must forward a copy of this submission to BOTH Ministry for the Environment AND Transpower, by any means you wish (post, fax, email)

This submission relates to the notices of requirement and/or applications for resource consent, lodged by Transpower New Zealand Ltd for the North Island Grid Upgrade Project, and identified below.

CLOSING DATE FOR SUBMISSIONS: 5 OCTOBER 2007

My/Our Full Name(s): NEIL LAURENCE AND SUZANNE LINDSAY FULLER

Postal Address: 80 SUTTON ROAD BROOKBY RD.1. MANUREWA AUCKLAND

Wk Ph: 0274 978522 Hm (09) 5309474 Cell: 0276 96177

Wk Fax: 0276 96177 Hm Fax: 09 5309478 Email: [snfuller@slingshot.co.nz](mailto:snfuller@slingshot.co.nz)

The reasons for my submission are:

See Attached.

I/we seek the following decision from the Board of Inquiry (provide precise details including the nature of any conditions sought):

THE CONSTRUCTION OF AN ALTERNATIVE 220 KV LINE WITH FURTHER UNDERGROUNDING.

I/we wish to be heard in support of my/our submission at the public hearing, and expect I will need between one and two days to present my evidence. I would like the location of the portion of the hearing which will receive my evidence to be held in the following location:

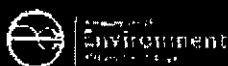
✓

I/we make my/our submission concerning all notices of requirements and applications for resource consents relating to Transpower's applications that will be heard by this Board of Inquiry. The references are NORs 27619, L07089, DES0011/07, RMR200621, DN/0006/07, 240/021, RM070209, and resource consents 34102, 34370, 34372, 34373, 34711, 34712, 116902, 116903, 116904, 116905, and any other NORs or resource consent applications that may subsequently be filed or altered. We oppose all of these NORs and applications for resource consent.

✓

I/we have served a copy of my/our submission on the applicant by copy to Transpower as above.

✓



Names(s):

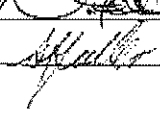
Date:

3-10-07

NEIL LAURENCE FULLER



SUZANNE LINDSAY FULLER



(Signature is not required for electronic (email) submissions.

If this is a joint submission by two or more individuals, each individual's name is required.)



Environment  
Canada

## TRANSPOWER GRID UPGRADE SUBMISSION

We are completely opposed to the 400kv grid upgrade proposal by Transpower NZ Ltd and fully support and agree with issues put forward by the Manukau City Council and the formulated committee 'Underground In Manukau'.

To meet the necessary power requirements for Auckland and Northland, it is apparent at this point in time the correct choice is to construct a 220kv line with further undergrounding through the Whitford/Brookby/Clevedon areas. A 200kv line would be far less intrusive and would give the ability to mitigate many of the concerns the public has down the full length of the proposed line. The current forecast by Transpower states that a 400kv line will not be required until 2040 and in reality may never be commissioned to that capacity.

The 400kv line and its associated pylons are of a technology not currently in use or seen in New Zealand. The sheer magnitude and physical nature of such a line would have massive environmental and health implications which must be more carefully considered. They must not be built over the heads of our future housing suburbs and lifestyle block areas.

Transpower have said it will be necessary to build a second 400kv line to support the first. By their own admission, they are having difficulty finding a suitable route for this first line through the Clevedon/Brookby/Whitford area, largely due to conflict with the Ardmore Aerodrome and its airspace regulations. Surely, a shared tunnel or underground corridor would be a cost effective and sensible option when considering the possibility of two 400kv lines.

The design of the proposed line through our immediate neighbourhood has complications because Transpower's original proposal protruded well into the airspace of the Ardmore Aerodrome. A revised design has addressed this by proposing to build two side by side flat top pylons with dual circuits on the top of the Brookby Ridge. This will create a 125m wide set of structures at a high point which will be visible from all directions up to a distance of 40km. The detail proposed on this part of the line must be closely examined to appreciate the magnitude of its negative impact on the environment.

These structures will need to be made visible, both day and night for all users of the Ardmore Aerodrome. Transpower proposes to use visual aids such as orange balls and flashing lights fixed to the line.

These side by side structures and subsequent earthworks seem a patchwork approach in trying to address what is a very important safety and security of electricity supply issue with little regard for the environment and social impact it will create.

Extending from the peak of the Brookby ridge heading north onto our property are pylon numbers 14 and 15, both of which also conflict with the airspace. Transpower proposes major earthworks on our property to address this and upon completion clears the airspace by just one metre. This particular area is a flight corridor for the approach to the Aerodrome.

This flight corridor is in place to convey Ardmore flights below the approach for Auckland International Airport and is therefore a high traffic area. Ardmore Aerodrome handles hundreds of flights daily and is in fact the busiest airport in the country. Many of these flights are undertaken by trainee pilots, and the proposed line will therefore pose a very real threat to the safety of this air traffic and to the security of electricity supply.

#### PROPOSED CONSTRUCTION ON OUR PROPERTY:

The construction on our property will include:

- Two pylons, approximately 50 metres high with lines running horizontally through the centre of our 70 acre lifestyle block where stock are currently grazing.
- Visual aids attached to the line such as orange balls and flashing lights (Transpower is not forthcoming with this detail prior to submission date cut off).
- Lines spanning from the two side by side flat tops on Brookby Ridge run north to meet pylon no.15, and then no. 14 on our property.
- Construction of an access road through the middle of our property suitable to withstand heavy construction vehicles and machinery.
- An estimated 4000 vehicle movements for works on our property, (as stated by a Transpower Engineer on site on 2<sup>nd</sup> October 2007). A large percentage of these vehicles being heavy duty trucks, earth moving machines and cranes.
- The removal of hundreds of timber pruned pine trees which are only 3 years from harvest date.
- Major earthworks required to lower our ground level where height restrictions on the pylons are imposed due to the Ardmore airspace issue.
- Works on our property are expected to take around 18 months.

After our meeting on site with a Transpower Engineering Representative, he stated that our property is probably the most heavily impacted in the entire route due to the nature of the works in relation to the land area.

#### THE IMPACT TO OUR PROPERTY AND LIVES

The construction of a 400kv line on our property will have a devastating effect for the following reasons:

- The current visual impact on our landscape will be severely affected.
- The removal of the ability to subdivide our property in the future as proposed by the Manukau City Council urban planning drafts. This same impact will apply to a lot of properties in the Brookby/Whitford area.
- The loss of forestry income from our pine trees which are only 3 years from harvest date. These have been professionally pruned and thinned and are high quality timber trees. This represents a considerable financial loss.
- The noise created by a 400kv line will be significantly evident particularly on wet or humid days. (The Transpower easement width is set solely by noise level requirements.)
- The likelihood of visual aids to satisfy CAA requirements for Ardmore Aerodrome including flashing lights and orange balls along the line.

- Access and use of our property during construction will hinder and impact on both our private lives and farming activities.
- The easement width Transpower propose is 65m yet our forestry plantation must be cleared to a width well in excess of this distance (as stated by a Transpower Engineering Representative on site on 2<sup>nd</sup> October 2007). Detail of the exact width to which these trees would be cleared was unavailable prior to submission cut off date but indications were approximately twice the easement distance.
- The above point clearly illustrates the easement width is grossly inadequate and the proposed line will impact upon our property well beyond easement limitations.
- The change in the contour of our land where Transpower need to excavate, to ensure their structures do not protrude in to the Ardmore Aerodrome airspace.
- The long term noise and general disturbance from construction work and traffic volumes on our private property. The estimated 4000 vehicle movements on our property alone, gives an indication of the scale of difficulty Transpower expects in order to satisfy the Ardmore Aerodrome and other requirements.
- The health implications relating to large high tension lines and their associated magnetic fields. This has been thoroughly researched by Dr Robin Smart and his findings clearly show an international trend towards easement widths far greater than that proposed by Transpower.
- The enjoyment of living on a property such as ours has been completely removed due to the protracted nature of this project.

Other reasons this project should be undergrounded through the Clevedon/Brookby/Whitford area are as follows:

1/ Local Attractions

- The Auckland Polo Grounds is an internationally recognised facility and will be heavily impacted by the line passing through the centre of its fields.
- The Papatoetoe Pony Club is currently establishing a multi million dollar facility immediately adjacent to our property and people nationwide come to attend regular equestrian events. The proposed line will have a negative impact on this well used outdoor recreational area.
- Clevedon, Brookby and Whitford regularly stage major cycling events which attract people from all parts of the country. This area is chosen for such events due to its attractive natural attributes and the proposed line will negatively impact on these activities.
- Overseas and local tourists pass through the Brookby/Whitford area to engage the Pacific Coast Highway which is a main route for travel around NZ. Brookby is the initial point at which you leave Auckland City to embark on this journey and is essentially the 'gateway' for the route. To have a massive set of lines placed at this strategic and important location does not fit with a 'Clean, Green New Zealand'.
- The local Brookby Primary School is admired for its location amongst traditional rural landscape and adheres to traditional rural curriculums such as Agriculture Days. If the 400kv project goes ahead, this will no doubt have a negative impact on the Schools outlook and reputation for its beautiful location.

- As documented by the Auckland Regional Council, Brookby Valley is registered as an 'Outstanding Natural Landscape'. To build a line of this magnitude through the middle of such a feature is unacceptable for this day and age.

### 2/ Electricity Commission Approval Process

- The most up to date 2007 SOO figures do not support the demand growth forecasts to justify the line. Specially selected out of date figures appear to have been used by Transpower to justify the project.
- Transpower have not considered nor costed the environmental and social impact of this proposal as compared with alternatives.
- Transpower have not considered potential alternative funding towards further undergrounding including a financial contribution as suggested by the Manukau City Council.

### 3/ Easement Width

- The proposed 65m easement width is grossly inadequate to cater for environmental and health impacts.
- The impact of noise will be at an unacceptable level particularly on wet days.
- Vegetation throughout the length of the line will negatively be impacted, particularly upon native trees.
- Topple effect. Transpower should not control operations beyond the easement. There are issues with the possibility of topple in to and out of the easement width as stated earlier (a 65m easement width in relation to the proposed pylon heights is intolerable).
- When considering the health implications of Electro Magnetic Fields (EMF's), the easement width should be in line with the latest international trends which clearly show 65m to be inadequate. Precautionary approaches must be adopted to mitigate the impact where new lines are being erected.
- Issues of access and earthmoving arrangements. This will also negatively impact on properties adjoining the proposed easement.
- Consideration needs to be made with ongoing restrictions on adjoining landowners.

### 4/ Extend The Underground Route

- The proposal is contrary to Plan Change 8 (Whitford Plan) and the visual amenity value.
- Transpower have taken no consideration to the Manukau City Councils plans for the future urbanisation of the Brookby Valley. This point must be fully investigated.
- No consideration has been made for the amenity value of this part of South Auckland to the residents of greater Auckland.
- Given that the life span of this proposal is indefinite, planning should take into account the growth probability beyond the current urban limit definition.
- No account or allowance has been taken of the fact that Manukau represents the most densely populated section of the proposed route, (3 ½ times more).
- The gradual growth of Clevedon Village has been ignored. Significant development is currently proposed for this area. Flashing lights at night and orange balls by day do not belong in this area.

- Little regard has been taken into account for Ardmore Airports safety issues, the visual impact of Transpowers recommendations to keep the lines safe for aircraft such as orange balls, night lights and parallel sets of pylons are all environmentally unacceptable.
- It must be appreciated that trainee pilots will make mistakes during their training and the risks involved with these taller, more threatening pylons and lines must be taken seriously.
- Undergrounding would extend diversity and security of supply into Auckland.
- Undergrounding of cables result in a significantly reduced electro magnetic field along the line, greatly mitigating health concerns

5/ Support Manukau City and Auckland Regional Councils

- We support the councils efforts in relation to further undergrounding.
- Transpower should consider alternative funding from other sources such as that offered by the Manukau City Council to help with further undergrounding.

6/ Substation at Brownhill Road

- We oppose the substation as a 400kv line may never be energised to that capacity.

In summary, we feel Transpowers planning for this 400kv line has been flawed and not fully researched particularly in relation to the Clevedon/Brookby/Whitford areas.

It would appear Transpower have not utilised their planning timeframes effectively.

There does not appear to have been any social responsibility displayed by Transpower in their planning procedures, merely financial considerations. However, Transpower have not considered alternative funding to assist with further undergrounding which would resolve several issues through the Clevedon/Brookby/Whitford areas.

Clearly more electricity transmission is required for this region however we trust that a more considerate and acceptable answer will prevail than that currently presented by Transpower.

In this modern era, we should not have to tolerate such disregard for the environment and well being of the general public such as has been displayed by Transpower. We feel while financial considerations are important, they must not totally dominate the ultimate design for this project.

Neil Fuller and Suzanne Fuller

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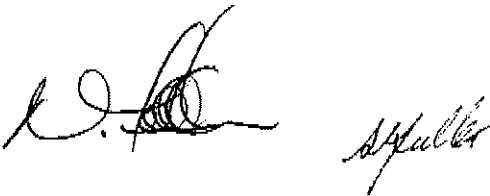
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TO: MINISTER FOR THE ENVIRONMENT  
ATTENTION: TRANSPower GRID UPGRADE SUBMISSION

FROM: NEIL AND SUZANNE FULLER

DATE: 03 OCTOBER 2007

TOTAL PAGES: 9 (INCLUDING THIS PAGE)

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