

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 Ltd. for
the North Island Grid Upgrade
Project

STATEMENT OF EVIDENCE OF BRIDGET MARY GILBERT

Dated 26 February 2008

(Landscape and Visual Effects – Matamata-Piako District Council)

1.0 INTRODUCTION

1.1 My full name is Bridget Mary Gilbert. I am a director of Bridget Gilbert Landscape Architecture Limited. I hold a Bachelor of Horticulture degree, and a post graduate Diploma in Landscape Architecture. I am an associate (full member) and registered member of the New Zealand Institute of Landscape Architects, an associate of the Landscape Institute (U.K.) and have practised as a Landscape Architect for the past sixteen years in both New Zealand and England.

1.2 Upon my return to New Zealand, I worked with Boffa Miskell Ltd. in their Auckland office for seven years and have been operating my own practice for the last three years, also in Auckland.

1.3 I have been involved in the preparation and analysis of a number of Assessments of Environmental Effects that have accompanied a variety of applications for resource consent, particularly applications requiring an assessment of potential landscape and visual effects. These have included a number of large scale infrastructure developments including windfarms (UK), wastewater and stormwater reticulation, and roading projects within a rural and urban context. I have also provided advice to various Councils, peer reviewing landscape and visual assessments accompanying resource consent applications.

1.4 I first became involved with the transpower submission on behalf of Matamata-Piako District Council at the end of January earlier this year.

1.5 I am familiar with the character and amenity values of the proposed transmission route through the District. I have undertaken a desk top and field survey of the line. I have reviewed the Visual Impact Assessment prepared by Isthmus Group Landscape Architects and the Information for the Overhead Line Section prepared by MWH as part of the Notices of Requirement Documentation. I have also reviewed the evidence prepared by Mr Lister, Dr Steven and Mr Beale.

Expert Witness Code of Conduct

1.6 I have read the Environment Court's practice note on the Code of Conduct for expert witnesses and agree to comply with it. I have approached the preparation of this evidence in the same way that I would for the Environment Court.

Outline of Evidence

1.7 As I have had the opportunity to read the evidence of the witnesses for the applicant I have attempted to avoid any unnecessary duplication in this statement. My evidence will only focus on the areas where I believe there is some divergence of opinion.

1.8 My evidence will:

- (a) briefly outline the statutory context relevant to an assessment of landscape and visual effects on the proposed transmission line through the Matamata- Piako District;
- (b) provide a brief assessment of the proposed line against the relevant District Plan criteria;
- (c) address matters of concern regarding the “5 Point Scale of Degree of Visual Effect”;
- (d) address specific issues arising from the close proximity of the proposed transmission line to Morrinsville township; and,
- (e) make recommendations.

2.0 PLANNING CONTEXT

Rural Zone

2.1 The majority of the proposed transmission line is located within the Rural Zone. The construction of overhead electrical lines including support pylons and structures for conveying electricity at voltages in excess of 110kV and telecommunication lines forming part of the same facility is identified as a discretionary activity within the Rural Zone.

2.2 Assessment criteria for the Rural Zone are set out in Appendix A attached. Generally, objectives and policies are concerned with the protection, maintenance and enhancement of rural productivity, rural character and amenity values. Issues for consideration include building dominance and scale, compatibility of scale to surrounding activities and structures, and compatibility of design and appearance of developments with the character of the surrounding townscape and landscape. The maximum height of buildings within the Rural Zone is 10 metres.

2.3 The Visual Criteria set out in Rule 1.4.1 identify the specific criteria to be considered in an assessment of visual effects for non complying, discretionary or restricted discretionary activities within the Rural Zone. These include (but are not limited to) effects on:

- the general landscape character of an area;
 - ridgelines; and,
 - existing vegetation.
- 2.4 The criteria reinforce the need to consider the scale of a facility or building and the compatibility with the surrounding landscape.
- 2.5 The Plan also requires regard to be had to *The Preliminary Visual and Landscape Study, October 1992 (Volume I)* prepared by LA4 Landscape Architects. For ease of referencing places mentioned in the following section of my evidence, I have included in Appendix B copies of the Notice of Requirement maps.
- 2.6 The landscape units coinciding with the proposed transmission route are *Landscape Type 3: The Western Foothills* and *Landscape Type 5: The Western Ranges*.
- 2.7 The Western Foothills unit is described as the rolling hills to the west of the Piako River and Tahuna and south of Morrinsville. The sections of line extending from approximately Tauhei Road in the north of the District, to Kuranui Road (south of Morrinsville) and from Tahuroa Road (south of Morrinsville) to Wairama Road environs broadly coincide with this landscape unit.
- 2.8 The key elements of this landscape type are identified as its smooth rolling landforms and expansive scale. The area is considered to have *'quite a high visual quality and its landform, vegetation and mixed use in places affords good screening for new developments'*.
- 2.9 The LA4 report identifies this to be good country in which to position visually intrusive development although qualifies this with the need for good siting to protect ridgelines and highly visible slopes which are very sensitive to change. The retention and improvement of the landscape qualities of the western foothills landscape whilst accommodating a range of rural uses forms the overriding objective for this landscape unit. Policies focus on:
- ensuring all structures are sited, designed and screened (if necessary) in a way which will have minimal impacts on the landscape; and,
 - encouraging landowners to revegetate stream and river margins and erosion prone areas.

The report goes on to identify that uses such as factory farms, dairy factories and glasshouses would require sensitive siting within this landscape unit.

- 2.10 There is no specific consideration given in this assessment report to the introduction of high voltage transmission lines into this landscape unit.
- 2.11 The Western Ranges landscape unit includes the Hapuakohe and Hangawera Ranges to the north of the District and the Te Tapui and Maungakawa to the south. The portions of the line coinciding with this landscape type include the short length north of Tauhei Road traversing the edge of the Hangawera Hills, the section of line to the south of the district extending from Kuranui Road to Tahuroa Road spanning the Mt Misery hills and the southern most portion adjacent the Waipa District boundary.
- 2.12 The landscape quality is deemed to be “medium” because the landscape quality is neither rare nor particularly vivid. In parts the landscape is considered to have a strong sense of place. The topography and absence of extensive vegetation is such that this landscape unit has a high level of visual exposure. The presence of power pylons on the hills south of Morrinsville is referenced. Objectives and policies aim to retain the landscape character of the western ranges, encourage rural uses only and ensure that buildings and structures are sited lower down on the foothills.
- 2.13 Since the LA4 report was prepared there have been a number of buildings introduced into these landscape units. The growing demand for rural residential sites throughout the District, in combination with Council’s objective to protect the highly productive soils generally located on the plains from residential development, has seen a proliferation of rural residential landuse in the foothills and ranges landscapes. Notwithstanding this change, I concur with the general assessment of these landscapes as set out in the 1991 report and am of the opinion that the objectives and policies remain applicable.

Morrinsville Planning Context

- 2.14 The transmission line coincides with the western side of Morrinsville township some 300 metres from the existing town edge. Although the proposed line is physically located within the Rural Zone, it is appropriate to consider the landuses immediately adjacent. This includes rural residential between the Main Trunk Railway Line and the Waitakaruru Stream (south of SH26), business zoned land either side of SH26, industrial land on the north west edge of town (accessed from Avenue Road North) and rural residential land to the north western extreme accessed from the Young St near Terrace Avenue and a separate rural residential development under construction accessed from Hangawera Road (north of Morrinsville).

3 ASSESSMENT OF PROPOSAL AGAINST MATAMATA – PIAKO DISTRICT PLAN CRITERIA

- 3.1 The proposed line comprises lattice tower structures ranging in height from 50.1 to 70m in height and have a varying footprint of between 10.1m² and 18.9m² where it passes through the district. The scale and visual character of these structures is in my opinion, blatantly out of keeping with the character of the existing rural landscape and Morrinsville township.
- 3.2 With reference to District Plan criteria relating to compatibility with the surrounding landscape, a basic premise inferred from the application documentation is that, by following the line of the existing ARI-PAK A line (where possible) the proposed alignment is moderating potential effects by focussing on landscapes in which transmission towers are an existing visual element and therefore, to a certain degree, an accepted component of that landscape.
- 3.3 The existing ARI-PAK A towers are approximately 25m high and from field observation, have a footprint of approximately 5m². I agree with Dr Steven's observations that in many of our rural landscapes, transmission towers have become a relatively familiar visual element and thus, part of our everyday experience of the landscape. This is not meant as an endorsement of towers within the landscape but rather as a statement of fact. I am however of the opinion that this 'acceptance' relates to transmission towers of a scale similar to the ARI-PAK A line and not towers of the height and bulk proposed. This question of scale will be further addressed later in my evidence, however in relation to the District Plan assessment criteria, I do not believe the presence of the ARI-PAK A line provides a context for the proposed line given the vast differences between the height, scale and bulk of the two lines. Put simply, we are not comparing 'apples with apples' when we make a comparison between the ARI-PAK A and the proposed line.
- 3.4 Field observation indicated that towers will be seen on the ridgeline south of Morrinsville (Mt Misery hills). The undulating topography of the balance of the district through which the line passes is such that many towers will be seen on the skyline from the surrounding countryside. This is considered to comprise a significant adverse effect and will be discussed in detail later in my evidence.
- 3.5 The proposed line will necessitate the removal of vegetation over 10m in height from a portion of the totara forest on the Waitakaruru Stream. This includes mature totara that are up to 20-23m in height. It is proposed that the effects of this vegetation removal would be mitigated by retaining and managing vegetation below 10m in height and replanting with appropriate

indigenous species that do not exceed a height of 10 metres. This tree removal is considered a significant adverse landscape effect. The proposed mitigation planting as set out in Mr Beale's evidence will, in time, mitigate this adverse effect.

- 3.6 It is proposed to undertake detailed landscape and visual assessments of properties within a 1 km zone of the line, with Transpower proposing as a condition of the notices of requirement that landscape mitigation be offered to owners of all houses within the 1 km zone. The various merits of this mitigation will be discussed in detail later in my evidence. However, fundamental to an assessment of landscape and visual effects is Mr Lister's acknowledgement that:

"The construction of a high capacity line connecting Auckland and Whakamaru will unavoidably result in significant landscape and visual effects" (para 638)

I agree with Dr Steven's conclusion in his peer review of Mr Lister's evidence that despite best efforts, the impacts of the proposed line cannot be meaningfully mitigated.

- 3.7 On balance it is my opinion that the proposed line is contrary to the objectives and policies of the District Plan.

4 METHODOLOGY

5 Point Scale of Degree of Visual Effect

- 4.1 Mr Lister has proposed a "5 Point Scale of Degree of Visual Effect" in which the potential visual effects of the line on individual residents and communities is estimated using aerial photographs, topographic maps and observations from public roads. Mr Lister concludes that:

"...as a rule of thumb effects, it was considered that effects would be very high on any house within 150m of the proposed line unless there were exceptional mitigating factors. It was considered the effects would likely be high up to about 500m, although the effects might be reduced to moderate if there was effective screening and/or the house was oriented away from the proposed line. Between 500m and 1 km it was considered the effects were likely to be moderate if the house was oriented toward the proposed line and there were open views, but that effects may fall into the low category with adequate screening or if the house was oriented away from the proposed line. Beyond 1 km it was considered effects were likely to be low apart from exceptional circumstances."

- 4.2 The importance of this 5 point scale of degree of visual effect should not be underestimated. The scale guides the more detailed analysis of effects later in Mr Lister's evidence where the

numbers of houses falling within the very high, high and moderate categories only are identified. The scale also informs landscape mitigation proposals, with Transpower proposing as a condition of the notices of requirement, that landscape mitigation be offered to owners of all houses within 1 kilometre of the line i.e. residents with potentially moderate effects in which the line will be prominent in their view.

- 4.3 I agree with Dr Steven's observation that proximity is only one of several factors that will influence visual and other perceptual impacts. Such factors include (but are not limited to), the landscape context, the viewing position, light level, the backdrop, whether towers are seen on the horizon, the number of towers in the view and the angle of view. However, it is proximity that is guiding analysis and mitigation recommendations for the transmission line with the proviso that definitive assessments of impacts for each property within the 1 kilometre zone should be undertaken.
- 4.4 I also concur with Dr Steven's recommendation that the zone identified to have *potentially very high effects* (i.e. towers 0-150m from the viewer) should be recalibrated to *potentially extreme effects*.
- 4.5 I am concerned that the remaining scales have been similarly underestimated. My discussion of this issue will focus on three key concerns:
- the incongruous scale of the proposed towers within the rural landscape;
 - the actual visibility of large scale transmission towers within the landscape; and,
 - the character of the Matamata – Piako District landscapes through which the proposed line traverses.

Scale of Towers

- 4.6 In my opinion it is exceptionally difficult to grasp the magnitude of the proposed lattice towers within the rural landscape. As mentioned previously, the towers range from 50.1m to 70m in height and have a varying footprint of between 10.1m² and 18.9m² throughout the district. Along the proposed route through the Matamata - Piako District there was nothing that I could identify during my field survey that was of a similar scale with the exception of the TV3 mast in the Waipa District on the ranges south of Wairama Road environs (south of district). The existing ARI-PAK A line comprises towers of approximately 25 metres in height and a considerably smaller footprint.

- 4.7 The photomontages that accompany Mr Lister's evidence assist a better understanding of the visual character of the proposal. They are however, only a tool and I note that the printed photomontages tend to down-play the visibility of towers on the skyline. More importantly, I am concerned that the photomontages do not include a same scale 'before' shot. In the absence of a same scale 'before' shot, the proposal tends to read as a typical line of transmission towers marching through the landscape. The uniformity of the tower design and consistent proportions confuse the viewer into the thinking the towers are of a similar scale to traditional transmission lines, particularly in mid to long range views.
- 4.8 Appendix C attached demonstrates the before and after view for four vantage points within the district. The 'before' shot was obtained from Isthmus Group Landscape Architects and is the photographic base image that was used in the preparation of the photomontages. The 'before' shot has been configured at the same size and scale as the photomontage 'after' view to enable an accurate comparison of the two visual characters. The viewpoints have been selected which I believe most clearly demonstrate the scale of the towers. It is acknowledged that in several of the other photomontages prepared for vantage points within the district, intervening landform and vegetation contribute to the outlook serving to reduce the perceived scale and the extent of towers visible and this is likely to be the case in various locations. However, more open views of towers will be obtainable from a large number of vantage points throughout the district and it is this 'worst case' scenario that needs to be more clearly understood.
- 4.9 The existing line comprises towers of approximate height 25 metres. Although an unattractive and utilitarian feature that intrudes on the rural character, the towers are of a scale that is comparable to existing elements within the rural landscape. Common shelterbelt trees species prevailing in the district include macrocarpa (*Cupressus macrocarpa*), pine (*Pinus sp*) and poplar (*Populus sp.*). These species range in height from 20 metres to 30 metres and provide an important 'grounding' function for this more traditional scale of transmission tower.
- 4.10 However, the proposed towers, by sheer virtue of their size and scale appear to dwarf the landscape setting. The scale of the towers reads in my opinion as exceptionally incongruous with the surrounding landscape.
- 4.11 Figures C1 and C2 depict the 'before' and 'after' view from a vantage point on Tauhei Road east of Tauhei School. The existing line is barely discernible on the skyline. This impression was confirmed by field survey. The proposed line however, is clearly visible on the skyline and is of a discordant scale to other elements within the view.

- 4.12 Figures C3 and C4 illustrate a view from the Morrinsville - Walton Road south of Morrinsville looking westwards across to the proposed line on the ridgeline. Again, the existing ARI-PAK A towers are barely visible on the horizon. Another existing line is glimpsed to the left of view but is similarly 'lost' from view as it ascends the distant hills. The proposed towers however are clearly discernible on the skyline and in my opinion, adversely impact on the long range view.
- 4.13 The images shown in Figures C5 and C6 (view from Starky Road looking south towards Ruru) clearly demonstrate the markedly different scales of the existing ARI-PAK A line and the proposed line. The proposed towers appear to dwarf the surrounding landscape.
- 4.14 Similarly, Figures C7 and C8 from an elevated location on Starky Road illustrate the vastly different scale of the two towers and the dwarfing characteristics of the proposed towers.

Visibility of Large Scale Towers

- 4.15 To further assist my understanding of the scale of the towers and potential visibility, I undertook a field assessment of the Huntly - Otahuhu line north of Runciman in South Auckland. This line was referenced in Mr Lister's evidence (para 9) and comprises relatively heavy towers with an average height of 45 metres. It should be noted that the proposed towers will be taller and heavier than these towers. My attention focussed on the section of the line extending from the Papakura southern motorway interchange, south to Ramarama as this section coincides with a landscape characterised by predominantly rural landuse (albeit periurban), relatively complex vegetative patterning and gently rolling topography and is therefore broadly comparable to the western foothills landscape of the Matamata – Piako district. The towers are also frequently seen on the skyline as is the condition likely for the proposed line through the Matamata- Piako district.
- 4.16 Appendix D shows the location and height of towers on the Huntly – Otahuhu line between the Pahurehure Inlet (Papakura) in the north and the Ramarama 'straight' to the south. Three 'viewpoints' are identified on the plan as follows:
- Viewpoint A : Harbourside Drive (entrance to recently constructed Hingaia peninsular subdivision), approximately opposite tower no. 167
 - Viewpoint B : Papakura BP Service Centre carpark (south bound side of southern motorway), approximately opposite tower no. 161
 - Viewpoint C : Jesmond Bridge on Bremner Road, Drury (west of Bremner Road motorway overbridge)

The day of assessment was a moderately cloudy day and the assessment was conducted around midday (20 February 2008).

Viewpoint A

- 4.17 From Harbourside Drive looking south, tower nos. 166, 165, 164 and 163 were clearly visible on the skyline. The farthest tower in this view is some 1.7 km from the vantage point.

Viewpoint B

- 4.18 From the Papakura BP Service Centre looking south, tower nos. 160, 159, 158, 157, 156, and 155 are clearly visible against the skyline. The farthest tower in this view is some 1.8km from the vantage point.

Viewpoint C

- 4.19 From Jesmond Bridge on Bremner Road looking south, tower nos. 155, 154, 153, 152 and 151 are clearly visible on the skyline. The farthest tower in this view is some 1.4km from the vantage point.
- 4.20 The Isthmus "5 point scale" assumes that effects drop to low beyond 1km unless there are exceptional circumstances. Certainly a wide range of other factors may contribute to a particular view of a tower or line of towers which will lessen their visual impact e.g. complex vegetation and / or landform patterning in the foreground which distracts the eye from the tower(s). However, the relatively clear visibility of the smaller Huntly- Otahuhu line towers at a range of up to 1.8km suggests that consideration of potential effects should be extended beyond the 1km zone.

Matamata – Piako District Landscape Character

- 4.21 As previously mentioned, the line passes through two landscape types within the district, - the western foothills landscape and the western ranges landscape. The western foothills landscape is a working rural landscape comprising moderate to shallow, rolling grazing and cropping land. Shelterbelts, hedgerows and scattered trees add to the visual complexity and sense of containment. This is typified by the landscapes between Hangawera Road and Morrinsville and south of Tahuroa Road as illustrated in Appendix E. Other areas are relatively sparsely vegetated and read as open rolling farmland. Examples of this are the landscape north of Hangawera Road and near Starky Road as illustrated in Appendix F.
- 4.22 The widely varied level of containment afforded by landform and vegetation within this landscape unit raises doubts as to the validity of ascribing what I would regard to be a

conservative estimate, on the likely zone of properties warranting mitigation of adverse visual effects. The Isthmus 5 point scale has resulted in the assessment of properties falling within an approximately 1 kilometre band either side of the line. My field survey indicated that a number of properties located outside of this band are likely to be exposed to *potentially high* or *moderate* adverse visual effects as a consequence of the open, uninterrupted views of the line and / or the visibility of all, or part of the towers on the skyline.

4.23 In the western ranges landscape, the landscape is dominated by steep, bare faced hillsides as illustrated in the photographs of the hills south of Morrinsville and to the extreme south of the district attached in Appendix G. Where seen against a landform backdrop, towers will be relatively prominent by virtue of the uncluttered backdrop. A landform backdrop does generally assist in reducing the visual prominence of a tower however this is most successfully realised when vegetation contributes to the visual complexity of the backdrop. I share both Mr Lister and Dr Steven's opinion that towers will be more visually prominent when silhouetted against the sky. As mentioned previously, I note that reproduced photomontages tend to down play these important subtleties in the backdrop influencing the visual prominence of towers and as such are, in my opinion, of limited use.

4.24 Mr Lister acknowledges that the towers on the skyline ridge will be visible from 3km or greater (para 331) and I agree with this assertion. However, application of the Isthmus scale has resulted in the consideration of only those properties falling within a 1 km band of the transmission line rather than the 3 km or greater that are likely to have views of the line. In my opinion, it should be assumed that for landscape areas in which the towers follow ridgelines, the *potentially high- moderate effects* category should extend from 500m - 4km.

5 Point Scale of Visual Effects Re-calibration

4.25 On this basis it is my recommendation that the '5 point Scale of Visual Effects' relevant to the Matamata – Piako District is recalibrated as follows:

Western Foothills Landscape

- From Tauhei Road in the north to Kuranui Road south of Morrinsville (Section 10)
Potentially very high replaced with *potentially extreme* (0-150m)
Potentially high replaced with *potentially very high* (150-500m)
Potentially moderate replaced with *potentially high* (500m-1km)
Potentially low replaced with *potentially moderate* (1km -2km)

Western Ranges Landscape

- Hangawera Hills section from Waikato District Boundary (Section 9 of route) to approximately where proposed line crosses Tauhei Road (Section 9 and 10 boundary); and
- Mount Misery hills south of Morrinsville from Kuranui Road to Tahuroa Road (section 10)
- The hill country on the border between Waipa and Matamata – Piako Districts extending southwards from Wairama Road environs

Potentially very high replaced with *potentially extreme* (0-150m)

Potentially high replaced with *potentially very high* (150-500metres)

Potentially moderate replaced with *potentially high* (500-2km)

Potentially low replaced with *potentially moderate* (2km -4km)

4.26 It is my opinion that the Matamata – Piako District should be re assessed on the basis of this recalibrated scale to determine a more accurate extent of the number of properties that will be exposed to potential adverse visual effects considered to be moderate, high, very high or extreme. This re assessment should also include public roads and open spaces to identify appropriate mitigation for agreement with Transit New Zealand and the Matamata - Piako District Council.

4.27 In keeping with the rationale of current mitigation proposals, it is recommended that landscape mitigation be offered to owners of all houses with potentially moderate effects in which the line will be prominent in their view. This will include a 4km zone where the line traverses western ranges landscapes and a 2km zone where the line passes through western foothills landscapes.

5 LANDSCAPE AND VISUAL EFFECTS ON MORRINSVILLE

5.1 As mentioned previously, the proposed line passes some 300m from the existing western edge of Morrinsville. In my opinion, the close proximity of the line to Morrinsville warrants specific attention over and above the generic assessment of landscape and visual impacts using the “5 point scale”.

View from State Highway 26

- 5.2 State Highway 26 (SH26) forms the western approach to the town, linking Hamilton and Morrinsville. The area comprises a relatively uncoordinated mix of landuses including light industrial, business, commercial, rural residential and residential.
- 5.3 The proposed line will cross SH26 at the same location as the existing ARI-PAK A line. The tower immediately north of the state highway is on a knoll above the carriageway and surrounded by trees. The upper portion of the tower is seen on the skyline from the highway when approaching from the west (Hamilton). Intervening landform and vegetation obscure views of the tower from the carriageway immediately adjacent.
- 5.4 The extensive tree cover and shelterbelts throughout the immediate area south of the state highway means that the towers extending into the Mt Misery hills (south of Morrinsville) are seen momentarily from the road.
- 5.5 Landform, existing shelter trees, the alignment of SH 26 and the scale of the existing towers (25 metres) combine to create a situation in which the existing line has a relatively low impact on the experience of road users.
- 5.6 In my opinion, the increased height and scale of the towers will give rise to a significant change in the role that transmission towers contribute to this landscape experience.
- 5.7 The proposed towers will be viewed at close and mid range views to the south. Although a transitory view, the incongruous scale of these structures by comparison to adjacent shelterbelt tree planting, and their visibility against a bare faced hillside and on the skyline will tend to draw the eye increasing their visual prominence. To the north, the existing vegetation will be dwarfed by the considerably larger size of the proposed towers. Again the incongruous scale will draw attention to this utilitarian element.
- 5.8 It is inferred in Dr Steven's evidence that the poor visual quality of the existing approach to Morrinsville is such that the impact of introducing larger towers is lessened. I would however argue that the introduction of the larger scaled towers will further reduce the quality of visual landscape in the western approach discouraging future development that seeks to enhance the western edge of the town.

View from Morrinsville edge, north of SH26

- 5.9 From the light industrial, rural residential and residential areas to the north of SH26 (Avenue Road North and Young St environs) the existing ARI-PAK A line is seen at mid range on the skyline as shown in Appendix H. The foreground comprises a complex patterning of shelterbelt trees and hedgerows serving to ground the 25metre high towers. The scale of the towers is such that they are barely legible on the horizon and the overall impression is one of an attractive rural outlook.
- 5.10 The increased scale of the proposed line is such that in my opinion the larger towers will read as an incongruous visual element in these views as illustrated in the Isthmus photomontage reproduced in Appendix I. The heaviness of the towers in combination with their height and location on the skyline means that they will be visually prominent. The friction arising from locating a large scale utilitarian structure within a rural landscape will serve to further attract attention to the towers.

View from Morrinsville edge, south of SH26

- 5.11 From the light industrial, rural residential and residential areas to the south of SH26 (Avenue Road South and West St environs) the existing line is seen at mid range on the bare face of the Mt Misery hills and against the skyline.
- 5.12 Again, the increased scale of the proposed line is such that the towers will read as an incongruous visual element in these views.

View from the township itself

- 5.13 For the most part, the close range of existing vegetation and buildings within the township itself, limits an appreciation of the landscape surrounding Morrinsville. The exception to this is the elevated landform of the Mt Misery hills to the south which are clearly visible from much of Morrinsville. In an area dominated by an expansive rolling landform character, the steep bare faced hill sides and complex network of stream gullies provide a distinctive and attractive landscape feature.
- 5.14 The existing ARI-PAK A transmission line is seen on the hillsides and skyline. The line contributes a utilitarian visual element to an otherwise uncluttered, rural outlook. The elevated and skyline location of many of the towers further draws attention and in my opinion the existing towers are moderately prominent.

- 5.15 The increased height and scale of the proposed towers will amplify the visual prominence of the transmission line adversely affecting the view to the Mt Misery hills from Morrinsville.

Mitigation

- 5.16 Options for mitigation include:
- Roadside planting SH26;
 - Riparian planting to Mt Misery hillsides;
 - Definitive assessments of private properties and public open spaces within X km zone of the proposed line;
 - Use of monopole tower design; and,
 - Undergrounding.
- 5.17 Roadside avenue planting of large scale and large grade tree species along SH26 could be successfully employed to create a memorable, distinctive and cohesive 'streetscape' that distracts the viewer from the surrounding landscape thus minimising the adverse visual effects of the proposed line. The towers would be glimpsed; however the dominant impression would be of an attractive, tree lined entrance to Morrinsville. Such planting should extend from the Gordonton turnoff to the main street.
- 5.18 Riparian planting of the perennial and ephemeral stream gullies throughout the Mt Misery hillsides against which the transmission towers are viewed would assist with visually integrating the structures. As previously discussed, towers tend to be less visually prominent when seen against a vegetated, landform backdrop. In the case of the Mt Misery hillsides, the reinforcing of the complex patterning of stream gullies with riparian planting would also create a strong visual element which in itself would serve to distract attention from the towers and lines further reducing their visual prominence.
- 5.19 Definitive assessments of private properties, roads and public spaces within a 2 km zone of the line extending from the north edge of Morrinsville to the south of Kuranui Road should be undertaken. Mitigation planting should be offered to all landowners within this zone.
- 5.20 The use of monopoles in the vicinity of Morrinsville township is worthy of consideration. I have visited the monopole line at Highbrook and viewed the Truescape visual simulation for monopoles at the Karapiro crossing. I agree with Mr Lister that monopoles are generally aesthetically preferable to lattice towers. They are simpler and cleaner in appearance and the benefits of using monopoles are greatest at close proximity. However, as Dr Steven in my

view, correctly observes, monopoles will still read as a large scale utilitarian element of an incongruous scale.

- 5.21 In and around Morrinsville, the monopoles are likely to be seen at relatively close range by a sizeable viewing audience. The transition between monopoles and lattice towers is likely to be a visually discordant element. To the south of Morrinsville, the transition could be discretely located in the folds of the hill country between Kuranui Road and Tahuroa Road. To the north of Morrinsville, the more open gently rolling landscape means that it would be difficult to find an unobtrusive location for the transition. Ideally the transition would occur north of the Matamata – Piako District Boundary where the line traverses the Hangawera Hills.
- 5.22 Undergrounding the line in the vicinity of Morrinsville would clearly be the optimal solution in terms of visual and amenity effects on the township and its immediate environs. It is my understanding that this option is prohibitively expensive.

6 CONCLUSION

- 6.1 In my opinion, it is the incongruity of the scale of the proposed lattice towers within the rural landscape of the Matamata – Piako District that contributes most significantly to potential adverse landscape and visual effects. Assuming it is not feasible to employ a considerably smaller scaled structure to support the proposed 400kV line I make the following recommendations.
- 6.2 The 5 Point Scale of Visual Effects should be recalibrated as set out in para 3.16 of my evidence.
- 6.3 The Matamata – Piako District should be re assessed on the basis of this recalibrated scale to determine a more accurate extent of the number of properties that will be exposed to potential adverse visual effects considered to be moderate, high, very high or extreme. This re assessment should also include public roads and open spaces to identify appropriate mitigation. Landscape mitigation should be offered to owners of all houses with potentially moderate effects in which the line will be prominent in their view. This will include a 4km zone where the line traverses western ranges landscapes and a 2km zone where the line passes through western foothills landscapes. Landscape mitigation should be similarly offered to relevant authorities responsible for public open spaces and road reserves within these zones.

6.4 A detailed assessment should be made of the landscape and visual effects on Morrinsville township and its immediate environs. The study area should extend from the north edge of the township to south of Kuranui Road and should span a 2 km zone either side of the proposed line. Mitigation options for consideration should include:

- the use of monopoles;
- detailed assessments of individual properties, roads and public open spaces within the 2 km zone;
- large scale and large grade avenue planting to SH26 from the Gordonton turnoff to the main street edge; and,
- riparian planting to perennial and ephemeral stream gullies on the Mt Misery hills sides against which towers will be seen.

Bridget Gilbert

February 2008