

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 (2) OF SYLVIA JEAN ALLAN FOR TRANSPOWER
NEW ZEALAND LIMITED IN REBUTTAL
(Planning: Resource Management Act Analysis, Overhead Transmission Line,
Brownhill Substation and Whakamaru and Whakamaru North Substation)**

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Introduction

1. **MY** name is Sylvia Jean Allan. I have the qualifications and experience set out in my statement of evidence in chief (1). I wish to present rebuttal evidence to the statements of evidence of the following people:
 - (a) Christopher James Freke on behalf of Manukau City Council
 - (b) Clayton Crane McKenzie on behalf of Manukau City Council
 - (c) Dennis John Scott on behalf of Manukau City Council, Underground in Manukau, Randal McKenzie and Mark Spring, and the Hunua Residents' Association
 - (d) Catherine Tuck on behalf of Underground in Manukau
 - (e) Randal McKenzie and Mark Spring
 - (f) Mark Mason on behalf of Regis Park Stage 2 Ltd
 - (g) Allan Robert McCreadie for Ardmore Airfield Tenants and Users Committee (AATUC)
 - (h) Sally Barbara Peake for Auckland Regional Council and Franklin District Council
 - (i) Douglas Parker on behalf of Hunua and Paparimu Valley Residents' Association Inc.
 - (j) Gary Edward Orbell on behalf of Matamata-Piako District Council
 - (k) Michael Bevan O'Connor on behalf of Matamata-Piako District Council
 - (l) Marius Erasmus Rademeyer on behalf of Matamata-Piako District Council
 - (m) Daniel Phillips on behalf of Matamata-Piako District Council
 - (n) John Blair Olliver on behalf of Waipa District Council
 - (o) Mary Caroline Buckland on behalf of Waipa District Council
 - (p) Aaron Mark Collier on behalf of South Waikato District Council
 - (q) Diane Jean Lucas on behalf of South Waikato District Council
 - (r) Murray John Parrish on behalf of Carter Holt Harvey Ltd
 - (s) Sally Barker Strang on behalf of Hancocks Forest Management (NZ) Ltd.

2. **THIS** rebuttal applies to matters that generally relate to my second statement of evidence in chief. I have provided separate rebuttal evidence in relation to my first statement of evidence in chief.

3. **THE** fact that I have not dealt in my rebuttal evidence with specific issues or opinions raised in evidence of others, should not be taken to mean I am in agreement with the evidence of others in respect of those issues or opinions.

EVIDENCE OF CHRISTOPHER FREKE

Impacts of Major Infrastructure on Manukau

4. **MR** Freke, in several places in his evidence (for example paragraphs 10(i)), 124, and 125), states or implies that Manukau City has been badly treated by past decisions relating to overhead transmission lines.
5. **IT** is correct that Manukau City is crossed by a number of significant power lines, as well as other significant infrastructure such as motorways and rail lines. This is an inevitable consequence of urban growth to the south of Auckland City which has taken place, particularly since the 1950s, in a relatively unplanned way. While both road and rail fully occupies land, transmission lines largely cross over land, leaving it able to be encroached upon by housing and other activities¹. Generally, urban growth has encroached on pre-existing infrastructure, as acknowledged in his paragraph 9.
6. **IN** my opinion, the “*significant ongoing effects*” referred to by Mr Freke in paragraph 10 (i) do not mean that Manukau City should not seek to undertake wise planning into the future. Should there be further urban expansion in the area of the proposed line in the future, careful planning can ensure that the overhead lines are encased in a protected “green corridor” and housing development is orientated appropriately.² Examples I have studied from overseas show that overhead lines can be successfully accommodated in urban fabric and need not have a blighting effect.

Proliferation of Utilities

7. **IN** his paragraph 10 (iii), Mr Freke says that “*each new utility that further degrades the isthmus corridor increases the likelihood of further such utilities*”.

¹ In my experience, over time it has proved difficult to protect transmission corridors through district plan provisions as it has been unacceptable to landowners to do so, particularly in urban areas. Councils have generally been reluctant to include setback provisions, although some plans do.

² For example, relevant concepts are set out in “A Sense of Place, Design Guidelines for Development near High Voltage Overhead Lines”, National Grid Transco, 2005.

8. I do not understand the basis for this comment. Utilities are designed to meet identified needs, ideally well in advance of the need. They are usually expensive and difficult items to plan, locate and construct, and they do not proliferate naturally.
9. **IN** terms of his subsequent comment that *“this is highlighted in this case by the reliance on the existing 110kV ARAPAK (sic) line to justify in part the impacts of the current much larger proposal”*, it is implied that little or no consideration was initially given to alternative routes. This was covered in my first brief of evidence, and the substation locations were addressed by Ms Hunter in her statement of evidence.
10. **IF** Mr Freke is suggesting that there are significant constraints in providing transmission and transformation infrastructure in south Auckland, I agree. However the ARI-PAK A route was not “relied on” – rather it was found that first one, and then a second existing substation, had to be connected to a new overhead line and the most appropriate route was already occupied by an existing line: all other route options had greater constraints. In my opinion, it is efficient to make use of an existing route if practicable. In this case, it was found appropriate to divert from the ARI-PAK A alignment between Brookby and the urban edge, and this also enabled a reduction in the length of the line and the removal of part of the ARI-PAK A line without replacing it.
11. I also acknowledge that Mr Freke, in his paragraph 57, accepts that Transpower has probably identified the *“best route for overhead lines through the Manukau section of the route”*.

Effectiveness of Consultation

12. **MR** Freke, in his paragraph 22, comments that Transpower has been entirely constrained by the Grid Investment Test (**GIT**). This follows on from comments about what he sees as the unsatisfactory nature of the consultation processes (paragraphs 17 and 18). I disagree and note, however, that Transpower has now proposed a gas-insulated substation on the Brownhill site largely as an outcome of the consultation processes.

Future Urbanisation of Brookby Valley

13. **IN** paragraph 35 of his evidence, Mr Freke indicates that Brookby Valley is “*earmarked for significant future development*” in the longer term.
14. **DESPITE** having reviewed all the available information from the Council and the Auckland Regional Council, and having been involved in a range of consultation processes, this is the first time that I have come across any suggestion that Brookby Valley will be urbanised in future. I am not aware that Mr Freke (or anyone else)³ has documented or disclosed this in any written or verbal advice to Transpower or its consultants. In contrast, I have found in Manukau City’s Draft Rural Strategy (2006)⁴, an intention to plan for the expansion of Clevedon Village (not acknowledged in Mr Freke’s paragraph 83). The alignment was careful to avoid this potential future expansion area.
15. **MR FREKE’S** attachment, Figure 1 “Indicative Concept for Rural Strategy”, shows the Brookby area being clearly within the Rural Strategy Boundary. The Draft Rural Strategy in 8.4 suggests that Brookby could be the next area considered for countryside living development, but that would need to be discussed with the other Southern Sector Partners⁵ due to its proximity to Papakura.
16. I have also perused the decisions on Plan Change 8, within which a number of submissions sought to extend the provisions of Plan Change 8 into the Brookby area (for example Haunui Farms). The submissions were declined as they involved land outside the Whitford catchment, because a full study would be needed to investigate the likely impacts on the environment, and because consultation would be needed with the affected Brookby community before making any change. It was not indicated in these decisions that the area might have been intended to be reserved for future urban development.

³ Generally, comments have related to protecting this area’s rural character from the proposed overhead power line – for example, in the evidence of Catherine Tuck, paragraph 32; Sally Peake, paragraphs 18 and 19.

⁴ Manukau Rural Strategy – Interim Decision Version, November 2006 – “A key approach within the Rural Strategy is to promote Beachlands, Clevedon Village and Whitford Village as the three main rural settlements to accommodate most of the share of the growth in the rural area”, page 34 (yellow, adopted section). The same document on page 38 (yellow, adopted section) indicates that “part of the Brookby Catchment could be considered in the near future for countryside living development.”. The Long Term Council Community Plan 2006 indicates that the Council will undertake plan changes for Beachlands, Clevedon Village and Whitford by 2010.

⁵ Auckland Regional Council, Papakura District Council and Franklin District Council (see 3.4 of the Draft Rural Strategy).

17. **THE** Manukau City website indicates that the Council is intending to undertake further urban studies⁶. It appears that these have not progressed to date for a range of reasons. However, when they do progress, it is clear that the Council intends to undertake careful evaluation of options and considerable consultation. As noted above, the Council is not in a position to be undertaking urban growth planning in isolation.
18. I am thus unable to ascertain the basis for, or validity of, the possible new urban growth proposal for Brooklyn Valley suggested by Mr Freke.
19. **URBAN** growth in Auckland is now subject to consideration by all the local authorities⁷, with the Auckland Regional Council working with local authorities to plan for urban, peri-urban and rural areas on a regional basis, including urban form. As I have explained in my first statement of evidence (2), at paragraphs 187 and 200, this is managed through the Auckland Regional Policy Statement. The Regional Policy Statement has recently been subject to Change 6, which has clearly stated growth expectations (see Objective 2.6.2 in Attachment SJA 2.1 to my first statement of evidence (2)) and has indicated that there is sufficient area for approximately 40 years currently zoned.
20. **WHILE** I agree with Mr Freke that the growth of Auckland's urban area will be subject to review on a regular basis (his paragraph 106), in my opinion this should be done on a logical, careful and analytical planning basis. It can also be expected that it will be done on a regional, or at least a sub-regional⁸ basis, taking into account constraints and opportunities, regional and local servicing and accessibility considerations, and the normal range of planning issues. Alternatives, which may include consolidation and intensification rather than new urban areas, as well as a range of expansion or new areas, would also be evaluated.
21. **WHILE** Mr Freke may consider "*Brookby Valley... to be a prime candidate for future urbanisation*" (paragraph 94), it is not clear by what reasoning he has

⁶ For example, the Rural Strategy referred to above indicates that the Manukau Growth Strategy is expected to be completed in mid 2007 (p24).

⁷ Through the Local Government (Auckland) Amendment Act 2004 direction for all Councils in the region to integrate their land use and transport provisions and ensure their consistency with the Regional Growth Strategy.

⁸ The grouping of the "Southern Sector" of local authorities – Manukau City Council, Papakura District Council and Franklin District Council together with the Auckland Regional Council – have a current Southern Sector Agreement (2001) to address the timing, sequence and location of growth in urban areas. This is referred to in the Manukau Rural Strategy and to my knowledge has not yet been updated.

formed his view. I acknowledge that he has commissioned Mr McKenzie to progress this idea and I comment on his evidence later.

- 22. FROM** the information available to me, I consider it unlikely that Brookby Valley will be urbanised in the near future (at least 30 years and longer if the Auckland Regional Policy Statement's expectations are met), and probably not at all in the period that Ardmore Airport remains in place. I explain my reasons for this in my response to Mr Clayton's evidence.
- 23. IN** any case, should Brookby Valley be urbanised, the alignment can be readily incorporated into the urban fabric as a green space. As a planner, I would categorically reject the last sentence of paragraph 95 of Mr Freke's evidence. While an overhead line may present some planning challenges, these are likely to be readily overcome by careful urban design. For example, Attachment SJA R2.1 shows a "retrofitted" transmission corridor within an urban area. Not only do the dwellings benefit from the adjacent open space, but the open space is a safe pedestrian and cycleway linking to places of work, schools and commercial facilities.
- 24. I** confirm my opinion and interpretation of policy as described in Mr Freke's paragraphs 99 and 100. Here he is referring to my analysis of the urban containment policies in the Regional Policy Statement, Objective 2.6.2 (on page 107, Attachment SJA 2.1 of my first statement of evidence (2)), which set in place a series of considerations to be taken into account when new urban areas are being considered – amongst them, that established activities (in this case the proposed overhead line) are able to continue. Mr Freke in his paragraph 101, is effectively suggesting that decisions should be made and costs incurred over long periods to "protect" areas for future urbanisation that may not be desirable for a range of reasons and which may never happen.
- 25. IN** contrast, it is my position that it is reasonable and responsible to take into account known areas of urban growth and plan for them. This is confirmed by the Regional Policy Statement, for example Objective 2.6.14.5 (b). In the Manukau City context, as development is taking place close to the urban boundary, and developers' plans are well-advanced, it is reasonable to underground lines, as placing them overhead could disrupt the present level of planning (eg, Regis Park subdivision, Flat Bush).

26. **HOWEVER**, where there is the opportunity for a future urban area to be planned around infrastructure, then, in my opinion, that is the appropriate approach. In the present case, development can be designed around the proposed overhead line in the Whitford Rural Plan Change 8 area, and in any urban or lifestyle area further south in the future.
27. **IT** would appear that Mr Freke is applying his experience of past lack of urban planning around power lines already within the Manukau City area to the future. However, both the planning situation and the land ownership issues have changed substantially in recent years. There is now, in my opinion, the ability to plan to avoid dwellings close to and under power lines⁹. Overseas case studies show that overhead power lines and urban development can readily co-exist through effective urban design.
28. **WHILE** Mr Freke refers at his paragraph 125 to transmission lines as having “a *major severance effect*”, that is not necessarily the case: green space below and around an overhead power line can become part of a network of open spaces and can actively integrate an urban area in a more effective way (by providing connecting green space containing walkways, cycleways and recreational access), than say a road or rail system or a waterway (which often form physical barriers with only specific crossing or connecting places).
29. **MY** understanding of the issues that Mr Freke refers to in his paragraphs 124 and 125 relating to the existing 220kV lines through the Flat Bush area, is that these relate to land ownership and development expectations, and possibly that (as pointed out by Mr Freke) they have been “left to last” rather than being tackled in the very preliminary layout of the Flat Bush area.
30. **HOWEVER**, I also acknowledge that Mr Freke is referring to an area which has three approximately parallel lines (220kV) in relatively close proximity (varying from a total corridor width of just over 100m to over 500m). Such situations are not easy to absorb, unless in a broad open space corridor within an urbanised area. This situation contrasts with the situation of a single overhead line, as proposed.

⁹ Indeed, the matter is now covered in Policy 11 of the National Policy Statement on Electricity Transmission (2008).

Undergrounding in the Interests of Ardmore

31. **IN** paragraph 82 of his evidence, Mr Freke suggests that undergrounding of the overhead line to south of Ardmore Airport may be justified on the basis of air safety, lighting or marking of lines.
32. **MARKING** or lighting of lines in the vicinity of Ardmore Airport has not been part of the Transpower proposal for the NOR. I acknowledge that the AIRBIZ risk report¹⁰ recommended further consideration of a range of possible mitigation options. However in Mr Sullivan's first statement of evidence, he states that he does not consider any mitigation measures to be necessary. He does not recommend undergrounding on the basis of safety or other Ardmore operational issues. Mr Sullivan does suggest an "offset" measure, of improved meteorological information (Sullivan evidence in chief, paragraph 125 to 129). Mr Stevens has further reviewed both the AIRBIZ report and Mr Sullivan's first statement of evidence, along with the evidence from Mr McCreadie for the Ardmore Airport Users Group, and does not find any basis to recommend any physical change to the proposed line.
33. **IN** his paragraphs 147 to 161, and particularly in his paragraph 154, Mr Freke provides the Board of Inquiry his assessment of the work undertaken for the NOR on Ardmore Airport and associated risk. He appears to rely on the opinions of Mr McCreadie for the Ardmore Airport Users' Group in preference to that of other experts. He fails to note that Ardmore Airport Ltd, the airport operator, has not become a party itself to the proceedings, and fails to acknowledge the neutral submissions of the Airways Corporation, of New Zealand¹¹.
34. **IN** paragraph 157 of his evidence, Mr Freke states that the AIRBIZ report "recommends a number of mitigation strategies". That is a misreading of the words of the report, which are "*the following six new risk mitigation measures are recommended for further consideration*". Following a review of the report and further consideration of risks, as noted above, Mr Sullivan does not recommend any of the mitigation possibilities, and Mr Stevens agrees. This consideration of additional mitigation is consistent with the Australian and New Zealand Risk Management Standard and Guidelines (SAA/SNZ 4360:2004 and SAA/SNZ HB

¹⁰ "Ardmore Aviation Risk Assessment Report", August 2007, Volume XI, section 4, NoR, pages 62 and 63.

¹¹ In contrast, Mr Richards, planning witness for the Auckland Regional Council, does acknowledge the conditional support in Airways Corporation of New Zealand submission in paragraph 19 of his submission.

436:2004) that risks are As Low as Reasonably Practicable (ALARP). The term “practicable” acknowledges that not all possible measures need to be applied.

Designation Process

35. **IN** paragraph 93 of his evidence, Mr Freke makes the comment that *“the assessment of the proposal needs to be regarded as something more akin to a full scale district planning exercise than a resource consent”*.
36. **THIS** is a curious comment, as Transpower has issued a Notice of Requirement for a designation, rather than seeking a resource consent¹². The designation process is a specific instrument provided for in the RMA to address projects proposed by network utility operators who are requiring authorities, and follows a specific process (in this case modified from the usual process by the Ministerial call-in), with specific matters to be taken into account in decisions.
37. **IF** Mr Freke is suggesting that the Council’s role has somehow been usurped, I would reject that proposition. I note that the National Policy Statement on Electricity Transmission in Policies 12 and 13 outline specific responsibilities relating to territorial authorities and decision makers.
38. **IN** his paragraph 96, Mr Freke states that I have not analysed Objectives 7.3.1 and 7.3.4, or Policies 7.4.1 and 7.4.2 of the Manukau District Plan. Mr Freke is incorrect. My statement of evidence (2) on pages 138 and 139 in Attachment SJA 2.1 sets out my analysis of these provisions.

EVIDENCE OF CLAYTON CRANE McKENZIE

39. **MR** McKenzie is an experienced surveyor who has been requested by Manukau City Council to *“undertake a brief analysis of the available information in order to confirm the sustainability of Brookby as a possible future urban development area”* as stated in his paragraph 6. He acknowledges the limited scope of his evidence in paragraph 5.
40. **WHILE** Mr McKenzie may have been involved in “greenfields” land development for many years, I would not have considered that this would necessarily provide

¹² Although a number of resource consents are sought from the Auckland Regional Council, these are in my opinion, subsidiary to the designation.

him with all the skills and knowledge to collect and analyse all the information necessary to make a determination about an area's suitability for future urban development, particularly at the growth planning stage.

41. **SURVEYING** skills are normally brought to bear at a much later stage in the urban growth management process than the initial studies that determine appropriateness of an area for urban growth in the broader sense.
42. **IN** paragraph 38 of his evidence, Mr McKenzie notes the existing transmission lines as one of the features that would reduce the "potential yieldable area" of urban development of Brookby Valley. The identification and acknowledgement of existing constraints is a usual part of analysis. This assists comparison between areas, as well as any analysis of the ability to develop a specific area. However, in drawing his conclusions in paragraph 41 and 42 of his evidence, he clearly does not accept the existing line (which closely follows the route of the proposed alignment) as a constraint.
43. **IN** contrast, in his paragraphs 43 and 44, Mr McKenzie notes the quarry and forestry operations which may outlast the urbanisation he is investigating. Transport systems would "*need to be factored into the urban design process*" for the benefit of these landuses.
44. **IN** my opinion, the range of constraints identified by Mr McKenzie make Brookby an unlikely preferred area for future urban development if planned on a regional scale, particularly given its confined nature between the Whitford rural residential locality¹³ and Clevedon valley, and the relative isolation from the rest of the urban area. There are a range of current urban growth planning practices, and they normally would not include developing a separate new community of 15,000-20,000 people effectively from scratch.
45. **HOWEVER**, Mr McKenzie has entirely overlooked one major constraint which may well prove to be a "fatal flaw"¹⁴ in terms of urban development of Brookby valley. The matter is one which can be identified from the information provided in the NOR documentation. Alternatively, the issues would have been identified from the most preliminary consultation with stakeholders in the area. This

¹³ As provided for in Plan Change 8.

¹⁴ Fatal flaw analysis is a normal part of evaluation of any area as part of an urban growth assessment.

possible flaw relates to the presence of the nearby Ardmore Airport, which Mr Freke in his evidence clearly wishes to retain and protect.

46. **AS** noted in the NOR documentation (Part VIII, page 131, 132) and explained in the AIRBIZ report and Mr Sullivan's evidence, the Brookby valley lies under the designated airspace (the obstacle limitation surface) for Auckland International Airport (see Map Book, Series 4, pages 1 and 2). It also lies on one of the favoured approach paths to Ardmore Airport (informally, the area is described as the "Brookby Roundabout") as well as being used by aircraft in north-south transit within the general area.
47. **AIRCRAFT** approaching Ardmore airport (or passing through the area) must stay below the Auckland International Airport protected area at 1500 feet above mean sea level, but to comply with CAA Part 91 requirements they must also stay above 500 feet above ground/structure level (in the Brookby valley this area is already at about 500 feet above mean sea level – with the new line at its highest point being slightly lower than the present highest point, at 496 feet above mean sea level). This situation is already recognised as a constraint, and has been taken into account and explained in the AIRBIZ report.
48. **THE** 500 feet separation relates to flying above rural areas. However, CAA Part 91 requirements increase that to 1000 feet above urban areas. The configuration of ground level and the Auckland International Airport Protection Area precludes aircraft flying at 1000 feet above ground level (or above) in this area, meaning that if the area is urbanised, the ability for aircraft to depart or approach Ardmore across the Brookby valley, or to transit South Auckland in this area, would be curtailed¹⁵. Consequently, Ardmore Airport and its users would need to operate in a way different from its current operation. This may significantly affect airport use¹⁶.
49. **IN** this context, the benefits for future urbanisation identified by Mr McKenzie and Mr Freke in relation to undergrounding the proposed line, in my opinion, become somewhat academic.

¹⁵ Since both the maximum land height above mean sea level and the tower heights are approximately 500 feet, undergrounding is immaterial in terms of the available space.

¹⁶ I note that the Auckland Regional Growth Strategy: 2050, Nov 1999, "A Vision for Managing Growth in the Auckland Region", page 50, notes that "low relative catchment constraint areas such as... Brookby Valley have been avoided, not specifically for environmental reasons but because of... other constraints, such as airfield approaches."

EVIDENCE OF DENNIS JOHN SCOTT

50. **MR** Scott describes himself as a *“futurist”* in paragraph 40 of his evidence, and in paragraph 37 he sets out what he describes as a *“collective but different version [held by communities] specific to their place”*. He then goes on to describe the *“vision”* as he sees it for Whitford, Brookby, Ardmore, Clevedon and Hunua. In paragraph 38, he says *“these are not theoretical ideas. There is a perceptible change occurring in these landscapes which I have witnessed and, which has been transforming these traditional productive rural landscapes for the past 15-20 years. I believe these changes are leading towards the realisation of the visions outlined above”*. Mr Scott’s visions seem to have no identified planning basis at present, except in respect of Whitford where Plan Change 8 has foreshadowed Mr Scott’s vision.
51. **CLEVEDON** is expected to be subject to a plan change. This is a potential settlement extension, rather than rural intensification (see footnote 4 of this statement of evidence), but this has not yet occurred. In Hunua there has been substantial lifestyle development, but a recent plan change has reduced the opportunity for further such subdivision. A small extension to Hunua township is proposed. There appears to be no basis for further subdivision or settlement in the vicinity of Ardmore while the airport remains.
52. I consider Mr Scott’s opinion on the impact of the overhead line, stated in paragraph 41, that *“the southern sector alignment completely compromises future growth opportunities”*, to be an unfounded and unjustifiable overstatement. I do not accept that the alignment *“forecloses future opportunities and options”* as stated in Mr Scott’s paragraph 42.
53. **IN** paragraph 108 of his evidence, Mr Scott describes Plan Change 8 as *“encouraging land use change through incentive-based subdivision development opportunity”*. He further suggests that *“it is possible to get down to a 1 to 2 hectare density average”*. This is a slight misrepresentation of the provisions of the Whitford Rural A Zone in Plan Change 8. The description of the Zone in the notified Plan Change included that it has a *“carrying capacity of 1 household unit per 4 hectares”*. Subdivisions of less than 2 hectares in area are non-complying activities, as are dwellings on 4 hectares or less in the catchment management overlay areas, and on 2 hectares or less in the scenic amenity overlay. In my opinion, given the policy for this Zone, a 1 or 2 hectare average is unlikely.

54. **THERE** are no controlled activity subdivisions provided for within the Whitford A Zone. The basic provision for subdivision within the Whitford A Zone is 4 hectares per lot, with permitted dwellings only at 1 per 10 hectares. Closer dwelling density or subdivision is subject to at least restricted discretionary control. There are no “incentive-based” provisions in the Plan, although I can envisage that developers will argue for intensification on the basis of protection of areas or planting. I have been advised by both ARC planners¹⁷ and MCC planners¹⁸ that there are now concerns about the capacity of this zone and that the Council intends to resist applications which go much below the specified anticipated density. A variation to Plan Change 8 is now under detailed consideration.
55. **IN** paragraph 109 of his evidence, Mr Scott refers to his Exhibit 5, which he says “*demonstrates the significance of the development opportunities in the immediate vicinity of the proposed Brownhill station (sic) and transmission line alignment*”. The main “*development opportunity*” shown on Exhibit 05 which is in any way affected by the line appears to be Haunui Farm, which is almost entirely outside the Whitford Rural Plan Change 8 area, and is in the Rural 1 Zone where a basic subdivision size of 12 hectares applies. Appeals have recently been settled by consent with the Environment Court on this property (see Attachment SJA R2.2). As can be seen from the Attachment, few of the dwellings shown on Mr Scott’s Exhibit 05 (assuming the red dots are dwellings), and none of those which are close to the line, lie within the Whitford Rural A Zone boundary.
56. **MR** Scott’s Exhibit 03, referred to in paragraph 107 of his evidence, shows “*proposed catchment vegetation patterns envisioned for the enhancement and ecological benefits of the Turanga sub-catchment – Plan Change 8 expected outcomes*”. This serves to demonstrate that the alignment largely follows lower-lying areas which will be subject to vegetation enhancement, and will not interrupt development opportunities. Tower 9 is on the ridge which forms the catchment and zone boundary.
57. **IN** his paragraphs 143 to 146, Mr Scott comments on Brownhill Substation. In paragraph 145, he states “*the attempt to visually integrate the proposed substation will in effect destroy the very elements that the community are actively*

¹⁷ Noel Reordan, ARC pers comm, 1.05.08

¹⁸ Ken George, MCC pers comm, 15.04.08, 16.06.08

protecting and enhancing". To reach this conclusion he draws on an intention "to modify and fill the stream to form a large level building platform". I am not sure if Mr Scott has visited the site and viewed the stream involved.

58. **THE** stream involved is a very minor tributary, which is sourced within the Transpower property. There is no effect on the larger stream which runs outside the site boundary.
59. **AS** described in the NOR documentation (Part X, Section II, page 24), the stream which will be rerouted around the building platform is already significantly modified and is highly degraded due to past agricultural development and use. The earthworks proposed will retain the open flow of this stream and the landscaping intended will include channel and riparian restoration¹⁹.
60. I consider Mr Scott's statement to be a significant overstatement, given the context and existing environmental quality. I also note that the position of the earthworks has arisen from extensive community consultation.
61. **SIMILARLY**, I consider he has overstated the effects on "*the elevated position of the viewing audience, where the existing and potential viewers virtually encircle the proposed route alignment*" (paragraph 146). Those on Redoubt Road and Umbria Way are so elevated that they will look over and beyond the substation to a very wide vista as can be seen from Mr Scott's own attachments; those on Brownhill Road are less elevated, but visual mitigation proposals are included for this viewing audience, including the use of GIS technology, a monopole at tower 5, specific design elements for the intermediate support structures which have replaced former tower 4, and landscaping of the substation site and alignment vicinities.
62. **IN** his paragraph 177, Mr Scott (acting for the Hunua Residents' Association) recommends "*a meaningful renegotiation with the Hunua community, based on informed outcomes of the further assessment and analysis, in order to derive a transmission route with significantly reduced landscape, ecological and visual effects*". This is an easy comment to make and it appears to have been made on the basis of a lack of appreciation of the process of route identification, assessment and decision, and ongoing development of the specific alignment, including the wishes of individual property owners.

63. **IN** particular, during the public consultation processes, members of the Hunua community particularly expressed a strong desire for the alignment to pass through the Hunua ranges and options were identified and evaluated. This is noted in the NOR documentation and the specific report and analysis is entitled “Hunua Options”²⁰ and is included in the Common Exhibits. As explained in my first statement of evidence (1), paragraph 92, a range of other options was also considered in the Hunua area at Route identification stage.
64. **THUS**, while I agree that the Hunua area is a sensitive one, due to its valley form, the significance of the nearby ranges, and the relatively extensive lifestyle development, I consider that Transpower has undertaken extensive evaluation of options and that a “*community appraised outcome*” (Mr Scott’s paragraph 177) has already been achieved.

EVIDENCE OF CATHERINE TUCK

65. **IN** paragraph 26(d) of her evidence, Ms Tuck includes as reasons for undergrounding “*future-proofing the district for inevitable increased development and urbanisation*”, and in her paragraphs 60 to 73 she expands on her expectation that future development will occur throughout the rural areas of Manukau.
66. **MS** Tuck adopts a particular view of urban development based on the need for each district (in this case Manukau City) to provide for its own growth. As I have explained in my evidence, urban development in Auckland is subject to future urban planning on a regional scale. The regional policy framework sets in place policy which requires particular attention to urban containment (Objective 2.6.2). In planning for new infrastructure, policy refers to the avoidance of significant adverse effects on the environmental values within the “defined limits” to metropolitan Auckland, and states that if such adverse effects cannot be avoided they need to be remedied or mitigated.

¹⁹ See for example, paragraph 284 of my evidence in chief (2).

²⁰ See Hunua Options Report (February 2005), and repeated as Specialist Report 1 in Part 2 of the Final Route Decision Report (July 2005), Common Exhibits.

67. **IN** my opinion, avoidance of significant adverse effects within metropolitan Auckland is achieved, as the overhead line does not intersect the metropolitan urban limits shown in Plan Change 6 to the Regional Policy Statement.
68. **ATTACHMENT** SJA R2.3 shows the metropolitan urban limits from Plan Change 6, the Flat Bush Countryside Transition Zone (from Manukau City Plan Variation 13, Flat Bush), and the Whitford Rural A Zone (from Manukau City Plan Change 8, Whitford Rural), in relation to the proposed Brownhill Substation site and the overhead line route. It can be seen that the commencement of the overhead line is some 1.8 kilometres from the metropolitan urban limits at closest point (as well as being separated from it by the significant ridge marked by the Redoubt Road extension), and 1 kilometre to the south and east of the extent of the Flat Bush Countryside Transition Zone (minimum lot size, 2000m²)²¹.
69. The Brownhill Substation site is also south of the metropolitan urban limits, but borders on the Flat Bush Countryside Living Zone. The substation itself is contained within a valley form at the downhill end of the site.
70. **BECAUSE** the substation and line are beyond both the metropolitan urban limits and the Flat Bush Countryside Living Zone, in my opinion there are no significant adverse effects on the environmental values of metropolitan Auckland. I acknowledge that there are adverse effects on the immediate vicinity of the substation and line, but these are outside the metropolitan urban limits, and have in any case been mitigated through the choice of route and specific alignment.
71. I also do not accept Ms Tuck's insistence (paragraph 70) that overhead power lines will create "*a future slum in the making*". As explained earlier, large overhead power lines can be absorbed within urban areas with careful planning and can become an asset, with the areas close to and below the power lines becoming desirable because of the associated open space. I am not personally aware of any successful New Zealand examples of this type of planning yet, although I have observed examples in Australia.
72. I also do not accept that areas in New Zealand where large power lines cross urban development are slums. For example, Redoubt Road²² is crossed by

²¹ The Structure Plan included within Variation 13 describes the area of the Flat Bush Countryside Transition Zone as a transitional area. Along Redoubt Road, despite the 2000m² minimum lot size, the topography results in dwellings being located close to the road frontage, resulting in an urbanised appearance.

²² Referred to locally as "Millionaires' Row".

220kV lines. During the development stage, I noted that the lots containing the power lines were developed relatively early, and there is no apparent difference in quality between the development on those sites and on adjoining sites. I have observed similar situations in recent rural-residential development on the fringe of Christchurch.

EVIDENCE OF RANDAL McKENZIE AND MARK SPRING

73. **IN** paragraph 2 of their evidence, Messrs McKenzie and Spring state that *“the valley and Scenic Drive have been identified in the Auckland Regional Plan as an area of high scenic value”*. I am uncertain which plan is being referred to in this comment. The ridge containing Redoubt Road and the proposed extension was identified as a sensitive ridge in the Manukau District Plan (in the Rural 3 Zone) and this provision has since been continued through Variation 13. The Whitford area including the Brownhill Road area are subject to Plan Change 8, Whitford Rural, which seeks to protect elements of rural character.
74. **BOTH** zonings allow for considerable change – the Redoubt Road ridge area as large-lot urban development (already well advanced) and the Whitford Plan Change 8 area into a rural area containing clustered lifestyle development area similar to that already occupied by Messrs McKenzie and Spring. There is no regional-level identification or protection of scenic or other values in this area.
75. **IN** paragraph 7 of their evidence, Messrs McKenzie and Spring refer to the subdivision in which they live as being *“designed in accordance with Rural Plan Change 8”*. The subdivision was approved in approximately 2001, well in advance of the notification of Plan Change 8. At the time, the subdivision was a sporadic development, but I agree that it was subject to conditions that required extensive landscaping.
76. **IN** paragraph 28, Messrs McKenzie and Spring state that *“there is a Draft Rural Growth Strategy for Brookby Valley”*. I have not been able to identify such a strategy.

EVIDENCE OF MARK MASON

77. **MR** Mason, for Regis Park Stage 2 Ltd, in the first three paragraphs under his item 1 (page 2), seeking a review of the positioning of the Brownhill Road

substation, expresses dissatisfaction with the use of the term “urban boundary”. He says that “it is dishonest of TPNZ to suggest that the [Brownhill] substation will fall in the vicinity of the South Auckland Urban Boundary”. No “urban boundary” is defined within the Manukau City District Plan. However the District Plan now includes a Flat Bush Countryside Transition Zone which could be interpreted as the limit of urban development. As can be seen on Attachment SJA R2.3, this is in a different location from the ARC’s Metropolitan Urban Limits (August 2007 Decisions Version), and the areas listed in Chapter 2 of the Auckland Regional Policy Statement, Plan Change 6. On the basis of the zoning and approved subdivisions shown on Attachment SJA R2.3, I consider it reasonable to say that the urban boundary in practice falls at the eastern edge of the Flat Bush Countryside Transition Zone, even though this is outside the Metropolitan Urban Limits. I am not sure on what basis Mr Mason could describe this description of the substation location as “dishonest”.

78. **IN** the following paragraph (fourth paragraph under item 1, page 2) Mr Mason suggests that the ARC “strongly recommends” undergrounding “much further south”. I do not understand that to be the ARC’s position.

EVIDENCE OF ALLAN McCREADIE

79. **ALTHOUGH** Mr McCreadie’s evidence includes a wide range of incorrect or misleading assertions, I wish to comment on only one matter.
80. **IN** paragraph 17(f) of his evidence titled “The Avoid Option” Mr McCreadie expresses disappointment that “there is no treatment of any “Avoid” option(s)” in the Airbiz report. From this and elsewhere in his evidence, I understand that to mean that undergrounding, ie, removal of the existing ARI-PAK A line and its replacement by an underground cable, should have been included in the risk assessment as an option.
81. **WITH** respect, the starting point for an evaluation of effects (including risk-related effects), is the existing lawful situation, ie, with the ARI-PAK A line in place. It is on this basis that the risk assessment was undertaken.

EVIDENCE OF SALLY PEAKE

- 82.** **MS** Peake in paragraphs 44 to 56 of her evidence, undertakes an evaluation of the proposed alignment in terms of Regional Policy Statement policy and reaches a number of conclusions which I discuss below. However, in a number of places (for example in her paragraphs 47, 48, 53, 55 and 56), she states that the line will not “comply” with stated policies.
- 83.** I have some difficulty with Ms Peake’s use of the word “comply” in a policy sense. Policy is usually expressed in a way that requires an assessment in terms of consistency, not compliance. Compliance is usually reserved for circumstances where a rule is to be met, which does not apply in terms of the designation sought. The use of the word “comply” and the way it is applied in Ms Peake’s evidence suggest a relatively simplistic understanding of the application of policy.
- 84.** **IN** Ms Peake’s paragraph 47, she refers to the inclusion of an area of Outstanding Regional Landscape identification which is crossed by the line. She does not acknowledge that this area, referred to in my evidence in chief (2), paragraph 202, was included in the Regional Policy Statement via Change 8 and was subject to several submissions²³. It was not included in the operative Regional Policy Statement, as implied by Ms Peake. As noted in my evidence, the Regional Council has released a number of its decisions on this plan change but has withheld decisions on the identified landscape areas. It is my understanding that further investigations are to be undertaken.
- 85.** **IN** paragraph 48 of her evidence, Ms Peake refers to an area of sensitivity near Brookby in the operative Regional Policy Statement. This area was withdrawn through Plan Change 8 to the Regional Policy Statement, as it was not included in the replacement mapping of significant areas.
- 86.** **IT** is my understanding that there were no submissions seeking to reinstate this area’s identification. Accordingly, section 19 of the RMA applies and the identification and the associated policy analysis in Ms Peake’s paragraph 48 is no longer of any relevance.

²³ Including by Transpower.

87. **IN** paragraph 53 of her evidence, Ms Peake refers to “areas of non-compliance” with policy in proposed Change 8 *“relating to avoiding built structures near to rivers and their margins, and protecting the naturalness/visual coherence and integrity of Outstanding Natural Landscapes and their physical or visual connections”*.

88. **MR** Lister has provided comment on some of these in his rebuttal evidence. I comment as follows:

- In terms of visually intrusive elements, it is acknowledged that the line has the potential to be visually intrusive, and considerable effort (as acknowledged by Ms Peake) has gone into trying to limit the intrusiveness by identifying contexts where the line will be least obvious and proposing additional mitigation measures. Ms Peake herself suggests in paragraph 34 of her evidence that the line will not “dominate the landscape” and that it will “quickly become an integrated feature”.
- The line has been deliberately located to avoid rivers and their margins in the area which Ms Peake’s evidence relates to, although there are some minor stream crossings in the Brookby and Clevedon areas, as well as elsewhere. In particular, the alignment has avoided the Wairoa River which runs along the base of the Hunua escarpment. Thus I do not understand the basis on which Ms Peake states that the alignment does not “comply” with this policy area.
- I have commented above in terms of the status of the single area of Outstanding Natural Landscape in proposed Change 8 (south of Hunua) which is crossed by the line. My first statement of evidence (2) and the evidence of both Mr Lister and Dr Stephen all address the values of the area. As explained by Mr Lister, the location of the line in this particular area took into account a desire to locate the line at distance and outside the main visual catchment of the Hunua escarpment and ranges.
- In terms of the comment in Ms Peake’s paragraph 55, an alternative route assessed for the line was that of the existing ARI-PAK A alignment which is clearly more visible from roads *“providing important public access to the Regional Park and Outstanding Natural Landscape”*, particularly from the south.

- I do not agree with Ms Peake (paragraph 60) that there is an absence of evaluation of cumulative effects, or a baseline assessment of the existing transmission lines. The baseline was the starting point for the evaluation of some effects as explained in my first statement of evidence (1). Cumulative effects were taken into account in Mr Lister's assessment in Hunua, both where the lines are in proximity to the existing line corridor (the 220kV flat tops and double circuit line), and where they are more spaced out but form a part of the existing environment in the vicinity of Hunua Village and north. Consequently, and in addition, cumulative effects were an integral part of the whole assessment process.

EVIDENCE OF DOUGLAS PARKER

89. **MR** Parker represents the Hunua and Paparimu Valley Residents Association and his evidence generally refers to this area. On page 13 of his evidence, towards the end of the second-to-last paragraph, he quotes the first sentence of my assessment of the line in terms of Policy 7.4.1 of Manukau District Plan (Attachment SJA 2.1, page 139). In particular, Mr Parker appears to be critical of my assessment of the line's design. With respect, the words quoted relate to the sections of the line which are in Manukau City – not in Franklin – and are followed by further explanatory material which is not acknowledged.
90. **IN** terms of line design, a range of options were considered. Mr Lister's evidence in chief and rebuttal evidence discusses these options. In particular, height and number of towers were considered as a trade-off, and tower design and the use of monopoles as an alternative were also considered. Mr Parker refers to "*contrary evidence in the form of alternative design features which are well known in the high voltage transmission industry*", without specifying what these are. I consider that I am relatively well-informed about the range of transmission structures used internationally. The line design is generally in accordance with best practice in common application overseas.
91. **ON** page 16 of his evidence (second paragraph), Mr Parker comments on the request in the NOR documentation that the overhead line is exempt from the requirement to undertake outline plan processes under section 176A of the RMA. This request has been made by Transpower on the basis of adequacy of

information available on the overhead line. However this is not a matter which is relevant to the Board's consideration of the NOR documentation.

92. **MR** Parker also comments at pages 20 and 21 on the request for more than five years to implement the designation. He links the issue to a range of comments on 400kV operation, including a quote from Commissioner Pinnell's dissenting opinion on the Electricity Commission's approval of the 400kV-capable North Island Grid Upgrade Project.
93. **IT** is my understanding that the development was approved by the Electricity Commission on the basis that it was staged and that costs were thus effectively spread over an extended part of the life of the project rather than all at the start.
94. **IN** my opinion, nationally-important infrastructure should be planned on a long-term basis (such as the 50-year urban growth horizon for Auckland's urban area), and the proposal does this. The 15 years sought for the designation is a precautionary approach, and does allow for long-term planning. Once in place, the designation becomes effectively permanent (section 184, RMA) but subject to a 10-year roll-over under the First Schedule of the RMA.

EVIDENCE OF GARY ORBELL

95. **IN** paragraph 2.2 of Mr Orbell's evidence, he notes that the line *"traverses major lengths of "high quality" soils/land as designated in the District Plan. This 'high quality' land forms part of the Nation's limited resource of such land and efforts must be made to preserve this land for future intensive land use"*. In paragraph 2.4, he again refers to *"high quality" land as defined in the District Plan"*.
96. I cannot find any specific definition of *"high quality"* land in the Matamata-Piako District Plan, and Mr Orbell does not explain where and how such *"designation"* is applied. However, under 3.3.2 Land and Development, Objective 2, the explanation refers to Classes I, II and III land. Objective 2 states *"to manage all activities in a manner that maintains and enhances the District's good quality soils and to ensure that the productive capability of rural land is not compromised"*, with supporting policies as follows:

"P1 Subdivision, use or development must minimise the coverage of good quality soils.

P2 *To limit fragmentation of titles and the establishment of houses on high quality soils so as to conserve the land for the use of future generations.*

P3 *To avoid, remedy or mitigate the effects of rural-residential development through the consideration of the natural or physical resources including roading, drainage, conservation, any hazards, and effects incompatible with other activities.”*

97. **READING** this policy along with the associated explanations (see Attachment SJA R 2.4), there is in my opinion little relationship with the proposed line, and no requirement to preserve Class I, II or III land from relatively minor effects such as that of the proposed overhead line, or to anticipate “*future intensive land use*”.
98. **MR** Orbell does not appear to acknowledge the presence of the existing ARI-PAK A line in a similar location, and does not comment on any effects associated with the existing line (how this aspect was addressed in route evaluation was set out in my first statement of evidence (1)).
99. **MR** Orbell refers to his opinion that the line “*fragments*” many farm titles in the District (paragraph 2.5) with “*a varying impact on the usability of the land*”. There is no definition of fragmentation in the Plan, but I have usually understood this term to mean actual subdivision of rural properties²⁴ rather than having a transmission line cross them.
100. **THE** transmission line can be expected to have some limited effects on the ability to use the land below due to the easement and the operation of the line, but it will not take much land out of production (at most, that within the tower bases) and will not limit the productive capability of the soil in the longer term.
101. **MR** Orbell mentions future climate change effects in paragraphs 2.2 and 2.4 of his evidence. He does not identify any specific issues or conclusions arising from this prospect. As one of the authors of the government’s Guidance Notes for Local Authorities on Climate Change (2004, and recently republished in an updated version, 2008), I can comment that it is not possible to link climate change with specific changes or trends in agricultural practice or productivity at present or in the near future. It is more likely that the economics of the farming

sector and any future carbon tax will affect productive use of land to a much more significant extent. (For example, the current trend to convert forest land to dairy production is driven by economic circumstances and not climate change.)

EVIDENCE OF MICHAEL O'CONNOR

102. MR O'Connor has undertaken a brief survey of a range of people as set out in 2.2 and 2.3 of his evidence. This is a small sample of affected people and key informants, with a low response rate from the postal²⁵ survey. It is my experience that people who consider themselves particularly adversely affected by an issue (such as wind farms) generally make an effort to respond, and are thus over-represented in the findings. In my opinion, the findings need to be interpreted and considered in that context.

103. I note that under question 4, the first answer reported relates to effects on land zoned rural residential. To my knowledge, the alignment does not cross any land zoned rural residential, and the closest zoned area is a minimum of 360 metres away. This does raise in my mind, questions about the selection of those to whom the survey was sent and the representativeness of the original sample.

EVIDENCE OF MARIUS RADEMEYER

104. MR Rademeyer, while accepting in paragraphs 4.5 and 4.6 of his evidence, my analysis of the current situation relating to the growth of Morrinsville, in his paragraph 4.7 disagrees with my conclusion about the potential effect on any future urban growth to the west of Morrinsville.

105. EARLIER, in paragraph 4.2, he sets out the current potential for growth in land already zoned. I would generally agree that the town is due for a careful assessment of its growth needs, and this should be undertaken on the basis of best planning practice taking into account growth pressures, sustainability principles and generally-recognised urban design principles²⁶. However, as Mr Rademeyer notes, there is a significant area which could be considered an effective available land bank. How and when such areas are released for

²⁴ For example in the Tasman Regional Policy Statement and Resource Management Plan.

²⁵ I assume this was done by post, but it could have been email.

²⁶ I have undertaken a number of growth studies, for example, Napier City (1992 and 1998), Palmerston North Industrial Land (2002), Richmond and Nelson (2004). I was awarded the first Nancy Northcroft Planning Practice Award by the NZPI for the Napier study.

development is a matter for the owners of the land, but in my experience when the land values become right, this usually does happen.

- 106.** I am not in a position to judge whether future growth should occur to the west of Morrinsville. However I confirm my comments relating to the effect on future growth in this direction (as reported in paragraph 4.7 of Mr Rademeyer's evidence). The alignment crosses the State Highway, at right angles to it and beyond an area of mixed commercial/industrial landuse, in elevated downland and close to a block of protected trees. In my opinion, the alignment could become part of an open space feature within a future urban framework if necessary. This may be preferable to having extensive residential development on the elevated areas.
- 107.** **MR** Rademeyer disagrees with my opinion, but does not explain why such a form of development could not be acceptable, or why he thinks the line would impede future urban growth.
- 108.** **IN** his paragraphs 4.8 to 4.10, Mr Rademeyer states that *"it is my understanding of the District Plan that the most significant resource management issues that it seeks to address, the "cornerstone" of the Plan, are the preservation of the District's high quality soils, and the productive capability thereof"*. In my opinion, that is not a reasonable interpretation from a plain reading of the Plan.
- 109.** **SECTION** 2.3 of the Plan sets out the Significant Resource Management Issues. These are:
- 2.3.1 Residential Growth – Urban Settlements
 - 2.3.2 Controlling the Adverse Effects of Activities
 - 2.3.3 Tangata Whenua
 - 2.3.4 Business
 - 2.3.5 Industry
- Protection of soils and/or rural productivity do not feature as particularly significant issues which the Plan seeks to address.
- 110.** **UNDER** the first of the above headings, a bullet point notes that *"the future use of high quality soils and significant features is in danger of being compromised. The three urban settlements are all located on good quality lands (classifications I, II*

and III Land Use Inventory). Urban encroachment and various activities such as subdivision, use and development in the rural areas can easily compromise the future use of the good quality land by the placement of hardstand and structures over the ground in a manner that makes future use of the soil difficult to achieve”.

111. THE policy which relates to this has been set out earlier in my response to Mr Orbell's comments. There is no “preservation” policy or expected outcome, and what protection of the soil resource that there is appears to be primarily directed at urbanisation and subdivision. In this context, I consider Mr Rademeyer's assessment of the “harm” of the line set out in his paragraph 4.11 of his evidence to be an overstatement.

112. THIS is compounded in his assessment of policy relating to Chapter 3.7, Works and Infrastructure, which is essentially an enabling objective and policy, subject to minimising adverse environmental effects. As indicated in my own policy analysis (page 170 and 171, Attachment SJA 2.1, statement of evidence (2)), the consideration of alternative routes within and beyond the district has addressed this, as other route options were all found to have greater potential adverse effects. I also note that Mr Rademeyer's evidence does not refer to Policy 1 and 2 under this heading, which are also relevant and are covered in my analysis.

113. IN his paragraphs 5.9 to 5.11, Mr Rademeyer addresses sections 7 (b) and 7 (g) of the RMA and opines that, the effects of the line on the district's soil resource is such that it cannot be an efficient use of the District's resources, and that effects on the finite versatile soils of the district have not been adequately avoided or mitigated. In paragraph 5.13, he reaches a similar conclusion on the more general basis that the district's high quality soils have not been safeguarded.

114. IT is my opinion that he can only reach these conclusions by overstating the actual and potential effects of the line on the soil/land resource, and overstating the protection of the resource in terms of the policy in the District Plan. As with Mr Orbell, Mr Rademeyer also does not take into account the existing ARI-PAK A line and its existing associated effects.

EVIDENCE OF DANIEL PHILLIPS

115. **BOTH** Mr Lister and Mr Noble have provided evidence in rebuttal relating to the tower heights used by Mr Phillips in relation to Appendix B of his evidence. I agree with their evidence.
116. **IN** his paragraph 3.9, Mr Phillips describes tower 221 as the future “gateway beacon” to those arriving in Morrinsville from the west. Mr Phillips does not acknowledge that there is already a cell-site on Mt Misery which is certainly prominent and is at a higher and more dominant location.
117. **IN** paragraphs 3.19 to 3.27 of his evidence, Mr Phillips describes some of the unplanned rural-residential development which has occurred in the rural area of the district. He makes these comments under the heading of “Urban Growth in Morrinsville”. It is not clear what point Mr Phillips is trying to make. However, such unplanned development is an issue when trying to locate connected infrastructure such as power lines. I note that the two areas identified in Mr Phillips’ Appendix A, diagrams 3 and 4, are both located very close to the alignment of the existing ARI-PAK A line. At Tahuroa Road (diagram 4), it can be seen that the alignment has been adjusted in an endeavour to minimise future effects.
118. **IN** my opinion, it is preferable for a range of reasons for Councils to actively provide zoned areas for rural residential development. This enables adequate planning and allows community input into acceptable locations, including from Transpower. In my first statement of evidence (2), paragraph 361, I have noted and commented on two submissions from the Morrinsville area which have been critical of Transpower for becoming involved in applications relating to rural residential subdivisions close to the line.
119. **IN** my opinion, the consequences of unplanned development include difficulty in maintaining and upgrading existing assets, and locating new networks, as well as reverse sensitivity. Mr Phillips’ implied criticism of Transpower’s proposed alignment based on proximity to rural residential development, is not justified.
120. **MR** Phillips acknowledges that there is a significant separation distance between the zoned rural residential areas and the alignment proposed. I have measured the closest distance, along the State highway frontage, at 360 metres.

121. **UNDER** the heading Tower Limits, in his paragraphs 3.36 to 3.44, Mr Phillips provides a somewhat unresolved discussion about what he sees as the future urban development style and pattern for Morrinsville, building in the currently popular range of urban design concepts. The tenor of the discussions perhaps indicates that the Council has significant work ahead prior to developing any growth strategy, as I have noted earlier in comments relating to Mr Rademeyer's evidence. The 2.2km radius circle shown in Mr Phillips Appendix A diagram 2 would suggest significant urban sprawl to me.
122. **MR** Phillips suggests in paragraph 3.46 of his evidence, that Morrinsville will grow "along SH26" to the proposed line within 20 years. In paragraph 3.43, he suggests that future development would be mixed use, providing for parks and recreation amongst other things. As noted earlier in this evidence, such types of uses are appropriate in the vicinity of overhead power lines and in my opinion could be readily built into future planning for this area.
123. **IN** his paragraph 3.48, Mr Phillips appears to advocate ribbon development along State Highway 26. In planning for urban expansion, the efficiency of the State Highway would need to be taken into account.

EVIDENCE OF BRIDGET GILBERT

124. **PARAGRAPH** 2.1 of Ms Gilbert's statement of evidence, where she says "*the majority of the proposed transmission line is located within the Rural Zone*", requires correction. The transmission line is entirely within the Rural Zone in the Matamata-Piako District Plan.
125. **IN** paragraph 2.10, in relation to a discussion of the advice in the 1992 LA4 Landscape Study, Ms Gilbert notes that there is "*no specific consideration given in this assessment report to the introduction of high voltage transmission lines into this landscape unit*". Both Ms Gilbert, and the LA4 report, overlook that the unit already contains a high voltage transmission line which the proposed line closely follows.
126. **IN** her paragraph 3.2, Ms Gilbert does acknowledge this line (the ARI-PAK A line), but in paragraph 3.3 she opines that the presence of the existing line does not "*provide a context for the proposed line*". She goes on to say that the two lines

cannot be compared as “*apples with apples*” because of their significant difference in height, scale and bulk.

127. **WITH** respect, comparison of the lines is not relevant when considering contextual matters. There is no disagreement that the proposed line is much larger than the existing line, but any assessment of effects must take into account the existing lawfully-established environment (as well as what the Plan allows), and the ARI-PAK A line does exist, and would continue to exist but for the new proposed line.
128. I largely agree with Ms Gilbert’s comments on the mitigation options set out in her paragraph 5.16. In particular, I note that the roadside planting and riparian planting on Mt Misery hillsides is largely compatible with retaining open space in the vicinity of the transmission line, although it will require a comprehensive approach, working with landowners beyond just the easement area. If urban growth does take place in the future to the west of Morrinsville, the same principles could be built into an urban design based growth strategy.

EVIDENCE OF JOHN OLLIVER

129. **IN** his paragraph 11, Mr Olliver refers to “Transpower New Zealand Ltd North Island Grid Upgrade Project: Notices of Requirement and Resource Consent Application Documentation” dated 30th April 2007. The resource consent applications were lodged slightly later in the process, and the reference is therefore incorrect.
130. **IN** his paragraph 15, Mr Olliver states that the project includes an “*underground connection with Pakuranga substation rather than Otahuhu as originally proposed*”. In fact, both connections are part of the project.
131. **IN** paragraph 45(a), Mr Olliver concludes that the proposal does not represent sustainable management because “*it fails to protect natural and physical resources needed to meet the reasonably foreseeable needs of people and communities, including Waipa residents*”. He then suggests that the District has “*diligently managed and protected*” outstanding natural landscapes and features.
132. **MR** Olliver is entitled to make his own comments, and as planning adviser to the Council, I would expect that he would support the methods used to date.

However, in my opinion, while the current district plan has identified “Special Landscape Character Areas”, these landscapes have not been particularly well-protected by the current planning regime.

133. EVEN in the period that the Transpower study has proceeded, numerous buildings and access roads (usually of a rural-residential nature but also recreational buildings) as well as visually-significant farm structures and raceways²⁷ have appeared in the so-called protected areas. While I would not use that as an argument to justify this particular proposal, it is my opinion that, as a general comment, both Mr Olliver and Ms Buckland in their respective evidence are over-stating both the quality and importance of the landscapes crossed by the proposed line and the protection afforded to them in terms of the Plan.

134. IN his paragraph 45(b), Mr Olliver opines that the proposal “*fails to avoid, remedy or mitigate the adverse effects of that activity on the environment*” as the route “*directly conflicts with those resources*”. Mr Olliver seems to be suggesting that “avoid” is the only strategy that could make the project “sustainable” in his view. I note that:

- The identification in the Plan of these areas does not prevent development within them and, if not proceeding on the basis of a designation, the line would have been a discretionary activity.
- The alignment skirts the extreme edge of one of the areas (the Significant Landscape Character Area) and effects would, in my opinion, be greater if positioned just outside the area.
- The alignment crosses the other two areas identified as Significant Landscape Character Area (on both banks of Lake Karapiro, and on the western side of the Waikato River north of Arapuni) on the shortest route with the minimum number of towers and with careful placement of the towers (including their placement away from the margins of these features).
- Two of the three identified Significant Landscape Character Areas crossed by the line already contain existing transmission structures, albeit at a smaller scale.

135. IN his paragraph 46, Mr Olliver states that it is his opinion that the line is inconsistent with section 5 based on his section 6 and 7 analysis “*and the fact that*

²⁷ For example, recent significant farm raceway and water supply structures have appeared high on the eastern slopes of Maungautatari as a result of a dairy conversion.

there is an alternative route that better meets the purpose contained in section 5". Mr Olliver is elevating his opinion to the status of a "fact", which is a misuse of the term²⁸.

- 136.** In Mr Olliver's paragraph 48, he quotes from the section in Part VIII of the NOR, relating to the Part 2 of the RMA analysis and section 6(a). He does not acknowledge earlier analysis on pages 183, 187 and 192 of Part VIII, relating to effects on natural character of the Waikato River and associated lakes. Clearly, the NOR does not treat Section 6(a) as an irrelevant consideration.
- 137.** **IN** his paragraph 49, Mr Olliver further suggests that the NOR has treated section 6(a) of the RMA as an optional consideration. That is an incorrect assertion. The NOR documentation addresses section 6(a) matters as noted above.
- 138.** **THE** relevance of section 6(a) relies on determination of firstly whether (and the extent to which) the margins of rivers, lakes etc are affected, and second whether the development is "appropriate" in the context. The quote from the NOR documentation provided in Mr Olliver's paragraph 48 merely indicates that (in my opinion as author) the existing natural character is preserved. This was also covered in my first statement of evidence (2), paragraph 237, but not noted by Mr Olliver. Regardless of whether the areas where the line crosses the lake and river are identified special landscape character areas, in my opinion the use and development is appropriate in terms of section 6(a), taking into account the existing extent of natural character and the aspects of the line design I have noted in my paragraphs 133 and 134 above.
- 139.** **IN** paragraph 53, in reference to Lake Karapiro, Mr Olliver says that the overhead power line is inappropriate development. He mentions, "*the introduction of conductor cables so close to the river surface*" as well as the "*scale of the towers on either side*" as aspects that make it inappropriate. There are a number of comments I wish to make:
- The conductor cables are replacing existing ones which are being removed, albeit at a greater scale, in a less obvious location slightly to the south.

²⁸ The Chambers (1998) dictionary definition of a "fact" is "*a truth, reality or a real state of things, as distinguished from a mere statement of belief*".

- If proximity to the water surface is a relevant consideration,²⁹ the conductor cables are at a similar height to the present ones (20m compared with 19.9m at present³⁰).
- The towers are certainly larger than the present ARI-PAK A towers, but they are further from the river margins and there are fewer of them in the visual corridor of Lake Karapiro.

140. **IN** his paragraph 54, Mr Olliver points out that the eastern route option did not involve any section 6(a) considerations. While I agree with that comment, it needs to be seen in the light of the two route sections 12E and W and the outcomes of the multi-criteria analysis of the contiguous route sections 11 to 14. This analysis is fully documented in the Common Exhibits, the NOR documentation and my first statement of evidence (1). It is not appropriate to attempt a “technical knock-out”, as Mr Olliver does, on the basis of a single element of a single aspect of all those considered.

141. **AS** explained in the evidence of Mr Lister, Isthmus Group undertook a classification and mapping exercise throughout the Area, which was further refined for the Corridor stage. This covered all the local authorities, and applied consistent considerations. Mr Olliver appears to suggest in his paragraphs 57 and 60, that because Waipa District has undertaken an exercise to identify Special Landscape Character Areas this is sufficient to make them outstanding, and by implication, that the districts of those local authorities which have not undertaken this exercise should thus have been preferred.

142. **THE** identification of these areas in the District Plan was noted in the Area, Corridor and Route investigations as reported in the various reports (see Common Exhibits). However, there was considered to be no basis to elevate these areas in the analysis as Mr Olliver would wish.

143. **IN** his paragraphs 57 and 58, Mr Olliver quotes from two parts of the Waipa District Plan – a general introduction and the “*Guidelines for activities in Special Landscape Character Areas*”. One of these references suggests that “*large parts of the district*” have outstanding natural features and landscapes: the other that “*a few parts of the District have produced outstanding landscapes or landscape*”

²⁹ Other structures are, of course, closer to the surface, such as the various bridges which cross the Waikato.

³⁰ Both figures under maximum operating conditions.

features". I note that in section 1.7 of the District Plan these landscapes are described as being "*worthy of some sort of policy protection*".

- 144.** I find the District Plan to be rather ambiguous and very ambivalent about what are actually the outstanding landscapes or features. For example, the objectives and policies, to the extent that they are protective, refer only to protecting "*existing landscape character*" (RU2) "*present character*" (RU4), or "*landscape character*" (RU8), or "*landscape qualities of the scenic landscape protection corridor*" (RU10). Nowhere within, or in the explanations under, the policies in the Plan, is it indicated that the Special Landscape Character Areas are in place to protect features or areas that are outstanding in terms of section 6(b).
- 145.** **IN** his paragraph 66, Mr Olliver relies on Ms Buckland's evidence that Maungatautari should be considered as a single cohesive unit, to state that the whole of the Special Landscape Character Area is outstanding. I would generally agree with the comment about cohesiveness, but neither Ms Buckland nor Mr Olliver has explained the basis for determining the outer edge of the unit, which includes extensive typical pastoral landscape.
- 146.** **WHEN** inspected on the ground, the limits of the mapped Special Landscape Character Area cannot be readily determined: they cross roads and the landscape in a way that includes some areas and exclude others of seemingly similar character and qualities. Mr Olliver relies on the "*context of Maungatautari's wider setting*" to obscure the boundary issues, which naturally apply only at the localised level.
- 147.** **IN** terms of Maungatautari, Policy Ru4 seems to protect the present character of "*the upper slopes of Mount Pirongia and Mount Maungatautari*", with a specific clarification that this refers to "*native regenerating forest*". However, this is encased within an apparently wider policy framework involving RU2 and RU3, which identifies 3 "levels" on these features (the Upper Slopes, the Mid Slopes, and the Lower Slopes and Steep Hill Country). Protection is required under RU2, but RU3 simply sets in place "*management guidelines for development which will recognise and enhance the landscape character of each*".
- 148.** **IN** terms of the Lower Slopes and Steep Hill Country, it is clearly indicated that this is a developed landscape and the visibility of roads and power lines is specifically noted. The last paragraph of explanation states that "*the most*

*important aspect concerning placing buildings in this landscape type is to remember that it is a **rural landscape**. Urban style buildings, subdivisions or colour schemes would be inappropriate in this landscape”.*

- 149. AS** is apparent from the mapped areas (see maps 19B, 20B, Series 2, Map Book), the alignment is just within the edge of the area included within the Special Landscape Character Area. In my opinion, visual effects would be greater if the alignment was outside this area. Similarly, the setting of the iconic feature of Maungatautari which Mr Olliver (in his paragraph 68) relies on, would in my opinion, be affected to a greater extent by an alignment which avoided the Special Landscape Character Area, than with the current alignment.
- 150. IN** his discussion of the “Finite Characteristics of Natural and Physical Resources” (paragraph 79), Mr Olliver expounds the view that the areas within the Special Landscape Character Areas are a finite resource. I agree with him in terms of areas which contain unmodified indigenous vegetation. I also agree with him to the extent that typical development such as houses, roads and other structures, once in place, become part of a landscape. However, other parts of the landscape, particularly working rural landscapes, are essentially dynamic and change with the removal and replanting of vegetation, new tracks and tracks that are reinstated back to farmland, paddock configurations and sizes, etc.
- 151. BOTH** Mr Olliver and Ms Buckland suggest quite strongly that new buildings (including substantial rural-residential dwellings and all farm buildings)³¹ can be, and have been, absorbed within the Special Landscape Character Areas without affecting whatever outstanding character they may have. Given this, their opposition to the proposed alignment appears to lack detailed consideration of the actual impact of the proposed line and the prospects for mitigation.
- 152. I** consider Mr Olliver’s suggestion, in his paragraph 79, that the proposed line will result in a permanent loss of what he calls “*the finite natural landscape values of the working rural environments*” within the Special Natural Character Areas, when other development and buildings will not, somewhat unbalanced.

³¹ Waipa District representatives advised (at a meeting on 25.08.06) that over 300 resource consent applications have been considered within the Significant Landscape Character Areas over the last few years and none have been declined, although many had been subject to conditions and others may not have been made because of the effect of the provisions.

153. I also consider his suggestion, in the same paragraph, that “*this problem is likely to be exacerbated if the line sets a ‘baseline’ against which to assess future development*”, to be baseless. As I would expect Mr Olliver as an experienced planner to understand, a designation is a specific mechanism to address specific network utility (or other) requirements. There is no basis to suggest the proposed line will become a baseline against which to assess any other type of development, or indeed other overhead power lines.
154. **THE** Zone Statement for the Rural Zone (Clause 2.1.4) refers to “*Public Works which are not Designated*” and states, “*as far as possible and practicable public works which are not “designated” in the District Plan will generally be required to comply with the rules for the Zone in which they are located*”. This is not mentioned in Mr Olliver’s evidence, but in my opinion it provides acknowledgement that large infrastructure which exceeds the Plan’s permitted activity provisions (and include a range of other issues) will probably proceed by way of designation.
155. **IN** his paragraph 96, Mr Olliver again advocates for the eastern route option on the basis of “*adverse environmental effects (such as visual effects)*” which, as he sees it, conflict with a small number of policies in the Waipa District Plan. He has clearly not undertaken an evaluation of the eastern route itself on a comprehensive basis, as sustainable management considerations would require, and he has not examined the objectives and policies of the district plans in the alternative areas (route sections 11E to 14E) that the line would cross.
156. **OBJECTIVE** PW2 that he refers to, is “*to ensure that any likely adverse effects on the environment of public works and utility services are avoided or mitigated to the extent possible and practicable*”. In my opinion it is incorrect to suggest, on the basis of this policy, that the line location (which has been arrived at on the basis of careful and comprehensive analysis) should be placed elsewhere, when a comprehensive assessment of options has identified the proposed location.
157. **IN** his paragraphs 97 and 98, Mr Olliver discusses the activity status of utility infrastructure within the Special Landscape Character Areas. Working backwards, he places considerable weight on the fact that utilities are not controlled activities in the Special Landscape Character Areas (whereas other buildings are) as a basis for his statement that “*utility structures are likely to be incongruous in these landscapes*”. The reason for activities that do not meet

permitted thresholds being discretionary is not stated in the Plan, and so Mr Olliver's evaluation appears to be speculative. I would suggest two equally valid alternative suggestions for the discretionary status:

- Some utility structures, such as power lines, are not particularly amenable to the types of control (over colours, materials or detailed locations) that are retained in the Plan for other structures
- The Plan (as noted in paragraph 154 above and also in Policy PW4) anticipates the use of designations for such activities.

158. I note in several places in Mr Olliver's evidence (for example paragraphs 60 and 90) statements that imply criticism of Transpower's acceptance of these rules and other Plan provisions during the Plan preparation process. The submission process was many years ago now, well before the recognition of the need for a new major power line that might cross the district. Just because Transpower did not challenge the Plan's provisions at the time, does not mean that they cannot use any of the methods under the RMA to seek to upgrade the national grid.

159. IN paragraphs 99 to 101, Mr Olliver identifies and applies the criteria that apply to utility services which are not permitted activities (ie, which are discretionary activities). While I accept that such criteria are part of the Plan and therefore generally relevant under Section 171, the extent to which they are specifically relevant (as the activity is not a discretionary activity, but is being introduced by way of designation) is questionable. I consider that Mr Olliver is overstating the importance of these criteria in order to provide a basis on which he can again advocate for the eastern route.

160. IN his paragraphs 102 to 104, Mr Olliver provides his assessment of the effectiveness of the provisions of the Significant Landscape Character Areas. He paints a picture of "*low-density nature of development*" in the area. Nevertheless, over the past four years, I have observed quite extensive new development in some parts of the area. I accept that this development is generally more harmonious with the rural landscape than it would have been without the control over design and appearance, but nevertheless it has occurred.

161. IN his paragraph 115, Mr Olliver again expounds his theory of a new "baseline" and consequent developer pressure. I have commented on this earlier in

paragraph 153 of this evidence. However, he goes further and states that Transpower and its advisors have applied similar logic in assessing the environmental effects of the proposed alignment.

162. I consider that Mr Olliver is confusing two quite different things:

- developer pressure which usually is experienced by planners along the lines of “*you allowed X to happen there so why can’t I do Y here?*”, and
- assessment of effects on the environment taking into account established activities.

163. **THERE** is a fundamental difference, in my opinion: the second being the legitimate assessment of effects using best-practice methods, and indeed methods that are condoned by the Courts through a number of cases.³² Mr Olliver appears to acknowledge this later in his paragraph when he says he has based his assessment on the existing environment. The first is simply the type of pressure that is applied to Councils and which they can easily withstand if the Plan is robust enough (and if there is sound decision-making).

164. **IN** his paragraphs 122 and 123, Mr Olliver notes the method by which the alignment, which is the basis of the NOR, was arrived at. He states that in his opinion, “*the final stages of the route selection were flawed*”, without saying why. Mr Olliver relies on Mr Hassell’s evidence. I have made comments on that evidence in my rebuttal statement (1), and it is fair to say that Mr Hassell does not find any stage of the process flawed. Rather, he seeks some minor clarification and I have provided that.

165. **IN** Mr Olliver’s paragraph 126, comparing the Eastern and Western Route options for section 11, 12 and 13, he says that he has applied a “*planning evaluation*” relying on section 6(a), 6 (b) and parts of section 7. Mr Olliver’s analysis is relatively simplistic (for example he does not acknowledge other section 6 matters such as 6(e) or 6(f)) and it also raises the question of weighting of different aspects relating to the line project.

³² Indeed Hawthorn Estate Ltd vs Queenstown Lakes District Council goes slightly further and allows consented activities which are likely to be developed to be taken into account as part of the existing environment.

166. **IT** is for that reason that a range of assessments were carried out as part of the route options analysis (ie sensitivity analyses) as described in my first statement of evidence (1). It is my opinion that that method of route identification was thorough and reached an outcome which supports the Western route and that the “technical knock-outs” which Mr Olliver endeavours to apply, result from overstatement of the values which the RMA identifies as being of national importance, compounded by an overstatement of the adverse effects of the line in those contexts.
167. I have commented on some specifics in Mr Olliver’s paragraphs 129 to 131 in my rebuttal evidence (1).
168. **MR** Olliver’s paragraph 137 contains a complaint that has been expressed to Transpower in the past (eg, at a meeting on 25.08.06) that Transpower and others (such as quarry activities) are targeting areas with few people (eg the Significant Landscape Character Areas) to establish “undesirable” activities. Mr Olliver finds it “perverse” that the “landscape outcome” (ie an area with fewer houses and roads) is a criterion favouring the placement of the line, because it avoids conflict with people and properties.
169. **IN** my opinion, this demonstrates a lack of balance in Mr Olliver’s views. I would agree with Mr Olliver if the areas were truly outstanding and/or natural, but an inspection of the areas shows them to be quite developed (roads, houses, farm buildings, power lines). The initial corridor and route identification processes as far as possible excluded areas which were highly natural and outstanding, and areas which were highly populated (amongst other considerations).
170. **BETWEEN** those two types of areas which were avoided because they were highly natural or highly developed, are areas which may be subject to further evaluation, and the identification and analysis of options proceeded on that basis. Mr Lister’s mapping and analysis identified similar visual, landscape and natural character values and qualities across both routes. In response to Mr Olliver’s paragraph 138, I could accept the proposition that where one district has chosen to identify areas of outstanding landscapes or natural features in its district plan and another has not, and all other things are equal, this could be a basis to choose one district’s area over the other. In this case however, there were many other relevant aspects which also required consideration and which were not equal. Overall, the analysis resulted in the Western route being favoured.

171. I have tried to follow the logic of Mr Olliver's paragraph 145, but have failed to understand the basis on which he has chosen to disagree with my paragraph 82. My assessment is based on *"the existing environment; that includes the ARI-PAK A line"*, apparently the same as Mr Olliver's. I take into account the presence of the existing line which will be removed and replaced by the larger line. The incremental effect will be less than if the existing line was not there: thus I have concluded that there is *"a reduction in effects that would otherwise have occurred"*.
172. I also do not consider it correct for Mr Olliver in his paragraph 145 to suggest that, on the basis of my assessment of effects "after the event" (as in my paragraph 82), that the existence of the ARI-PAK A line has influenced route selection. How the presence of the ARI-PAK A line was taken into account in the route identification process is set out clearly in my first statement of evidence (1) at paragraph 70.
173. I agree with Mr Olliver's paragraph 146.

EVIDENCE OF MARY BUCKLAND

174. **MS** Buckland does not acknowledge her involvement in the process which led to the NORs in her introductory section. Later in her evidence (paragraph 11.1) she mentions that she *"edited"* Mr Lister's methodology report *"and added a few comments"* in May 2004. This suggests an informal process.
175. **MS** Buckland was formally engaged by MWH as one of two reviewers of the landscape methodology early in the project. Professor Swaffield was first engaged, but this was on the basis that he would not become engaged in any hearings or court appearances. At that stage MWH engaged Ms Buckland as an additional expert reviewer. It is correct that she added only a few words to Mr Lister's draft. In my role as planner and technical team leader, I took that to mean her complete acceptance of the methodological approach. Ms Buckland undertook her review in parallel with Professor Swaffield's review.
176. **IN** her paragraphs 7.1 and 7.2, Ms Buckland sets out the approximate location of the proposed 400kV line and notes that the line runs through identified Special Landscape Character Areas for a total of 8.5km within the district. She does not

acknowledge that what she measures as 5.5km within the Maungatautari area is only just within the edge of the area (and emerges outside the mapped area over part of the distance) so that the measured length within the Special Landscape Character Area is actually somewhat less. Later, in her paragraph 11.20, that *“the 400kV alignment runs along the edge of the areas identified as outstanding”* is acknowledged.

177. **IN** her paragraphs 9.6 and 9.8, Ms Buckland identifies power lines as particular structures which, if introduced, will *“undermine the integrity of the District Plan”*. She clearly feels so strongly about this that she expects the proposed line, if approved, to require a review of the Plan’s provisions. In my opinion, this is a significant overstatement both of the Plan’s provisions and the situation *“on the ground”* in the vicinity of the line.
178. **FIRSTLY**, the line is not being *“introduced”* into an area where there is no line (except in relation to the Arapuni Crossing³³). Rather, it is replacing an existing line, albeit at a greater scale but, in my opinion, in an improved location in visual terms when crossing Lake Arapuni as well as bypassing Horahora and with fewer towers set at greater distance from the Lake Karapiro crossing.
179. **SECONDLY**, discretionary activity status is not usually taken to equate to *“development of this type (being) specifically discouraged by the Plan”*. Rather, the Plan requires an assessment in terms of section 104 matters for discretionary activities which are, in my opinion, not as *“discouraging”* as the non-complying activity matters.
180. **THIRDLY**, obtaining an approval to proceed does not automatically result in the integrity of a Plan being undermined. Both Ms Buckland and Mr Olliver have drawn a strong distinction in the Plan between dwellings and other structures which can proceed on the basis of controlled activity status, and power lines which are not permitted being discretionary. I have addressed this in my paragraph 157 and I consider that nothing particularly turns on that point. In my opinion, the ongoing construction of new dwellings in the areas is a much greater challenge to the integrity of the Plan and is a matter that the controlled activity status can do little about.

EVIDENCE OF AARON COLLIER

181. **MR** Collier states in his paragraph 4.11 that “*because the proposal does not comply with Rule 10.4.2 (a) ...the Notice of Requirement, (sic) precedes (sic) overall as a discretionary activity under Rule 10.4.2 (c)*”. Mr Collier has undertaken a similar exercise to the exercise that I undertook in preparing the NOR (Part VIII, section 3.9, pages 51 to 54) where I reviewed the Plan rules to establish what the status of the activity would be if it were not progressing on the basis of a Notice of Requirement.
182. **MR** Collier’s evidence does not demonstrate that he understands that the NOR process is included in the RMA for a specific reason which is associated with the nature of network utilities, and that takes them outside the normal provisions of the district plan. While the rules of the relevant plan, along with all the other provisions are matters to which particular regard must be had in terms of section 171 of the RMA, it is my understanding that as the particular status of the activity in terms of plan rules does not apply (see section 77B which refers to types of activities and consents), the designation activity should not be evaluated as having any particular status.
183. **IN** a roundabout way, in paragraph 4.12 and 4.13, Mr Collier acknowledges the permitted baseline for public utilities. This information was set out in the NOR to the South Waikato District Council, and it was made clear that the line is well in excess of the permitted baseline in terms of heights of structures and capacity.
184. **MR** Collier places reliance on the methods in sections 10.4.1 of the Plan, and indicates that they are “*consistent with the effects-based approach of the Plan and the use of non-regulatory methods*”. As I read these, they apply to local networks and the need to integrate servicing with land use and development. They have little relation to the national electricity grid. My own assessment of the relevant objectives and policies (first statement of evidence (2), paragraphs 229 to 230 and Attachment SJA 2.1, pages 177 to 182), acknowledges an inconsistency between the Plan’s policy on visual amenity and the proposed line. However, the proposed line is not inconsistent with a range of other policy intentions.

³³ And in this location, following the existing alignment would have crossed a greater length of Special Landscape Character Area in a more “*open*” location, with greater effect on the Pohara Marae, including continuing to sever the marae from the urupa and with a resultant greater impact on the nearby ignimbrite cliffs (see also Ms Lucas’ evidence).

- 185.** IN paragraph 5.4, Mr Collier refers to the Waikato Regional Policy Statement provisions relating to accelerated erosion. He also mentions cumulative effects. He appears to imply that the project may be an *“inappropriate land use practice”* resulting in such effects, but does not explain where or how this may occur. The NOR and applications contain information about the scale of ground disturbance involved, and mitigation provisions which are largely related to the construction management plan and site works plan. I disagree with Mr Collier’s implications about the potential effects of earthworks³⁴.
- 186.** IN his paragraph 5.6, Mr Collier quotes an issue and objective from the Regional Policy Statement, again implying that the alignment is a *“land use practice”* which may affect soil health and reduce soil versatility and productivity. In my opinion, Mr Collier draws a “long bow” in suggesting that the line will affect soil productivity in the District to the extent that the proposal would be contrary to this policy. Minor effects on productivity have been acknowledged in the documentation of the NOR. I note that Mr Collier does not claim that soil health or versatility would be affected.
- 187.** I note Mr Collier’s discussion on Part 2 of the RMA in his section 6. He promotes use of existing corridors or undergrounding as *“alternatives which could be considered by the applicant”* and *“which could achieve a nationally important outcome of providing transmission without the significant adverse environmental effect (sic) resulting from the current proposal”*. It seems likely that Mr Collier has not read much, if any, of the background documentation in identifying the alternatives he promotes. As a result, his conclusions cannot be considered particularly credible.
- 188.** IN his paragraph 6.8, *“it appears”* to Mr Collier that forestry plantations were one of the reasons for siting the line where it is in the southern part of the district. Had he read the relevant material it would have been clear to him that while land use was taken into account, the location was the outcome of careful analysis of a wide range of aspects. The changing landuse in the south part of the district had not commenced at the time of route identification. The conversions began to occur after Transpower had released the Route report. This is fully acknowledged in the documentation.

³⁴ I note that the district has recently experienced earthworks due to forest/farming conversion on an unprecedented scale, in my experience. Consents were not required from either the district or regional councils for these works.

- 189.** **IF** Mr Collier is saying that “*effects on people and communities are... likely to increase*” simply by virtue of there being farmers now living in the area, I would agree. However, given that the landuse change is occurring in close parallel with the development of the overhead line, the increase is at the low end of impact and the opportunities for mitigation of effects from new farm planning, taking account of the line design, is considerable through, for example, location of plantings, paddock boundaries and raceways, and location and orientation of dwellings.
- 190.** **IN** his paragraph 6.9, in relation to effects on the Waikato River, Mr Collier suggests that there may be significant section 6 (a) effects amounting to “*interrupting the naturally flowing length of this feature*”. Assuming Mr Collier is not using a figure of speech, I comment that towers are set well back from the riverbanks and do not in any way interrupt the flow. If Mr Collier is speaking figuratively, I would disagree with his conclusion relating to “significant adverse effects”.
- 191.** **IN** his paragraph 7.2.2, Mr Collier states that on his site visit he observed two airstrips affected by the line. Unfortunately he does not say which ones they are. Mr Nichols’ first statement of evidence and his rebuttal evidence refer to two airstrips in South Waikato, and notes that one is used only for recreational purposes.
- 192.** I accept Mr Collier’s comment in his paragraph 7.2.3 that farms are workplaces. He refers to an unsourced impression that no workplaces will be “*placed within the designated area*” and seeks clarification. It is my understanding that the use of the term “workplaces” that is intended applies to buildings where, in particular, equipment is to be used (dairy sheds, tool sheds, etc). While it is my understanding that all standards will be met, the intention is to provide an additional precautionary buffer in terms of people spending a long period under the line and/or use of electrical or electronic equipment, water systems etc.

EVIDENCE OF DI LUCAS

- 193.** **IN** her paragraph 20 Ms Lucas repeats the words of the South Waikato District’s Mayor from the District’s 2005 submission to Transpower, which set out a number of effects identified by that person and made comments on behalf of the community. However, in the subsequent paragraphs she acknowledges the substantial analytical work undertaken. I have commented further on specific

assertions relating to paragraphs 21 to 27 in my statement of rebuttal evidence (1).

- 194.** **IN** paragraph 28 of her evidence, Ms Lucas quotes my first statement of evidence (2), paragraph 307 and disagrees that effects of the line through rural South Waikato would be “very localised”. My paragraph 307 in fact relates to my assessment of the Brownhill Road substation development (see heading, page 71), not the overhead line in South Waikato, and it is quite incorrect of Ms Lucas to criticise my opinion on that basis.
- 195.** **MS** Lucas refers to “*Mr Brown’s advice (April 2007)*” in her paragraph 31. No report or advice from Mr Brown has been made available to Transpower or its consultants.
- 196.** **IN** her paragraph 41, Ms Lucas refers to Maori land ownership and associations with local landscapes. Avoiding or minimising effects on Maori values and Maori land was a part of the multi-criteria decision methodology at all stages of the ACRE process as explained in my first statement of evidence (1) (paragraphs 43, 48, 56). Reviewing the information applied in the decision methodology, the route eventually chosen in the South Waikato had less impact on the identified values (including land ownership) than the range of alternatives considered.
- 197.** **IN** her paragraph 48, Ms Lucas says it is unclear how by the Route stage, I was able to conclude that areas with “*highest landscape values*” had been excluded. To understand the process, it is necessary to review the documentation of the Area, Corridor and Route methodology, which it appears that Ms Lucas has not done. In particular, areas were mapped by Mr Lister under three categories, and those with the highest values in most if not all categories were able to be excluded at the Area and Corridor stages.
- 198.** **MS** Lucas takes me to task for stating, in relation to electrical and magnetic field exposure, that “*no workplaces are to be placed within the designated area*” (paragraph 71, first statement of evidence (2)), and failing to acknowledge that all farmland is a workplace. Coming from a farm myself, I am fully aware that people work on farms. As I have explained in relation to Mr Collier’s similar comments (paragraph 192 above), my use of the term “workplace” in the context was intended to convey a particular type and potential duration of work, usually involving buildings and equipment.

- 199. MS** Lucas discusses, in her paragraphs 79 and 94, the Arapuni area. She acknowledges that Arapuni settlement owes its existence to hydro development. She somehow paints a picture of the settlement being contained by structures to the south, but having a “protocol” of no structures to the north. With respect, from the settlement area, hydro structures and transmission lines are not obvious. One of the reasons why a southern crossing was not favoured was that the existing hydro structures around the river, in particular the power house, have become historic places and the dam and swing bridge in the vicinity also have high recreational values.
- 200. I** thus disagree with Ms Lucas when she suggests in her paragraph 80, that an alignment of the proposed line would be more appropriate in that vicinity. Following this to its conclusion, the alignment would have crossed the river to the south of Arapuni settlement and followed the existing alignment of the ARI-PAK A line, running close to the cliffs at the foot of Maungautatari and close to Pohara marae, and continuing to sever the urupa from the marae. In my opinion, this would have been inappropriate.
- 201. IN** terms of Ms Lucas’ criticism of my opinion of the relationship of section 6(a) and the Arapuni crossing (paragraph 81), it is correct that I do not rate the natural character of the Arapuni River crossing area particularly highly, due to the range of structures, exotic plantings and formal shelter belts in the vicinity. In my opinion, given the setbacks of the towers from the river margins and the short line crossing of the river at right angles to its flow, the crossing is not inappropriate. In this respect, I am more in accordance with Dr Steven’s views than those of Mr Lister (see paragraphs 53 to 55, Dr Steven’s evidence in chief).
- 202. MS** Lucas says in her paragraph 87, that I do not recognise the full length of the recreational trail that is planned *“and hence does not recognise the potential effects on that experience”*. I do not know how she has been able to draw either inference. My opinion is in accordance with that of Mr Bamford that the experience of the trail will be little affected by the river and replacement lake crossing proposed.

EVIDENCE OF MURRAY PARRISH

Telecommunications Activities

203. **MR** Parrish in his paragraph 5.3 seeks that the designation, if granted, should clearly state that its purpose is limited to the supply of telecommunications lines for the sole purpose of the control of supply of electricity by Transpower. This is the ultimate paragraph of a series under the heading “Use of Lines for Telecommunications’ Purposes”, in which it is implied that Transpower has the intention of using the lines for conveying third-party telecommunications for “added value” (paragraph 5.1).
204. **THE** nature of the proposed project or work is described in the form of the Notice of Requirement for each district and refers to “*the construction, operation and maintenance...of a 400kV-capable transmission line....and ancillary activities*”. In my opinion, that does not allow for third-party telecommunications which are not ancillary to the transmission purpose of the designation.
205. I do not consider it necessary for the designated purpose to be altered to exclude activities which are not related to the specific purpose³⁵. I have not come across any designations that are expressed in that way.

Section 93/94 Considerations

206. **UNDER** the heading “reverse sensitivity” in paragraphs 6.1 to 6.5 of his evidence, Mr Parrish discusses and then appears to seek a limitation on Transpower’s future ability to participate in processes relating to possible future consent applications. This is clarified in Mr Parrish’s paragraph 8.5 (a) where the specific relief of “*a restriction on the ability for Transpower to be considered an affected party as summarised in paragraph 6.5 [of that evidence] above*”, is sought as a condition.
207. I have no comment on whether Transpower could or should reach such an agreement as a “side agreement” outside the RMA. Such arrangements are in my experience quite frequently entered into.

³⁵ In fact, Mr Parrish seeks to limit the telecommunications purpose to “control of the supply of electricity”. My understanding is that the telecommunications information transmitted has a broader role than that described.

208. HOWEVER, I would not see it as appropriate for such a limitation to be a condition of a designation as appears to be sought. Such a condition would override the provisions of the statute and in my opinion this would not be reasonable.

Review Condition

209. IN paragraph 8.5(e) of his evidence, Mr Parrish seeks a condition allowing a review of “*consent conditions*” to “*allow for potential impacts as a result of changes in technology or scientific understanding*”. It is not completely clear whether Mr Parrish is referring to the designation or the applications for consent.

210. IF Mr Parrish is seeking a review condition relating to the applications for regional consents, that would be reasonable, although it is unlikely to be needed as all consents sought at this stage relate to the construction of the overhead line and one of the underground cables. These are short-term activities of finite impact and are unlikely to be affected by technology or scientific understanding over the period they are effective. The draft conditions of consent proposed by Transpower nevertheless include a standard review clause.

211. HOWEVER, there is no ability that I am aware of to impose a review clause or condition on a designation. My understanding of the designation procedure is that once the works provided for in the designation have been undertaken and the activity is in place, then it may be “rolled over” into each successive district plan (or at least every 10 years). This gives any person the right to lodge a submission seeking a change to the designation or to vary a condition. Such a procedure could allow for changes to conditions which may address Mr Parrish’s concerns.

EVIDENCE OF SALLY STRANG

212. MS Strang, on behalf of Hancock Forest Management (NZ) Ltd refers to some similar matters to Mr Parrish. In paragraph 6.5(c) of her evidence she seeks a similar condition relating to review of conditions relating to future technology or scientific understanding.

213. I make the same observation on Ms Strang's suggestion as I have in respect to that of Mr Parrish, in my paragraphs 209 to 211 above.

Sylvia Allan

17 June 2008

ATTACHMENT SJA R2.1

**Example of Transmission Line
Infrastructure Integrated into
Urban Environment
(Didcote, UK)**

ATTACHMENT SJA R2.2

**Consent Order –
Determination of Whitford
Rural Zone Boundary on
Haunui Farm**

ATTACHMENT SJA R2.3

**Map Showing Relationship of
Metropolitan Urban Limits and
Various Zones in the Vicinity of
Brownhill Substation**

ATTACHMENT SJA R2.4

**Policies P1 to P3 and Associated
Explanations from the Matamata-Piako District Plan,
Section 3.3.2, Land and Development,
as Referred to in Evidence of Gary Orbell,
in Paragraph 97 of this Evidence**