

IN THE MATTER OF The Resource Management Act 1991

AND

IN THE MATTER OF appeals under clause 14 of the First Schedule to the Resource Management Act 1991 concerning proposed One Plan (Combined Regional Policy Statement and Regional Plan) for the Manawatu-Wanganui Region.

BETWEEN **TRUSTPOWER LIMITED**

ENV-2010-WLG-000145

AND **OTHER PARTIES**

Appellants

AND **MANAWATU-WANGANUI (HORIZONS)
REGIONAL COUNCIL**

Respondent

**STATEMENT OF EVIDENCE OF ROBERT JOHN SCHOFIELD
ON BEHALF OF TRUSTPOWER LIMITED
RELATING TO THE PROPOSED ONE PLAN LANDSCAPE PROVISIONS**

17 February 2012

Introduction

- i. My name is Robert John Schofield, and I am a Director of Boffa Miskell Limited, a national firm of consulting planners, ecologists and landscape architects. I hold the qualifications of BA (Hons) and Master of Regional and Resource Planning (Otago). I am a Member of the New Zealand Planning Institute, and a Past President (1998-2000). I have been a planning consultant based in Wellington for over 27 years, providing consultancy services for a wide range of clients around New Zealand, including local authorities, land developers, and the infrastructure and power sectors.
- ii. My experience includes the writing and preparation of Plan Changes for Councils and private clients, as well as work on the preparation of District and Regional Plans, including formulating provisions for infrastructure and energy development and distribution. I have also worked for several generators, including TrustPower Limited ('TrustPower'), on analysing district and regional plans and policy statements in respect of consistency with the RMA and relevant planning instruments. As an editor for the Quality Planning website, I have also authored a number of guidance documents for the Ministry for the Environment, including, recently, guidance on the implementation of the National Policy Statement on Renewable Electricity Generation.
- iii. In this matter, I was commissioned by TrustPower in 2007 to prepare its submissions on the Manawatu-Wanganui Regional Council's (the 'Regional Council' or 'Council') Proposed One Plan ('One Plan' or the 'Plan'), and to present planning evidence on its submission points to the Council hearings in 2008-2009. I subsequently assisted TrustPower in its appeal and s274 notices on a range of issues arising from the Council's decisions, and have been involved with a number of mediation meetings and with an expert conference of planners on the landscape topic on 19 January 2012.
- iv. In preparing my evidence, my approach was to:
 - Consider the provisions of the Proposed One Plan of consequence to TrustPower, having regard to the purpose and principles of the

Resource Management Act 1991 ('RMA' or 'Act') and other relevant national policies and strategies; and

- Recommend appropriate changes that would give effect to the amendments requested by TrustPower in a manner that is consistent with the RMA and my duties as an independent planning expert.
- v. I have read the Code of Conduct for Expert Witnesses issued as part of the Environment Court Practice Notes. I agree to comply with the code and am satisfied the matters I address in my evidence are within my expertise. I am not aware of any material facts that I have omitted that might alter or detract from the opinions I express in my evidence.

1 Scope of Evidence

- 1.1 This evidence provides my independent planning opinion on a number of specific matters in which TrustPower has an interest and which remain in dispute with the Regional Council or other parties.
- 1.2 Specifically, my evidence addresses Outstanding natural features and landscapes (Chapter 7 and Schedule F) on behalf of **TrustPower** as an appellant and as a section 274 party to the appeals of Meridian Energy Limited and Genesis Power Limited.
- 1.3 In this matter, I have worked with Frank Boffa, a Landscape Architect at Boffa Miskell, to understand the implications of the One Plan provisions as they relate to the upgrading (known in the energy sector as 'repowering') of wind farms and the potential for significant adverse cumulative effects.
- 1.4 My evidence relies on the evidence of Clayton Delmarter, Manager Major Projects (Acting), TrustPower, and the evidence of Frank Boffa of Boffa Miskell Limited, prepared on behalf of TrustPower.
- 1.5 In preparing my evidence, I have also reviewed a range of relevant documents, including:
- (a) The s42A reports by Regional Council's advisers on landscapes and infrastructure;

- (b) The evidence of Clare Barton, planner, and Clive Anstey, landscape architect, for the Regional Council;
- (c) The Proposed One Plan, as notified and as amended by the decisions of the Council on submissions ('decisions version');
- (d) The decision of the Environment Court on the Motorimu Wind Farm [Motorimu Wind Farm v Palmerston North City Council W067/08];
- (e) The decision of the Board of Inquiry on the Turitea Wind Farm;
- (f) The National Policy Statement on Renewable Electricity Generation, and the accompanying implementation guidance;
- (g) The National Environmental Standard for Electricity Transmission Activities; and
- (h) Guidelines for Local Authorities: Wind Power, Energy Efficiency and Conservation Authority, August 2004.

1.6 I would note that the evidence of Ms Barton provides comprehensive overviews to the preparation of the policies on landscape in the Proposed One Plan, with which I do not dispute. I therefore do not intend to provide any background except where particularly pertinent to my opinions and recommendations.

1.7 The specific changes to provisions I am recommending as appropriate and necessary are provided in **Appendix 2** of this evidence. These proposed amendments are shown as tracked changes, and, where appropriate, build upon the changes that have been agreed by the parties since the Council's decisions.

2 Provisions for Outstanding Natural Features and Landscapes

2.1 Generally, TrustPower supports the changes that have been agreed to by the parties as a result of mediation to date. However, the few changes that have been agreed do not address the fundamental concern I share with TrustPower that there is a policy 'gap' for consideration of the effects of the repowering of wind farms, and that there is a lack of guidance and certainty

in respect of the management of upgrades or 'repowering' of already established wind farms in areas identified as an ONFL.

2.2 TrustPower's primary concern is that, against the background of the Turitea decision, as well as the Council's decision to introduce Policy 7-7(aa), any repowering of the Tararua Wind Farm would be considered against the position that the Ruahine/Tararua Skyline ONFL is visually 'saturated', thus setting a very low threshold for adverse cumulative effects. Potentially, even minor effects of one activity could be determined to trigger the threshold.

2.3 In this section of my evidence, I will address the following plan provisions that remain in dispute by TrustPower:

- (a) Policy 7-7 and associated explanation in regard to significant adverse cumulative effects in ONFLs;
- (b) The definition of 'upgrade' in the Glossary section of the Plan; and
- (c) The relationship of Objective 7-2 and Policy 7-7 with Chapter 3 in regard to renewable electricity generation, particularly Policies 3-3 and 3-4.

2.4 In brief, in my opinion, the current provisions do not provide sufficient guidance and certainty to give appropriate effect to section 7(j) of the Act, to the National Policy Statement on Renewable Electricity Generation and, ultimately, to the purpose of sustainable management. Given the substantial sunk investment, and the investment required for the future repowering of the Tararua Wind Farm (which is nationally significant infrastructure), and the significant benefits that such an upgrade would yield, I would contend that such guidance is essential.

Current Provisions for Outstanding Natural Features and Landscapes

2.5 Policy 7-7 is one of two policies for achieving Objective 7-2, which itself is the only objective in the Proposed One Plan in regard to ONFLs. As amended by Council's decisions Objective 7-2 reads –

Objective 7-2: Outstanding natural features and landscapes, and natural character

- (a) *The characteristics and values of:*
- (i) *the Region's outstanding natural features and landscapes, including those identified in Schedule F, and*
 - (ii) *the natural character of the coastal environment, wetlands, rivers and lakes and their margins*
- are protected from inappropriate subdivision, use and development.*

- 2.6 Policy 7-7A sets out the requirements for assessing ONFLs, while Policy 7-7 sets out the outcomes to be sought in managing the effects of all subdivision, use and development on ONFLs in the Region. The explanation to the provisions for ONFL includes the following statement:

"However, to aid local decision-making, regional policies provide guidance for managing the effects of subdivision, use and development of land that may affect outstanding natural features and landscapes..."

- 2.7 As modified by the Council's decisions, Policy 7-7 reads as follows:

Policy 7-7: Regionally outstanding natural features and landscapes

The natural features and landscapes listed in Schedule F Table F1 must be recognised as regionally outstanding. All subdivision, use and development directly affecting these areas must be managed in a manner which:

- (aa) *avoids any significant adverse cumulative effects on the characteristics and values of those outstanding natural features and landscapes, and*
- (a) *except as required under (aa), avoids adverse effects as far as reasonably practicable and, where avoidance is not reasonably practicable, remedies or mitigates adverse effects on the characteristics and values of those outstanding natural features and landscapes.*

- 2.8 Policy 7-7(aa) was inserted as an outcome of Council's decisions, and has been described as providing a statement that 'enough is enough' in respect of the further development of winds farms within the Ruahine/Tararua Skyline ONFL. However, its generic wording would have the Policy apply to any ONFL within the Region and to any activities within those areas. This policy position is particularly important against the background of recent proposals including the decision of the Board of Inquiry on the

proposed Turitea Wind Farm which confirmed that, when viewed collectively along with the proposed Turitea Wind Farm, the wind farms on the Ruahine/Tararua Ranges have an adverse cumulative effect from where they present an extensive coverage of a significant natural landform (Paragraph 13-257, Turitea Board of Inquiry decision).

2.9 Through the mediation process, the parties (including TrustPower) have agreed to make a number of amendments to Policy 7-7, as follows:

Policy 7-7: ~~Regionally~~ Outstanding natural features and landscapes in the Region

The natural features and landscapes listed in Schedule F Table F1 must be recognised as ~~regionally~~ outstanding and must be spatially defined in the review and development of district plans. All subdivision, use and development directly affecting these areas must be managed in a manner which:

- (aa) avoids ~~any~~ significant adverse cumulative effects on the characteristics and values of those outstanding natural features and landscapes, and*
- (a) except as required under (aa), avoids adverse effects as far as reasonably practicable and, where avoidance is not reasonably practicable, remedies or mitigates adverse effects on the characteristics and values of those outstanding natural features and landscapes.*

2.10 I support these changes in that:

- (a) They address the lack of clarity about the nature of “regionally” outstanding landscapes;
- (b) They seek to have the uncertainty created by the generalised definitions of ONFLs in Schedule F (especially in regard to skylines) eventually removed through spatially defining such areas in District Plans; and
- (c) Removing “any” from Policy 7-7(aa) is appropriate because the term is superfluous, assessment of significant adverse cumulative effects does not need to be qualified by the word ‘any’.

2.11 However, no changes have been agreed in regard to the management of future upgrading of existing infrastructural assets located within areas identified ONFLs. For the reasons I will outline, the Policy and other

associated provisions should be amended to provide greater guidance as to how future repowering proposals should be assessed and managed.

Tararua Wind Farm Upgrading Requirements

2.12 As outlined in the evidence of Clayton Delmarter at paragraphs 4.1 to 4.4 of his evidence, TrustPower owns the Tararua Wind Farm located on the hills to the northeast of Palmerston North City. The longest established wind farm on this ridgeline and the oldest wind farm of any size, the Tararua Wind Farm comprises 134 turbines, and was developed in three stages:

- Stage I, commissioned in 1999, comprising 48 x 660kW, three-bladed lattice steel wind turbines (Vestas V47), each being 63.5m in height (to the blade tip)¹;
- Stage II, commissioned in 2004, comprising 55 additional turbines of the same model (Vestas V47), a total of 103 three-bladed lattice steel wind turbines, 63.5m in height; and
- Stage III, commissioned in 2007, comprising 31 x 3MW turbines on cylindrical steel ('tubular') towers (Vestas V90), each being 110m in height (to the blade tip).

2.13 To the north of the Tararua Wind Farm is Meridian's Te Apiti Wind Farm, which is located immediately north of the Manawatu Gorge. To the south is the Te Rere Hau Wind Farm, and further south is the site of the recently consented Turitea Wind Farm. All of the neighbouring wind farms comprise tubular towers which are higher than the older lattice 63.5m high turbines in Tararua I and II. In comparison:

Wind Farm	Total Height (inc. blade)
Te Apiti	106m
Te Rere Hau	46m
Turitea (consented)	Max up to 125m
Tararua I	63.5m

¹ Turbine height is measured from the ground level to the tip of a blade when it is at 12 o'clock.

Tararua II	63.5m
Tararua III	110m

2.14 All of these wind farms are generally located in the Ruahine/Tararua Skyline ONFL, as identified in Schedule F of the Proposed One Plan, and have contributed cumulatively to the visual effects on the landscape.

2.15 As agreed in the conferencing of landscape experts on 18 January 2012, the definition of the Ruahine/Tararua Skyline ONFL and its characteristics and values are as follows:

Outstanding natural feature/landscape	Characteristic/value
(ia) The series of highest ridges and highest hilltops skyline along the full extent of the Ruahine and Tararua Ranges, including within the Forest Parks described in items (h) and (i). Defined as the boundary between the land and sky as viewed at a sufficient distance from the foothills so as to see the contrast between the sky and the solid nature of the land at the crest of the highest points along ridges. The skyline is a feature that extends along the Ruahine and Tararua Ranges beyond the areas in (h) and (i) above.	<p>(i) Visual, <u>natural</u> and scenic characteristics of the skyline of the Ruahine and Tararua Ranges, as defined by the <u>series of highest ridges and highest hilltops along the full extent of the Ruahine and Tararua Ranges</u>, including the <u>skylines</u> aesthetic cohesion and continuity, its prominence throughout much of the Region and its backdrop vista in contrast to the Region's plains.</p> <p>(ii) Importance to Tangata whenua and cultural values</p> <p>(iii) Ecological values including values associated with remnant and regenerating indigenous vegetation</p> <p>(iv) Historical values</p> <p>(v) Recreational values</p>

2.16 As explained by Mr Delmarter (paragraphs 5.2 and 5.4), the older wind turbines in the Tararua Wind Farm are likely to be required to be replaced within the next ten years (i.e., within the lifetime of Proposed One Plan). The existing smaller lattice towers and turbines are no longer manufactured. The likely replacement turbines will be tubular in shape and higher, likely more consistent in appearance with other existing turbines in

the Ruahine/Tararua Skyline ONFL. As I understand, the newer replacement turbines would be more efficient than the older turbines; this is because they are generally larger. The greater height (and efficiency) of replacement turbines will require a decreased number to be located within the same overall footprint.

2.17 As Mr Delmarter (paragraph 5.8) emphasised, TrustPower does not currently know the details of a specific repower of Tararua I and II. This decision will need to be made at the time the repower is required, and will depend on what types of turbines are being manufactured at that time, their cost and the economics of various options. In brief, the decision to invest in a wind farm upgrading is nearly as significant as the original development of a wind farm.

2.18 As outlined in the evidence of Mr Boffa (paragraph 30), the likely replacement of the existing 103 lattice turbines with higher tubular forms of turbines will result in a change in the scale, intensity and character of the existing wind farm in that:

- (a) The increased height of the replacement turbines will alter the existing scale;
- (b) The reduced number of turbines will alter the existing intensity within the current overall farm footprint; and
- (c) The change from lattice to tubular towers, combined with the above two points, will alter the existing character.

2.19 Depending on the height of the replacement turbines, Mr Boffa (paragraphs 20 and 31) acknowledges that there is the potential for a repowering proposal to be assessed as a significant visual change: in particular, because of the change in the scale (due to the higher turbines) and character (due to the form and colour of the turbines). He also acknowledges that there is the potential for the significant adverse cumulative effects threshold to be triggered if the replacement towers were significantly higher.

2.20 However, Mr Boffa considers that, provided the height of the replacement turbines is similar to those of other turbines within the Ruahine/Tararua

Skyline ONFL, and there is reduced density of turbines within the same overall footprint, the resulting overall change could be an improvement visually, despite being potentially deemed to be a significant adverse cumulative effect. In other words, while there may be a visual change, if the repowering would result in an overall visually cohesive pattern of turbines, then the repowering should not be precluded by the potential of triggering the significant adverse cumulative effects threshold.

2.21 I believe the wording of Policy 7-7(aa) should be amended to provide guidance for decision makers on how to assess a repowering proposal to ensure the effects are appropriately managed. In the absence of such policy guidance, in my opinion, there is a significant risk of considerable and unnecessary confusion, debate, challenges and costs that will be incurred, either through the District Plan review process to give effect to this Policy and/or through the resource consent process when a wind farm is repowered.

2.22 I would emphasise that TrustPower's appeal did not seek to challenge the identification of the Ruahine/Tararua Skyline ONFL. Furthermore, TrustPower is not seeking an exemption from the policy framework to manage outstanding landscapes for any future upgrading from any resource consent process as suggested in Ms Barton's evidence-in-chief (paragraphs 67 and 84). Rather, TrustPower's appeal focuses on resolving the uncertainties that Policy 7-7(aa) will raise in:

- (a) Developing District Plan provisions on managing repowering activities within ONFLs; and
- (b) Assessing and making decisions on resource consent applications for repowering proposals.

2.23 In respect of District Plans, my view is that territorial local authorities are likely to interpret the directive in Policy 7-7(aa) as requiring a restrictive approach to managing activities within the Ruahine/Tararua Skyline ONFL: for example, by way of non-complying activity status which is often used to manage an activity in which there is the real potential for an 'environmental bottom-line' to be breached.

2.24 Given the absolute nature of Policy 7-7(aa), against the recent background of Turitea, I would anticipate that a territorial local authority could consider that such a status was merited to give effect to the RPS. For wind farm developments, in which a range of resource consents are often required, such a status would likely require the 'bundling' of all consents as non-complying.

2.25 In regard to resource consent applications, particularly in the period before the relevant District Plan provisions are reviewed, there are significant risks about how Policy 7-7(aa) is to be interpreted, and the uncertainty that it creates in determining how the landscape effects of a repowering proposal may be assessed. I am very aware about the general lack of guidance and consistency over how the visual effects of wind farms should be assessed. For proposals located within a Schedule F ONFL, this will be complicated by the need to assess and form an opinion on cumulative effects, including what the Board of Inquiry on the Turitea Wind farm referred to as 'internal cumulative adverse effects'.

2.26 In this regard, I would concur with Ms Barton, as well as with Mr Anstey and Mr Boffa, that potentially a repowering of an existing wind farm could result in significant adverse cumulative effects. Accordingly, I would also generally agree with Ms Barton in this respect (paragraph 87(a) to (d)), and I would not support an exemption for any repowering of an existing wind farm from consideration under Policy 7-7. However, in regard to paragraph 87(d), Ms Barton states that:

"A reconfiguration causing significant adverse effects beyond those already existing should be able to be avoided. The simultaneous, successive and sequential visual effects could be covered in the design so they will not be greater. Presumably, fewer turbines are an inevitable consequence of larger turbines to avoid wind disturbance between turbines."

2.27 As I comment on below in regard to Mr Anstey's evidence (paragraph 2.32), it is most likely that a repowering proposal would have greater simultaneous and sequential visual effects, simply because of the greater height and the different form and colour of the replacement turbines. These effects, while potentially minor in themselves, may trigger the significant

adverse cumulative effects threshold due to the internal visual changes arising from taller turbines.

2.28 Given that internal cumulative effects are considered to be part of the wider cumulative effects consideration in Policy 7-7 (refer paragraphs 11-14 of Mr Boffa's evidence), in my opinion, it is very likely that future decision-makers are likely to take a conservative approach in regard to any change occurring as a result of a repowering proposal.

2.29 I have reviewed the recent decision of the of the Board of Inquiry on the NZTA's Plan Change requirement regarding the Transmission Gully Project, in which (at paragraphs 164 to 166) the Board concluded that:

"...Consideration of whether any particular proposal is contrary to the objectives and policies of any given regional or district plan is frequently a difficult and disputed exercise involving a broad consideration of objectives and policies overall. However in a situation where there are objectives or policies directed at specific outcomes (as in Policy 4.2.10), a proposal which is found to directly offend such objectives or policies may be found to be contrary to the objectives and policies of the plan overall.

[165] We appreciate that there are contrary arguments (such as those advanced by Ms Thomson for KCDC) but do not think that it is necessary for us to determine who is right or wrong in that regard. In the context of these proceedings, we consider that it is sufficient if we find that there is uncertainty as to the consequences of the policies insofar as any application for non-complying activity consent for TGP is concerned so that they potentially preclude the grant of consent to TGP. We find that to be the case.

[166] Accordingly, we conclude that the underlying rationale for the Request is well founded. That finding of itself does not lead us to the conclusion that the Request ought be approved but does mean that there is a live issue to be determined as to whether or not there should be an alteration to the policy framework of the Freshwater Plan to accommodate TGP as sought by NZTA and if so what form it might take." [Page 41 Final Decision of the Board of Inquiry on the Transmission Gully Plan Change Request, 2011]

2.30 My concern about the lack of policy guidance on significant adverse cumulative effects is exacerbated by the evidence of Mr Anstey, who, in exploring why a repowering proposal could have significant adverse cumulative effects, states:

"While an upgrade of TrustPower's wind farm may result in fewer and more aesthetically pleasing turbines, if the turbines are taller with greater rotor diameters their visual effects will likely be greater than

those structures they replace. Not only could their prominence on the upper slopes and ridgeline be greater so that they are visible from a wider area, but also their greater prominence on lower slopes could increase the wind farms contribution to sequential cumulative effects; the presence of turbines in views from highways will become more apparent."[paragraph 39]

- 2.31 Given the evidence of Mr Delmarter (paragraph 5.9), any replacement turbines are more than likely going to be taller with greater rotor diameters, and, even with fewer turbines, they are likely to be more prominent on the skyline than the existing smaller lattice towers, and their presence more apparent from local highways. Mr Anstey's focus on the visual change from the existing wind farm (rather than the broader context) underscores my concerns about the uncertainty as to whether the change in the scale, intensity and character that is likely to occur with a repowering proposal will be deemed to represent a significant adverse cumulative effect, and accordingly be determined to be contrary to Policy 7-7(aa).
- 2.32 As Mr Boffa states (paragraph 20), in making an assessment of significant adverse cumulative effects, the change in the scale, intensity and character that will be brought about by a repowering proposal needs to be considered against the wider context, including the relationship and consistency with all of the wind farms within the Ruahine/Tararua Skyline ONFL (i.e., coherence), weighed against the effects of a reduced density of turbines. A full assessment of significant adverse cumulative effects should weigh the effects of prominence and sequential effects (as highlighted by Mr Anstey) with the relationship of those proposed changes with the existing environment, particularly the overall coherence of wind farms within the skyline.
- 2.33 The risks that are inherent with the current uncertainty in Policy 7-7 is, in my opinion, exacerbated by the definition of 'upgrade' in the Proposed One Plan, and by the silo approach to the various chapters in the RPS part of the Plan.

The Meaning of 'Upgrade'

- 2.34 As outlined in the evidence-in-chief of Ms Barton (paragraphs 89-92), the Council's decisions introduced a definition of 'upgrade' into the Glossary section of the Proposed One Plan, which is as follows [emphasis added]:

Upgrade means bringing a structure, system, facility or installation up to date or to improve its functional characteristics, provided the upgrading itself does not give rise to any significant adverse effects, and the character, intensity and scale of any adverse effects of the upgraded structure, system, facility or installation remain the same or similar.

- 2.35 Defining an activity by reference to the scale of adverse effects is an unusual approach, and, in my view, not one that accords with best practice. An upgrade should be defined simply by the nature of the activity, rather than the level of its adverse effects – different types of upgrade can have a range of adverse effects, including significant adverse effects, but it still remains an upgrade.
- 2.36 The Oxford Dictionary, for example, defines upgrade (as a verb) as being to “raise (something) to a higher standard, in particular improve (equipment or machinery) by adding or replacing components”; it makes no reference to scale or magnitude, unlike, for instance, ‘alteration’ which the Dictionary defines as meaning a “change in character or composition, typically in a comparatively small but significant way”. The repowering of an existing wind farm by replacing its component turbines with more efficient turbines clearly comes within this meaning of upgrade; I would note that the evidence-in-chief of both Ms Barton and Mr Anstey include many references to the ‘upgrading’ of wind farms using the commonly understood meaning.
- 2.37 In my opinion, it is better practice to define upgrade without reference to effects, and to have the adverse effects of upgrading, as per any other activity, managed by policies and rules – i.e., rules to set thresholds of acceptability, and policy guidance as to the acceptability or otherwise of potentially significant adverse effects.
- 2.38 In contrast to the Proposed One Plan approach, under clause 3 of the National Environmental Standard for Electricity Transmission Activities

('NESETA'), upgrading of a transmission line means "increasing the carrying capacity, efficiency, security, or safety of a transmission line". By way of example, the upgrading of a transmission line could result in significant increases in tower heights, and therefore potentially create adverse visual effects. The approach of the NES is to manage the potential adverse effects of such upgrades by setting various thresholds for changes in tower height in the NES, using the resource consent process to determine the acceptability of 'major' upgrades.

2.39 In my opinion, the Proposed One Plan currently buries essentially a policy on the acceptability of effects of an activity in the Glossary section of a Plan. If it is the intent of the Regional Council to only actively provide for or enable forms of upgrading that only have minor effects, then the relevant policy should clearly state this position, without the need to have reference to the Glossary.

2.40 This concern relates to Chapter 3 of the Proposed One Plan, which contains objectives and policies in regard to the management of regionally significant infrastructure in the Region, which includes renewable electricity generation. It is to Chapter 3 that a decision-maker would turn in considering a repowering proposal. On face value, Policy 3-3 appears to be an enabling one as follows (as amended by mediation agreement):

Policy 3-3: Adverse effects of infrastructure and other physical resources of regional or national importance on the environment

In managing any adverse environmental effects arising from the establishment, operation, maintenance and upgrading of infrastructure or other physical resources of regional or national importance, the Regional Council and Territorial Authorities must:

- (a) *recognise and provide for the operation, maintenance and upgrading of all such activities once they have been established...*

2.41 It appears that this policy supports the upgrading of regionally significant infrastructure, including wind farms. However, with the Glossary definition of upgrade, it is clear that this policy seeks to only provide for 'minor upgrading' – i.e., changes that do not alter the scale, intensity or character of existing facilities. This interpretation is reinforced by the evidence-in-chief of Ms Barton (ref paragraph 94).

- 2.42 Accordingly, while Policy 3-3 appears to be an enabling directive, in practice, unless like is replaced with like, it would not facilitate the repowering of existing renewable electricity generation assets through the replacement of uneconomic turbines with newer more efficient turbines.
- 2.43 If Policy 3-3 of the Proposed One Plan is to require local authorities to provide for the operation, maintenance and minor upgrading of existing regionally significant infrastructure including renewable electricity generation facilities (i.e., to direct a tolerance of a low level of effects), then this should be made explicit in the policy itself.
- 2.44 In my opinion, enabling the upgrading of renewable electricity generation facilities only insofar as an operator is already entitled to under section 10 of the Act is not giving full effect to the National Policy Statement on Renewable Electricity Generation ('NPSREG'), notably Policy E3 which requires that [emphasis added]-

Regional policy statements and regional and district plans shall include objectives, policies, and methods (including rules within plans) to provide for the development, operation, maintenance and upgrading of new and existing wind energy generation activities to the extent applicable to the region or district.

- 2.45 Another concern I have with an effects-based approach to definitions is that it introduces a large measure of uncertainty in that an applicant would have to undertake an AEE to contend whether a proposal is an upgrade or 'something else': This approach leaves uncertainty in the application of policies.
- 2.46 A final concern I have with the current Proposed One Plan definition of upgrade is the conjunctive nature of the two "effects" qualifiers: that is, even if an applicant could contend that a proposed upgrading would have no "significant adverse effects" (including cumulative), the applicant would then also have to demonstrate that the character, intensity and scale of any adverse effects of the upgrade would remain the same or similar (which is essentially a paraphrasing of existing use rights under s10 RMA²). Given

2 Section 10 Certain existing uses in relation to land protected:

(1) Land may be used in a manner that contravenes a rule in a district plan or proposed district plan if—
(a) either—

that a replacement of turbines to improve the capacity and efficiency of generation as I described above would, in all likelihood, fail the second qualifier, it would therefore be deemed to be something other than an upgrade, and it would fall outside the assistance that Policy 3-3 should be providing.

2.47 While it could be contended that this is an appropriate policy position (which I would question given section 7(j) RMA and the NPSREG), I am concerned about the negative implications that Policy 3-3 would have, in conjunction with the definition of upgrade, in exacerbating the uncertainty in the application of Policy 7-7(aa) that I described above.

2.48 While it is quite appropriate for the Proposed One Plan to take a strong policy position on significant adverse cumulative effects on landscapes identified as outstanding, the flip side is that, in conjunction with Policy 3-3, the Proposed One Plan potentially 'straightjackets' existing renewable electricity generation facilities, and does not recognise the logistical and technical practicalities associated with upgrading renewable electricity generation activities. In particular, in terms of turbines, technically 'like' cannot be replaced with 'like' in that the smaller lattice steel turbines that were originally used are long outdated and out of production. Thus, on this point, Policy C1(b) of the NPSREG is relevant:

Decision-makers shall have particular regard to the following matters:

...

b) logistical or technical practicalities associated with developing, upgrading, operating or maintaining the renewable electricity generation activity;

2.49 Further, Policy C2 of the NPSREG, which requires regard to be given to offsetting measures where "*any residual effects of renewable electricity generation activities cannot be avoided, remedied or mitigated*", is a particularly relevant consideration given the logistical and technical practicalities associated with developing wind farms (and difficulty in avoiding, remedying or mitigating their adverse visual effects).

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- (i) the use was lawfully established before the rule became operative or the proposed plan was notified; and
 - (ii) the effects of the use are the same or similar in character, intensity, and scale to those which existed before the rule became operative or the proposed plan was notified

2.50 Given there is a specific definition of upgrade provided by the Proposed One Plan, the decision-maker has to be guided by that definition.

2.51 In this regard, I would observe that there is no policy within the Proposed One Plan for directing decision-makers to recognise and provide for the benefits to be obtained from enhancing the capacity and efficiency of existing renewable electricity generation activities. On this matter, I note the 'replacement and reinstatement' section of the Energy Efficiency and Conservation Authority's 2004 Guidelines for Local Authorities on Wind Power, which states:

"A wind farm could be developed as a permanent installation or may be relatively temporary (20-25 years). Although it is reasonably practical to reinstate land once wind turbines have reached their life end and been removed, this prospect, in areas of good wind resource in New Zealand, seems unlikely given that a good site could be used on a permanent basis once initial consent has been obtained.

Wind turbines installed in the past are likely to be superseded commercially by larger capacity generating turbines, which continue to increase in size. For example, in New Zealand the first commercial scale turbine was 225kW in 1993 and the most recent is 1650kW in 2004." [Page 28: the full text of this section of the Guidance is provided in **Appendix 1** to my evidence]

2.52 To this end, I support the recommendation of Ms Barton, Council's planner, to introduce a new clause to Policy 3-4 to direct decision-makers to have particular regard to the benefits of enabling the increased generation capacity and efficiency of existing renewable electricity generation facilities (paragraphs 99 and 102). In addition, though, I would recommend adding another new clause that would have decision-makers take into account the logistical or technical practicalities associated with developing, upgrading, operating or maintaining an established renewable electricity generation activity, in line with Policy C1(b) of the NPSREG.

2.53 It is helpful to note at this point that Mr Clayton Delmarter (paragraph 43) discusses the restrictions in size of turbines on the Tararua Ranges, a class 1A wind resource. Due to the high wind speeds turbine heights will be limited by wear and tear. Uninhibited changes in the size and scale of turbines on the Tararua Ranges is simply not practical.

2.54 The change to Policy 3-4 alone, however, will not achieve the level of certainty that I consider is necessary. First, this Policy 3-4 may be perceived to be a corollary of Policy 3-3(a) (i.e., provision for the operation, maintenance and [minor] upgrading of renewable electricity generation), rather than a more enabling directive for decision-makers in regard to considering renewable electricity generation proposals. Second, in my opinion, it would provide little assistance in addressing the weighting given to the assessment of significant adverse cumulative effects in regard to ONFL under Policy 7-7(aa).

2.55 As a result of mediation (27 September 2011), the Regional Council's advisers appear to accept the merits of TrustPower's outstanding concerns. In particular, it was accepted that any upgrade is likely to involve fewer but higher modern tubular turbine towers that would have a consequent reduction on the intensity of turbines and likely achieve a better integration of the Tararua Wind Farm with the adjoining wind farms. It was also accepted, however, that the effects of repowering would not be of the same or similar in scale, intensity and character as the existing wind farm, and thereby would not come within the meaning of 'upgrade' as currently defined by the Proposed One Plan.

2.56 Discussion with Council's advisers traversed the concerns with the definition of 'upgrade' and possible solutions. My preference is to amend the definition by deleting all reference to effects and by, drawing from the NESETA definition, adding further explanation to the purpose of upgrading, as follows:

Upgrade means bringing a structure, system, facility or installation up to date or to improve its functional characteristics to increase its capacity, efficiency, security, or safety, ~~provided the upgrading itself does not give rise to any significant adverse effects, and the character, intensity and scale of any adverse effects of the upgraded structure, system, facility or installation remain the same or similar.~~

2.57 As a consequence, Policy 3-3(a) would have to be amended to read:

(a) *recognise and provide for the operation, maintenance and minor upgrading of all such activities once they have been established...*

2.58 As outlined in the evidence-in-chief of Ms Barton (paragraph 95), the term 'upgrade/upgrading' is used elsewhere in the Proposed One Plan, and

therefore there may be unintended consequences of modifying the definition. However, a quick review of its use elsewhere should highlight such consequences, and if it does occur, a similar amendment as for Policy 3-3(a) could be made. If necessary, a sub-definition could be included to the following effect:

Minor upgrading means an upgrade in which the character, intensity and scale of any adverse effects of the upgraded structure, system, facility or installation remain the same or similar.

- 2.59 An alternative approach could be to introduce a new term into the Plan, such as 'redevelopment', or 'repowering' to address upgrading proposals that are more than minor in effect, with a Glossary definition that is specific to renewable electricity generation or regionally significant infrastructure.

Silo Approach of the One Plan – Weighing Competing Considerations

- 2.60 As stated, the key concern for TrustPower, with which I concur, is the lack of guidance in the Proposed One Plan for addressing how repowering proposals to nationally significant infrastructure located within an ONFL would be assessed in light of Policy 7-7(aa), particularly when there are already identified issues of 'landscape saturation' (as referred to in the evidence-in-chief of Mr Anstey). A related concern is the silo approach of the Proposed One Plan at the RPS level, with the decisions version moving deliberately away from the use of cross-referencing between key connected policies, on the basis that decision-makers should and will weigh up all relevant objectives and policies (refer to Barton evidence-in-chief, paragraphs 96-99).
- 2.61 Ms Barton's evidence accepted that the policy suite within the decisions version could be better supported in relation to the repowering of an existing wind farm, and as I outlined above (paragraph 2.52), she proposes an amendment to include an additional sub-clause within Policy 3-4, with which I agree.
- 2.62 However, this change in itself would not alleviate my concerns with Policy 7-7(aa). In my view, there would remain a significant possibility that territorial local authorities would consider that, if taken as a whole, the policies in the RPS are directing them to make general provision for the

(minor) upgrading of wind farms in their review of District Plans, but that, given the specificity and absolute nature of Policy 7-7(aa), which is addressing a matter of national importance under section 6(b), a much stronger control or restriction is being sought for upgrading existing windfarms in areas defined by Schedule F. Indeed, territorial local authorities may infer that it warrants an almost prescriptive approach such as applying a non-complying activity status on such changes. In my opinion, a non-complying activity status would neither be giving effect to the NPSREG nor to section 7(j) of the Act. While Policy 7-7 is concerned about giving effect to section 6 of the Act, given the presence of wind farms within the ONFL, a more enabling management approach should be sought by the RPS.

2.63 Similarly, Policy 3-4 is unlikely to greatly assist future decision-makers in respect of resource consent applications for repowering proposals, to make the necessary judgement on the trigger of significant adverse cumulative effects and whether or not a repowered wind farm is an inappropriate development and use of an ONFL.

2.64 I agree with Ms Barton (paragraph 70) that, when considering a resource consent application for a repowering proposal, decision-makers should take into account Policy 7-7 and the policies in Chapter 3 of the Plan when determining what is or is not an appropriate development and use of the ONFL. However, again, given the absolute nature of the decisions version of Policy 7-7(aa), it may be difficult for decision-makers to recognise that the enabling requirement of Policy 3-4 is intended to 'bridge' the need to recognise the benefits of upgrades when considering the significant adverse cumulative effects in accordance with Policy 7-7.

2.65 This is because Chapter 3 policies would not assist in determining what an appropriate use of an ONFL is. Only Policy 7-7 can provide direct guidance to decision-makers in determining whether a proposal is an inappropriate development and use. In isolation, local authorities could interpret Policy 3-3 as enabling minor upgrading in general (for example, as a permitted activity), except in areas identified as ONFLs where there is a clear and relatively absolute directive under Policy 7-7, in giving effect to section 6(a).

This is where the policy 'gap' for consideration of repowering proposals exists.

- 2.66 I note that, in his evidence-in-chief, Mr Anstey has suggested that repowering can be designed in a way that will not have the potential for significant adverse cumulative effects, although his principal method for achieving this outcome appears to be the use of "fewer turbines" (for example, paragraph 40). As indicated in EECA's *Guidance to Local Authorities* (see **Appendix 1**), the use of newer and higher turbines will inevitably result in fewer turbines³. However, fewer turbines would still be more prominent than the existing turbines simply because of the increase in height, and that such prominence would contribute to changed sequential effects on the lower slopes. According to Mr Anstey's evidence, these changes could represent an adverse effect: the difficulty is in the inability to determine whether they would in combination with other effects, be considered a *significant* adverse cumulative effect. Mr Anstey states that:

"It is possible that an upgrade using larger and fewer turbines on the same footprint, if properly configured and designed, may not cause significant adverse cumulative effects, but this can only be determined through a robust assessment of the particular proposal within the context of the wider landscape".[paragraph 41]

- 2.67 While Mr Boffa does not disagree with Mr Anstey on that point, he considers that the more important matter, in the context of repowering, is the consideration of both internal and external spatial design and visual coherence relative to the particular site's/area's landscape classification and its current land use activity (paragraph 20). Mr Boffa notes that Policy 7-7 does not explicitly recognise this important consideration.
- 2.68 In other words, in order to assess whether adverse internal cumulative effects (i.e., the effects assessed in the context of the existing wind farm) are significant in the wider context (i.e., against the context of all turbines within the ONFL), a proposal needs to be assessed as to –

3 "Progressive change to taller, larger turbines, for example, may be technically difficult because of potential interference with remaining turbines": *Guidance to Local Authorities: Wind Energy*, EECA 2004 page 28.

- (a) Whether the reduced number of turbines is consistent with the existing density of turbines within the wider landscape (i.e., spatial design), and
 - (b) Whether the proposed replacement turbines maintain or enhance the overall coherence of turbines within the landscape.
- 2.69 The second matter relates to such factors as the height of the turbines, the number and rotation speed of turbine blades, the colour, shape and form of the towers, and the locational pattern of turbines.
- 2.70 The inclusion of such criteria into Policy 7-7 would require either the need to carefully design and configure a repowering proposal or to undertake a specific assessment of cumulative effects of a proposal, and this would provide two key outcomes:
 - (a) It would provide guidance to developers, decision-makers and other parties about assessing the overall *significance* of potential adverse cumulative effects; and
 - (b) It would clearly signal the presence and function of significant infrastructure such as wind farms in some ONFLs.
- 2.71 As an example of the ability of Policy 7-7 to provide such guidance, I would refer to Policy 7-8A which contains guidance as to what the Regional Council sees as appropriate subdivision, use or development in relation to managing the natural character of the coastal environment, wetlands, rivers and lakes.
- 2.72 While I support the principle of simplicity in policy-making, particularly at the relative high level of an RPS, this has to be balanced with the need to provide clear and proactive direction and guidance on matters of regional significance. In my opinion, providing for the benefits to be obtained from the repowering of New Zealand's most significant wind farm warrants such direction. In this regard, I would refer to Policy B(c) of the NPSREG which require decision-makers to have particular regard to the following matter:

- c) *meeting or exceeding the New Zealand Government's national target for the generation of electricity from renewable resources will require the significant development of renewable electricity generation activities.*

Section 32 Evaluation

- 2.73 The preparation of the provisions of the Proposed One Plan are required to be undertaken in accordance with the requirements of section 32 of the RMA.

Consideration of alternatives, benefits, and costs

- (1) *In achieving the purpose of this Act, before a proposed plan, proposed policy statement, change, or variation is publicly notified, a national policy statement or New Zealand coastal policy statement is notified under section 48, or a regulation is made, an evaluation must be carried out by—*

... (c) the local authority, for a policy statement or a plan ...

- (3) *An evaluation must examine—*

- (a) *the extent to which each objective is the most appropriate way to achieve the purpose of this Act; and*
- (b) *whether, having regard to their efficiency and effectiveness, the policies, rules, or other methods are the most appropriate for achieving the objectives.*

- 2.74 Importantly, section 32(4) requires that –

- (4) *For the purposes of the examinations referred to in subsections (3) and (3A), an evaluation must take into account—*

- (a) *the benefits and costs of policies, rules, or other methods; and*
- (b) *the risk of acting or not acting if there is uncertain or insufficient information about the subject matter of the policies, rules, or other methods.*

- 2.75 In this regard, the benefits to be obtained from repowering a major wind farm should be taken into account, while the potential costs of Policy 7-7(aa) should take into account the significant level of investment in the existing wind farms within the Ruahine/Tararua Skyline ONFL (and potentially other ONFLs), as well as the significant investment required in any repowering of these facilities. Given the uncertainty about how significant adverse cumulative effects are to be determined in respect of

repowering proposals, there is a substantial risk concerning the implementation of the Policy.

Conclusion

- 2.76 In conclusion, the landscape policies in the RPS should be consistent with recognising and providing for nationally significant renewable energy generation that already exists in an ONFL, including policy support of NPSREG.
- 2.77 Under section 62(3) of the RMA, a Regional Policy Statement must “give effect to” any National Policy Statement. Accordingly, in my opinion, the Regional Council has a mandatory and active duty to ensure the policies of the NPSREG are achieved through the provisions of the RPS: i.e., ‘positively implemented’ rather than ‘passively implemented’. In this regard, the RPS should seek to recognise and provide for the benefits of renewable electricity generation, which is a matter of national significance under the NPS. Giving full effect to this requirement includes enabling opportunities for enhancing the generation capacity and efficiency of existing renewable electricity generation facilities, including providing greater certainty where the potential for substantial increases in efficiency and capacity may be in doubt.
- 2.78 In respect of the Proposed One Plan, I would contend that there is a live issue in respect of the uncertainty created by policy seeking a specific outcome (Policy 7-7(aa)) against a more generic set of policies regarding renewable electricity generation (Chapter 3).
- 2.79 While I accept that inserting a new sub-policy to Chapter 3 as recommended by Ms Barton will ensure that this requirement is directly expressed within the One Plan (refer paragraph 2.61 above), in my opinion, positively implementing the NPSREG requires a much broader exercise, in which all proposed policies within the RPS are considered in terms of:
- (a) The potential to frustrate or conflict with the NPSREG; and
 - (b) The potential to enable further renewable electricity generation as appropriate.

- 2.80 In my opinion, it is not appropriate for the RPS to rely on implementation through District Plan reviews and/or the resource consent process where there is a pending substantial issue involving a resource of national significance. The RPS should be as proactive as practicable, and, if there is potential for uncertainty, provide clear guidance as to how the policies are to be implemented.
- 2.81 This requirement is of particular importance in regard to a matter of national significance as is renewable electricity generation. Just as landscapes are a resource which must be sustainably managed, renewable electricity generation facilities must also be sustainably managed. Where there is a potential for conflict or tension between policies (for example, between Policies 3-4 and 7-7(aa)), the RPS should provide clarity or guidance inasmuch as it can, particularly if the resources in question are nationally significant and the types of future outcomes are known, as I would submit there are in this situation. The One Plan should afford further certainty to existing resource users as an inherent aspect of the sustainable management of the Region's natural and physical resources.

Proposed Relief

- 2.82 For these reasons set out above, I consider that the Proposed One Plan should be amended to provide better clarity and direction for the future upgrading of renewable electricity generation activities located in areas/features identified as outstanding natural features and landscapes.
- 2.83 I recommend a number of interrelated amendments be made to the One Plan to address these concerns:
- (a) To amend Policy 7-7 to specifically provide guidance on assessing the significant adverse cumulative effects of upgrading of regionally significant infrastructure located within an ONFL;
 - (b) To add further explanatory text in regard to providing for the upgrading of existing infrastructure;
 - (c) To either amend the definition of upgrading as outlined, or introduce new terminology;

- (d) To re-introduce a sub-policy that cross-references Policy 3-3 and 3-4 or add text to the explanation to Policy 7-7 that outlines the relationship; and
- (e) Adding a new clause to Policy 3-4 to refer to the logistical or technical practicalities associated with upgrading an established renewable electricity generation activity.

2.84 These amendments are outlined in **Appendix 2** attached to my evidence.



Robert Schofield
Director, Boffa Miskell Limited | Environmental Planner
17 February 2012

Appendix 1: 'Replacement and reinstatement' section of the Energy Efficiency and Conservation Authority's 2004 Guidelines for local authorities on Wind Power

[Emphasis added]

A wind farm could be developed as a permanent installation or may be relatively temporary (20-25 years). Although it is reasonably practical to reinstate land once wind turbines have reached their life end and been removed, this prospect, in areas of good wind resource in New Zealand, seems unlikely given that a good site could be used on a permanent basis once initial consent has been obtained. Wind turbines installed in the past are likely to be superseded commercially by larger capacity generating turbines, which continue to increase in size. For example, in New Zealand the first commercial scale turbine was 225kW in 1993 and the most recent is 1650kW in 2004.

Wind farms may be regarded as permanent land use activities, which, like other land uses, may undergo upgrade, maintenance and change over time. An existing wind farm could be replaced with a smaller number of larger turbines in the future. Technological development may allow turbines, nacelles, blades, and even towers to be progressively changed to make better use of the wind resource. However, the first layout of a wind farm will tend to set the pattern for future use of the site. Progressive change to taller, larger turbines, for example, may be technically difficult because of potential interference with remaining turbines. The visual impact of a different size and style of turbines, or a mix of turbine types, may warrant careful consideration for some sites.

As a resource consent issue, it is appropriate to consider providing for maximum opportunity to vary turbine size, type, and specific siting over time. This will allow progressive upgrading, replacement at the end of the machine's life or replacement of obsolete technology, and will also allow for competitive tendering of initial and replacement turbines.

Appendix 2: Recommended Amendments to the Proposed One Plan

The following outline the proposed amendments to the Proposed One Plan discussed in my evidence (changes shown as struck-through or underlined) (based on the decisions version of the One Plan):

Policy 7-7

Amend Policy 7-7 as follows:

Outstanding natural features and landscapes in the Region

The natural features and landscapes listed in Schedule F Table F1 must be recognised as outstanding and must be spatially defined in the review and development of district plans. All subdivision, use and development directly affecting these areas must be managed in a manner which

- (~~a~~) ensures that new development or the intensification/expansion of existing development avoids ~~any~~ significant adverse cumulative effects on the characteristics and values of those outstanding natural features and landscapes, and*
- (~~b~~) provides for the operation, maintenance and upgrading of existing infrastructure of regional or national importance that results in a reduced density and a more visually cohesive pattern of development within the outstanding natural feature or landscape to avoid significant adverse cumulative effects, and*
- (~~c~~) except as required under (~~a~~) and (b), avoids adverse effects as far as reasonably practicable and, where avoidance is not reasonably practicable, remedies or mitigates adverse effects on the characteristics and values of those outstanding natural features and landscapes.*

Policies 3-3, 3-4 and Policy 7-7

Insertion of a new explanatory text to guide decision-makers in making the bridge between Policy 3-4(a)(iv) and Policy 7-7 as follows:

The objectives, policies and methods adopted here are to provide guidance and direction in for the protection of these values. For example, the policies require avoidance of significant adverse cumulative effects (i.e., cumulative effects that are so adverse that they have the potential to significantly alter or damage the essential characteristics and values of the natural feature or landscape). In accordance with Policy 3-4(a)(iv), the need to provide for upgrading regionally significant infrastructure within any outstanding natural feature or landscape in a manner that is acceptable with these policies is addressed in Policy 7-7(b).

It is recommended that this wording would be inserted immediately after the last sentence to the paragraph under “Natural Features and Landscapes”.

New Glossary Definition of Intensification/Expansion

Consistent with the recommended changes to Policy 7-7 outlined above, I recommend the insertion of a new definition to the term ‘intensification’ and ‘expansion’ within the Glossary to assist in the interpretation of Policy 7-7 as follows:

***Intensification/expansion** means, in regard to outstanding natural features and landscapes, an increase in the number of functional units of an existing structure, system, facility or installation within the existing site area, or additional units outside the existing site area.*

Glossary Definition of Upgrade

Amend the definition of “upgrade” consistent with the commonly understood meaning of upgrade, as follows:

Upgrade means bringing a structure, system, facility or installation up to date or to improve its functional characteristics to increase its capacity, efficiency, security, or safety; ~~provided the upgrading itself does not give rise to any significant adverse effects, and the character, intensity and scale of any adverse effects of the upgraded structure, system, facility or installation remain the same or similar.~~

Policy 3-3(a)

In line with the recommended changes to the glossary definition of “upgrade”, the following amendments to Policy 3-3(a) are required to address ‘minor upgrading’:

Adverse effects of infrastructure and other physical resources of regional or national importance on the environment

In managing any adverse environmental effects arising from the establishment, operation, maintenance and upgrading of infrastructure or other physical resources of regional or national importance, the Regional Council and Territorial Authorities must:

*(a) ~~allow~~ recognise and provide for the operation, maintenance and **minor** upgrading of all such activities once they have been established, ~~no matter where they are located,~~*

Policy 3-4

Policy 3-4 should be amended through the addition of two new clauses to have decision-makers recognise the benefits of upgrading and the logistical and technical practicalities associated with upgrading, in line with the NPSREG as follows:

Policy 3-4: Renewable energy

- (a) *The Regional Council and Territorial Authorities must have particular regard to: ...*
 - (iv) *Enabling the increased generation capacity and efficiency of existing renewable electricity generation facilities*
 - (v) *The logistical or technical practicalities associated with developing, upgrading, operating or maintaining an established renewable electricity generation activity.*