

**BEFORE THE HEARING COMMISSIONERS
IN WAIKATO DISTRICT**

IN THE MATTER of the Resource Management Act 1991 (“**the Act**”)

AND

IN THE MATTER of the Proposed Waikato District Plan (Stage
1) Hearing 22 Infrastructure

**STATEMENT OF EVIDENCE BY LYNETTE PEARL WHARFE
FOR HORTICULTURE NEW ZEALAND
29 SEPTEMBER 2020**

1. QUALIFICATIONS AND EXPERIENCE

- 1.1 My name is Lynette Pearl Wharfe. I am a planning consultant with The AgriBusiness Group. I have a BA in Social Sciences and post graduate papers in Environmental Studies, including Environmental Law, Resource Economics and Resource Management.
- 1.2 I am an accredited commissioner under the Making Good Decisions programme with Ministry for the Environment.
- 1.3 I have been a consultant with The AgriBusiness Group since 2002. The Agribusiness Group was established in 2001 to help build business capability in the primary sector.
- 1.4 I have spent over 18 years as a consultant, primarily to the agricultural industry and rural sector, specialising in resource management, environmental issues, and environmental education and facilitation, including 18 years of providing advice to Horticulture New Zealand ("**HortNZ**") and its precursor organisations, NZ Vegetable and Potato Growers Federation, NZ Fruitgrowers Federation.
- 1.5 As part of providing advice to HortNZ for submissions and plans across the country I have been involved in development of Regional Policy Statements, Regional Plans and District Plans, including omnibus plans such as the Auckland Unitary Plan and the Horizons One Plan and district plans in Whakatane, Opotiki and Hastings so am familiar with the range of matters to be addressed in the Proposed Waikato District Plan ("**PWDP**").
- 1.6 I have been involved in a range of plan processes for HortNZ that address infrastructure issues, including provisions for the National Grid. Such plans include Western Bay of Plenty, Hastings, Opotiki, Whakatane, Whangarei, Far North and Horowhenua.
- 1.7 I have been involved as a consultant to HortNZ contributing to submissions and further submissions on the Proposed Waikato District Plan.
- 1.8 I have read the Environment Court's Code of Conduct for Expert Witnesses, and I agree to comply with it. My qualifications as an expert are set out in Appendix 1. I confirm that the issues addressed in this brief of evidence are within my area of expertise, except where I state I am relying on what I have been told by another person. I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed.

2. SCOPE OF EVIDENCE

2.1 This evidence provides a planning assessment of those provisions on which HortNZ submitted which are addressed in Hearing 22 – Infrastructure.

- (a) Chapter 6 Infrastructure and Energy Objectives and Policies
- (b) Ch 14 – Report D0 Infrastructure and Energy Overall
- (c) Ch 14 - Report D1 Infrastructure and Energy Introduction
- (d) Ch 14 - Report D3 General Infrastructure
- (e) Ch 14 - Report D4 14.1 National Grid
- (f) Ch 14 - Report D12 14.12 Transportation

2.2 In undertaking this assessment I have considered:

- (a) The Section 42A Hearings Report for Hearing 22
- (b) The s32 Reports for PWDP
- (c) National Policy Statement for Electricity Transmission (NPSET)
- (d) The Operative Regional Policy Statement for Waikato
- (e) NZECP34:2001 Electrical Code of Practice
- (f) National Planning Standards

2.3 I have attached to this evidence the following appendices:

- (a) Copy of provisions for the National Grid from Western Bay of Plenty District Plan
- (b) NZECP34:2001

3. MY UNDERSTANDING OF HORTICULTURE NEW ZEALAND'S SUBMISSIONS

3.1 HortNZ made submissions and further submission on the PWDP because horticulture is a key activity within the Waikato District.

3.2 HortNZ made submissions and further submissions on provisions related to infrastructure because of the importance of infrastructure to the sector and also because of provisions, such as the National Grid, that can affect growers ability to undertake their activity.

- 3.3 HortNZ has been involved in a number of planning processes relating to the National Grid and has sought to work with Transpower to establish an agreed approach.

4. GENERAL COMMENTS

Structure of the PWDP - relocations

- 4.1 The s42A Report is recommending changes to the structure of provisions.
- 4.2 In my opinion the most appropriate format is to include all the provisions in the infrastructure chapters and include a note in relevant chapters, such as rural, where reference needs to be made to the Infrastructure provisions.

5. S42A REPORT D13:-CHAPTER 6 INFRASTRUCTURE AND ENERGY OBJECTIVES AND POLICIES

- 5.1 HortNZ made a number of submissions and further submissions on the objectives and policies for infrastructure and Energy. I address these in the order of the s42A Report. I address these prior to consideration of the rule framework.

D13.3 6.1 General Infrastructure Pg 12

- 5.2 HortNZ made a further submission (1168.135) opposing the submission of Genesis Energy (924.16) which sought a new policy for regionally significant infrastructure.
- 5.3 The s42A Report is recommending inclusion of a new policy. While I recognise that there is a need to include a policy to give effect to the RPS I am concerned about the recommended wording, particularly the clause to '*protect the effectiveness and efficiency of existing and planned regionally significant infrastructure*'.
- 5.4 RPS Objective 3.12 seeks to recognise and protect the value and long term benefits of regionally significant infrastructure.
- 5.5 The report writer expresses some concerns about inclusion of a policy but considers that such infrastructure needs to be enabled and protected against adverse effects of land use, development and subdivision.
- 5.6 I support protecting the value and long term benefits of regionally significant infrastructure but consider that the provision in the PWDP reflect that intent rather than the recommended wording.
- 5.7 I would support recommended 6.1.17 b) be amended to:

Protect the value and long term benefits of regionally significant infrastructure.

D13.4 Objective 6.1.1 Development, operation and maintenance of infrastructure Pg 18

- 5.8 HortNZ made a further submission (1168.136) opposing the submission of Transpower (576.73) seeking that Objective 6.1.1 be amended which would apply to all infrastructure, not just the National Grid.
- 5.9 The s42A Report is recommending that the objective be amended but not as specifically sought by Transpower.
- 5.10 Inclusion of upgrading is recognised as part of operating a network and that following policies and rules will determine the nature and activity status of such upgrading.
- 5.11 I also recognise that such upgrading may generate benefits beyond the district. The s42A Report is recommending that reference to the district be deleted so that the objective is broader in focus.
- 5.12 I support that recommendation.

D13.5 Policy 6.1.2 Development, operation and maintenance Pg 21

- 5.13 HortNZ made a submission (419.68) seeking recognition of the potential impacts on landowners.
- 5.14 HortNZ also made a further submission (1168.137) opposing a submission of First Gas (945.35) seeking addition of the need to access infrastructure.
- 5.15 The s42A Report rejects the HortNZ submission to recognise affected landowners and property on which infrastructure is located. Not all infrastructure is located within designations or publicly owned land and so relies on the relationship between the landowner and infrastructure operator. Sometimes easements exist and sometimes they don't- so there is an element of goodwill. The s42a Report is of the opinion that easements are generally in place for maintenance and access arrangement but this is not always the case.
- 5.16 When the Council is considering the development, operation, maintenance, repair, replacement, upgrading and removal of infrastructure throughout the district it is reasonable that they will take into account the party over whose land the infrastructure may pass, which is provided for the benefit of the district, region or nation.

- 5.17 Therefore it is relevant that the role of landowners is recognised in the policy.
- 5.18 I do not support the addition of the 'need to access infrastructure' to the policy considerations as a specific point as it is covered in consideration of functional and operational needs.
- 5.19 The access to infrastructure that crosses private land is dependent on the relationship between the respective parties and is not a matter that the district plan should be regulating.
- 5.20 Therefore I do not support the addition of vii) to Policy 6.1.2 a).

D13.7 Policy 6.1.4 Infrastructure benefits Pg 33

- 5.21 HortNZ made a submission (419.69) which sought that Policy 6.1.4 a) iv) re managing adverse effects on the environment be deleted.
- 5.22 Policy 6.1.4 sets out a range of benefits that infrastructure provides, which all, apart from clause iv), identify enabling or providing for activities within the wider community.
- 5.23 Clause iv) is different as it is not about enabling or providing for the community. Managing adverse effects on the environment is something that infrastructure providers need to be able to undertake but I do not consider that it is 'a benefit' from having the infrastructure.
- 5.24 However the s42A Report considers that avoiding, remedying or mitigating adverse effects is a benefit.
- 5.25 If the infrastructure did not exist there would be no need to manage adverse effects which only arise because of the existence of the infrastructure.
- 5.26 A benefit is something additional or an enhancement, where as managing adverse effects is focused more on maintaining the existing environment rather than something providing additional or an improvement as a benefit.
- 5.27 If the principle is applied on a wider level then addressing adverse effects from any activity could be taken as a benefit.
- 5.28 Therefore I support the deletion of iv) from Policy 6.1.4.

D13.9 Objective 6.1.6 Reverse sensitivity Pg 38

- 5.29 HortNZ made a submission (419.70) that sought a rewording of the objective for reverse sensitivity so that it applies generally across all infrastructure.

- 5.30 HortNZ also made a further submissions opposing a submission by Transpower (576.77) to amend the title of the objective (1168.138); opposing in part Federated Farmers (680.81) seeking to amend the objective (1168.139); and opposing Powerco (836.42) seeking inclusion of regionally significant infrastructure (1168.140).
- 5.31 The s42A Report is recommending changes but not those that are sought by HortNZ.
- 5.32 It is important to note that Objective 6.1.6 and Policy 6.1.7 apply to all infrastructure. There are specific policies for the National Grid and renewable energy provided in separate sections, that can give effect to the provisions in the respective NPS.
- 5.33 However it would appear that the s42A Report (Para 169-171) is relying on the wording of Policy 10 in the NPSET for approach in Objective 6.1.6 and Policy 6.1.7
- 5.34 During the development of the NPSET the Board of Inquiry received submissions seeking that the NPSET provisions be applied more broadly, including electricity distribution. However, the Board determined that the approach of the NPSET was to focus on the national significance of the National Grid.
- 5.35 Therefore I do not consider that the NPSET should be the benchmark for an objective for reverse sensitivity for all infrastructure. It is appropriate that it is the basis of Policy 6.2.6 which is specific to the National Grid.
- 5.36 In my opinion the approach to infrastructure more generally should not be driven by the approach to the nationally significant National Grid as that applies a framework beyond its designed purpose.
- 5.37 Given this approach the provisions in 6.1.6 and 6.1.7 should not be written to be generic to all infrastructure based on the direction in the RPS, with specific provisions for the National Grid in Policy 6.2.6.
- 5.38 Objective 3.12 g) of the RPS seeks that land use conflicts are minimised including minimising potential for reverse sensitivity yet Objective 6.1.6 seeks that infrastructure is 'protected' from reverse sensitivity effects, thus proposing a much higher test than in the RPS.
- 5.39 Policy 6.6 for significant infrastructure and energy resources does not specifically mention reverse sensitivity, nor does Method 6.6.1. It is included in 6.6.2 for the transmission corridor management approach.
- 5.40 HortNZ sought that Objective 6.1.6 be reworded as:

Manage activities to the extent reasonably possible to reduce the potential for reverse sensitivity effects on infrastructure.

- 5.41 Such an approach is consistent with the RPS and minimising potential for conflict and reverse sensitivity.
- 5.42 The s42A Report is recommending that 'construction, operation, maintenance, repair, replacement and upgrading' be added to both the objective and policy.
- 5.43 This seems to be unnecessary duplication. In my opinion the objective should provide the high level direction as to how reverse sensitivity should be minimised, with the more specific detail of 'how' included in the policy.
- 5.44 I do not consider that the policy should be renamed 'adverse effects of infrastructure' because the only effect referred to is 'reverse sensitivity'. The renaming implies a wider range of effects.
- 5.45 An alternative rewording of the objective based on the HortNZ submission and the RPS direction would be:

Manage activities to minimise the potential for reverse sensitivity effects on infrastructure.

- 5.46 Policy 6.1.7 could then include the more specific aspects of achieving that objective and reverse sensitivity for the National Grid managed through Policy 6.2.6 and Renewable energy under 6.3.

D13.10 Policy 6.1.7 Reverse sensitivity and infrastructure Pg 46

- 5.47 HortNZ made a submission (410.71) seeking a replacement Policy 6.1.7 for reverse sensitivity.
- 5.48 HortNZ also opposed(1168.143) a submission by First Gas (945.38) regarding access; opposing in part (1168.142) a submission by Federated Farmers (680.82) seeking to delete parts of the policy; and opposed (1168.141) a submission by Transpower (576.78) seeking to amend the policy to adverse effects.
- 5.49 Following on from the approach I support for reverse sensitivity in Objective 6.1.6, I consider that Policy 6.1.7 should provide the direction on how reverse sensitivity effects will be minimised.
- 5.50 HortNZ sought that Policy 6.1.7 be deleted and replaced with a new policy:

Manage the potential adverse effects of activities adjacent to infrastructure, including to reduce the potential for reverse sensitivity effects, by ensuring sensitive activities and inappropriate subdivision use and development do not occur in a location or form

that significantly constrains the safe, effective and efficient operation maintenance, upgrade and development of the infrastructure.

- 5.51 I support this approach as it is consistent with the RPS and allows for the specific approach for the National Grid to be applied in Policy 6.2.6 rather applying to all infrastructure generically.
- 5.52 The policy would also then focus on sensitive activities which are the main source of reverse sensitivity complaints and reducing potential for incompatible activities.
- 5.53 I do not support renaming the policy to Adverse effects on infrastructure as the policy is seeking to only address reverse sensitivity effects.
- 5.54 I therefore do not accept the reasons set out in Para 215 of the s42A Report for rejecting the HortNZ submission and proposed re-wording of Policy 6.1.7.

D13.11 Objective 6.1.8 Infrastructure in the community and identified areas Pg 55

- 5.55 HortNZ made a submission (419.72) which sought the inclusion of land use in the policy.
- 5.56 Objective 6.1.8 is:
- Infrastructure takes into account the qualities and characteristics of surrounding environment and community wellbeing.*
- 5.57 The HortNZ submission sought that 'land use' also be taken into account. The s42A Report rejects the submission as the amendment isn't needed.(Para 259)
- 5.58 Objective 6.4.2 seeks integration of infrastructure with subdivision, land use and development. For such integration to occur infrastructure should consider the surrounding land use, which is part of the environment.
- 5.59 The land use will have a significant impact on the appropriateness of infrastructure in that environment and so is an important consideration to be taken into account in Objective 6.1.8. The amendment would read as follows:

Infrastructure takes into account the qualities, land use and characteristics of surrounding environment and community wellbeing.

D13.12 Policy 6.1.9 Environmental effects, community health, safety and amenity Pg 58

- 5.60 HortNZ made a further submission (1168.144) opposing a submission by Powerco (836.43) seeking a change to 'significant' adverse effects.
- 5.61 The s42A Report is recommending that the submission be rejected and I support that recommendation as all adverse effects should be considered, not just 'significant' adverse effects.
- 5.62 Such an approach does not give effect to s5 of the RMA to avoid, remedy or mitigate adverse effects.

D13.14 Policy 6.1.11 Undergrounding new infrastructure Pg 66

- 5.63 HortNZ made a further submission (1168.145) supporting in part a submission by WEL Networks (692.33) that sought to differentiate the rural zone in terms of providing for undergrounding new infrastructure.
- 5.64 The s42A Report recommends that the submission be rejected on the basis that consideration of economic reasons will preclude undergrounding in rural areas.
- 5.65 I consider that it is appropriate that there is an explicit recognition that undergrounding may not be suitable or appropriate in rural areas so that having to demonstrate economic reasons are anticipated in the policy.
- 5.66 Therefore I support the submission of WEL Networks and do not support the recommendation in the s42A Report.

D13.15 Policy 6.1.12 Co location of compatible facilities Pg 71

- 5.67 HortNZ made a further submission (1168.146) supporting Federated Farmers (680.87) regarding consideration of reverse sensitivity effects.
- 5.68 The s42A Report rejects that submission because reverse sensitivity is addressed in separate policies, but recommends other changes to the policy that adverse effects are avoided, remedied or mitigated.
- 5.69 However reverse sensitivity effects are adverse effects that should be managed and are particularly relevant where co-location of activities could increase the potential for reverse sensitivity effects.
- 5.70 While the infrastructure may be compatible, the extent to which the infrastructure is compatible with surrounding land uses may be different and needs to be taken into account.

- 5.71 Policy 6.1.12 could be amended to include a specific reference to reverse sensitivity effects as follows:

Encourage compatible infrastructure to share location or facilities where the operational advantages can be achieved and adverse effects, including reverse sensitivity effects, are avoided, remedied or mitigated.

D13.18 Policy 6.1.16 Water conservation Pg 76

- 5.72 HortNZ (419.73) sought that Policy 6.1.16 be retained.
- 5.73 The s42A Report recommends that the policy be retained and I support that recommendation.

D13.20 General submissions on National Grid Pg 80

- 5.74 HortNZ made a further submission (1168.147) supporting in part Housing NZ Corp (749.24) seeking provisions which are practical and reasonable.
- 5.75 The s42A Report rejects the submission.
- 5.76 It is important that while the Plan needs to give effect to the NPSET and RPS that the provisions are practical and reasonable.
- 5.77 This is the approach I support in respect of submissions on specific provisions.

D13.21 Objective 6.2.1 National Grid Pg 83

- 5.78 HortNZ (419.74) made a submission seeking that the objective be amended to be consistent with the NPSET to recognise and provide for the National Grid. Transpower supported this submission point.
- 5.79 HortNZ also made further submissions (1168.148) supporting in part Transpower (576.16) seeking to amend Objective 6.2.1; and opposing (1168.149) Frist Gas (945.39) seeking that the gas network be added to the objective.
- 5.80 The s42A Report recommends that the submissions are accepted in part and recommends a change to the objective.
- 5.81 However the change is not consistent with the NPSET.
- 5.82 The proposed Objective 6.2.1 sought that the national significance of the National Grid is recognised and protected.
- 5.83 The NPSET seeks that the National Grid is recognised and provided for – but does not seek protection.

- 5.84 The s42A Report is recommending that Objective 6.2.1 is amended to the national significance of the National Grid is recognised and protected and provided for.
- 5.85 The change is attributed to the HortNZ submission but it is not as the submission sought.
- 5.86 The recommended change is still inconsistent with the NPSET.
- 5.87 In other plans and policy statements Transpower has acknowledged that the NPSET does not seek protection and has accepted 'recognise and provide' for as an appropriate policy framework.
- 5.88 Therefore I support wording in the PWDP that gives effect to the NPSET and Objective 6.2.1 be worded as follows
- The national significance of the National Grid is recognised ~~and protected~~ and provided for.*
- 5.89 I support the recommendation to reject the submission by First Gas seeking inclusion in the policy framework with the National Grid.
- 5.90 The NPSET was developed to specifically recognise and provide for the national significance of the National Grid so it is inappropriate to extend the framework to include the gas pipeline.
- 5.91 While I acknowledge that there may be issues with the provision of the gas pipeline, the approach sought by First Gas is not supported. There is a framework in the Plan that addresses all infrastructure.
- 5.92 Establishing relationships with landowners is critical where a network traverses across private property and will greatly assist with the safe operation of the gas pipeline.
- 5.93 Therefore I do not support the inclusion of provisions for the gas pipeline as sought by First Gas.

D13.22 Policy 6.2.2 Recognise the National Grid Pg 89

- 5.94 HortNZ made a further submission (1168.151) opposing First Gas (945.40) seeking that the gas network be added to the policy. HortNZ (1168.50) also supported Heritage NZ (559.62) seeking that the policy focus on the National Grid.
- 5.95 The s42A Report is recommending that the First Gas submission be rejected and that the Heritage NZ and HortNZ further submission also be rejected.
- 5.96 The s42A Report is recommending that Policy 6.2.2 be amended to specifically recognise the needs and constraints of the National Grid

which are linked to the functional and operational needs of the network.

- 5.97 I support this change as it is consistent with the NPSET.
- 5.98 I also support the recommendation to reject the submission by First Gas seeking inclusion in the policy framework with the National Grid.

D13.23 Policy 6.2.3 Operation and development of the National Grid Pg 93

- 5.99 HortNZ made a further submission (1168.152) opposing Frist Gas (945.41) seeking that the gas network be added to the policy.
- 5.100 The s42A Report is recommending that the First Gas submission be rejected.
- 5.101 I support that recommendation for the reasons set out above.

D13.24 Policy 6.2.4 Maintenance and minor upgrade of the National Grid Pg 95

- 5.102 HortNZ made a further submission (1168.154) opposing Frist Gas (945.42) seeking that the gas network be added to the policy. HortNZ (1168.153) also supported a submission by Transpower (576.19) seeking that 'operation' be added to the policy.
- 5.103 The s42A Report is recommending that the First Gas submission be rejected and that the Transpower and HortNZ further submission also be rejected.
- 5.104 The s42A Report considers that Policy 6.2.4 provides for maintenance and minor upgrade while Policy 6.2.3 provides for operation and development of the National Grid, so it is not necessary to include operation in Policy 6.2.4.
- 5.105 I concur with the s42A Report that 'operation' is provided for so does not need to be added to Policy 6.2.4.

D13.25 Policy 6.2.5 Environmental effects Pg 98

- 5.106 HortNZ (1168.155) opposed a submission by Transpower (576.20) seeking amendments to Policy 6.2.5. HortNZ (1168.156) also supported Federated Farmers (680.96) seeking new clauses to the policy.
- 5.107 The s42A Report recommends that the Federated Farmers submission be rejected and the Transpower submission accepted in part.

- 5.108 The recommended changes include limiting consideration of environmental effects within the rural environment to the list of stated matters, which do not include effects on rural land use or high class soils.
- 5.109 While the matters in the recommended clause are consistent with Policy 8 of the NPSET it should not override Policy 4 which requires decision makers to have regard to the extent to which adverse effects can be avoided remedied or mitigated by the route, site selection and method selection.
- 5.110 Policy 4 is not limited to specific activities. Therefore I am concerned that recommended changes to Policy 6.2.4 will be taken as being the only things in the rural environment that will be considered.
- 5.111 A possible change would be to add the word 'including' so that the list is not exclusive:
- 5.112 Such an approach would support the submission of Federated Farmers which sought an acknowledgment of the effects of activities on rural activities.
- 5.113 The policy could be amended as follows:

Within rural environment seeking to avoid adverse effects, including on identified heritage values...

D13.26 Policy 6.2.6 Reverse sensitivity and the National Grid Pg 104

- 5.114 HortNZ made a submission (419.75) seeking that Policy 6.2.6 be deleted and replaced with an alternative policy.
- 5.115 HortNZ (1168.158) also supported a submission by Federated Farmers (680.97) which sought to amend Policy 6.2.6, including new clauses recognising rural production activities.
- 5.116 HortNZ (1168.157 and 159) also opposed submissions by Transpower (576.21) and First Gas (945.43) seeking to amend Policy 6.2.6
- 5.117 Some amendments are recommended in the s42A Report but they do not address the issues identified by HortNZ.
- 5.118 I consider that the policy framework proposed by HortNZ more adequately addresses the issue of reverse sensitivity consistent with the NPSET and so do not support the changes recommended in the s42A Report.

D13.38 Objective 6.4.1 Integration of infrastructure with subdivision land use and development Pg 123

- 5.119 HortNZ (1168.160) opposed a submission by Counties Power (405.2) which sought the protection of existing infrastructure assets.
- 5.120 The objective seeks that there is integration of infrastructure with subdivision land use and development and as such it is not appropriate that some assets are separated out and given a priority of protection.
- 5.121 The s42A Report is recommending that no changes are made to Objective 6.4.1 and I support that recommendation.

D13.44 Policy 6.4.7 Stormwater Pg 145

- 5.122 HortNZ made a submission (419.76) that sought that Policy 6.4.7 be amended to consider discharge of contaminants from urban development.
- 5.123 The s42A Report is recommending that the change be accepted in part by focussing on the district council land use controls of activities, rather than the regional council function of discharges of contaminants by adding a new clause:

Avoid remedy or mitigate the generation of contaminants from urban development, particularly from high contaminant generating car parks and high use roads.

- 5.124 I support that recommendation.

6. CH 14 – REPORT D0 INFRASTRUCTURE AND ENERGY OVERALL

D0.9 Definition – Minor upgrading of existing infrastructure (Pg 35)

- 6.1 HortNZ made a submission (419.127) seeking that the definition of minor upgrading limited the increase in voltage through such minor upgrading.
- 6.2 The s42A Report rejects the submission on the basis that electricity lines should be able to be upgraded.
- 6.3 As I understand the submission point it is not to limit the ability to upgrade the voltage but to ensure that affected parties are aware that such an increase in voltage is taking place.
- 6.4 NZECP34:2001 sets distances for clearance from electricity lines based on voltage. The greater the voltage the greater the required setback. A grower could have a structure or building that complies with NZECP34:2001 for an existing line but the increase in voltage could mean that the structure or building becomes non-compliant and a greater distance is needed.

- 6.5 In such an instance, it is reasonable that a landowner should be aware of the increase in voltage. It may be that poles could be replaced to greater height and so the distance is provided for through the increased height.
- 6.6 Counties Power has opposed the submission because the network has been built at 11kV and it is possible to make minor changes to operate at 22kV and that reconductoring does not affect landowners.
- 6.7 Table 2 of NZECP34:2001 sets out the safe distances from conductors depending on the span. An 11kV line with a 80m span requires a 5.5m minimum distance. For a line exceeding 11kV but not exceeding 33kV the distance would be 7m, thereby requiring an increase distance of 1.5m for the same line. An increase to higher voltage would increase the distances again.
- 6.8 Many district plans have a provision where there is a limitation on increase in voltage as sought by HortNZ. It is not a new provision. If the line has been operating below design capacity then it could be reasonably anticipated that the voltage may increase. But if the change is beyond design capacity then the minimum distances become an issue for landowners.
- 6.9 Where such lines are on private property and affect the landowner there needs to be recognition of the impact such an increase in voltage could have. By providing a limitation on the increase as part of 'minor upgrading' means that consideration of such effects is undertaken.
- 6.10 It is acknowledged that the NESETA regulations would override such a provision in a plan so the minor upgrading definition would only apply where the NESETA does not apply.
- 6.11 Therefore I support the addition sought by HortNZ to include the addition to the definition of minor upgrading slightly amended to recognise the NESETA.

An increase in voltage of a line can only occur as minor upgrading if the line was constructed for the increased voltage, unless the NESETA Regulations apply.

D0.10 Definition National Grid terms (Pg 38)

- 6.12 HortNZ made submissions (419.128 and 129) and further submissions (1168.126, 124 and 125) seeking changes to the definition of National Grid Yard and National Grid Corridor.

- 6.13 The definitions were inaccurately transposed in the notified Plan and the s42A Report is recommended that the error be corrected. I support this recommendation.
- 6.14 In addition I support the inclusion of the National Grid Subdivision Corridor so it is clear that the corridor only applies to subdivision, not land use.
- 6.15 The s42A Report is also recommending that additional explanation be included within the definitions. The description is useful but seems to go beyond the clarity that is required in a definition. It may be better that description of where the measurements are taken is as an advice not in the rules rather than the definitions.

D0.12 Definitions Functional need and operational need (Pg 47)

- 6.16 HortNZ made a further submission (1168.118) supporting Federated Farmers (680.137) seeking a change to the definition of functional need so it not only applies to Ch 14.
- 6.17 The s42A Report is recommending that the change be made.
- 6.18 I support that recommendation so the definition is the same as the National Planning Standards definition.

D0.13 Definition Infrastructure (Pg 50)

- 6.19 The definition of infrastructure is the definition in the RMA.
- 6.20 Various submission points seek that the definition be amended but the s42A Report is recommending that the definition be retained consistent with the RMA.
- 6.21 I support that recommendation.

D0.14 Definition Regionally significant infrastructure (Pg 54)

- 6.22 HortNZ supported (1168.109) a submission by Transpower (576.36) to include the definition of regionally significant infrastructure from the RPS in the Plan.
- 6.23 The s42A Report is not recommending that the definition be added.
- 6.24 I note that s42A Report D13.3 is recommending that a policy be included for regionally significant infrastructure with reference to the definition in the RPS, even though Para 224 the report states that there does not need to be specific provisions for regionally significant infrastructure.
- 6.25 If the term regionally significant infrastructure is used in the Plan it would be appropriate to include the definition from the RPS.

D0.16 Definitions – Other (Pg 62)

- 6.26 HortNZ made a submission (419.119) that sought clarification on the definition of 'Energy Corridor' which was defined as an energy corridor shown on the planning maps.
- 6.27 The s42A Report is recommending that the definition be amended to clarify that it is a corridor for the transportation of minerals and substances, limited to coal ash, aggregate, overburden, cleanfill, wastewater and other liquids (other than a hazardous substance).
- 6.28 I support that recommendation as it clarifies the intent of the term.

7. CH 14 - REPORT D1 INFRASTRUCTURE AND ENERGY INTRODUCTION

D1.2 General on Introduction (Pg 1)

- 7.1 HortNZ made a further submission (1168.180) supporting Federated Farmers seeking changes to take rural land use into consideration when analysing resource management issues for infrastructure services and networks.
- 7.2 As a result of the submission the s42A Report is recommending that the definition of farming be clarified so that on-farm activities are not classed as infrastructure. Additional words in the Introduction are recommended.
- 7.3 I support clarification of the interrelationship between infrastructure and rural production activities, however I do not support the recommended wording which seeks to apply 'protection' for infrastructure over the rural production activities. Nor does the recommended wording acknowledge that infrastructure can be located on private land and may limit the ability of the land to be utilised for rural production activities.
- 7.4 The wording sought by Federated Farmers sought to recognise the soil, cultural and economic wellbeing of farmers and rural communities without adversely impacting on the functioning of infrastructure networks.
- 7.5 While Transpower has identified some issue with rural production activities and the National Grid this should not be taken as incompatibilities between all infrastructure and rural production activities. The Introduction should be able to be applied generically.
- 7.6 I consider acknowledgement of such wellbeing is important in terms of recognising the relationship between rural production activities and infrastructure services.

7.7 Therefore while I support additions to the Introduction I do not support the wording as recommended and prefer that sought in the submission of Federated Farmers.

8. CH 14 - REPORT D3 GENERAL INFRASTRUCTURE

D3.5 14.3.1 P2 Minor upgrading of existing infrastructure (Pg 6)

8.1 HortNZ made a submission (419.81) seeking changes to the rule for minor upgrading of existing infrastructure consistent with the change sought to the definition of minor upgrading.

8.2 As stated above in respect of the submission on the definition of minor upgrading, an increase in voltage has the potential to adversely affect a landowner with an electricity line through their property.

8.3 For the reasons set out above I support the changes that HortNZ sought to 14.3.1 P2 and do not support the recommendation in the s42A Report to reject the submission.

D3.8 14.3.1 P5 Trimming, maintenance or removal of vegetation or trees associated with infrastructure.

8.4 HortNZ made submissions (419.82 and 419.142) seeking reference to the Electricity (Hazards from Trees) Regulations 2003 in the rule rather than as a note in 14.3.1.4.

8.5 The s42A Report is recommending that the Note be retained but with additional information.

8.6 I consider that this approach presents confusion as it is applying two different requirements to the management of vegetation. The regulations stipulate how trees and vegetation are to be managed and it is not necessary to duplicate another set of requirements in the district plan.

8.7 Therefore I support the HortNZ submission that seeks to rely on the tree regulations as a basis for the requirements in the rule and delete the note.

D3.19 14.3.3 Minor upgrading of existing infrastructure that does not comply with one or more of the conditions of Rule 14.3.1.1

8.8 HortNZ made a submission (419.83) seeking that a new matter of discretion be added to 14.3.3 RD1 'effects on affected landowners'.

8.9 I have outlined above concerns about the impact of minor upgrading on affected landowners.

- 8.10 The s42A Report rejects the submission as it considers effects other than amenity effects should be considered outside of the district plan.
- 8.11 Unfortunately this approach fails to recognise the social and economic wellbeing of the affected landowners. If a minor upgrading triggers the need for a resource consent it is reasonable that any affected landowners are considered as part of that consent process.
- 8.12 Therefore I do not support the recommendation to reject the HortNZ submission and support inclusion of an additional matter of discretion in 14.3.3 RD1 'effects on affected landowners.'

9. CH 14 - REPORT D4 14.1 NATIONAL GRID

- 9.1 HortNZ made a number of submissions and further submissions relating to the National Grid. Section 5 of this evidence addresses the objectives and policies for infrastructure, including the policy framework for the National Grid in Chapter 6.
- 9.2 I support a framework that gives effect to the NPSET that recognises and provides for the National Grid whilst still enabling rural production activities to occur in rural areas.
- 9.3 Key considerations in providing for the National Grid are the National Policy Statement (NPSET) and NZECP34:2001 and the RPS as set out in the s42A Report D4 14.4.
- 9.4 The s42A Report has essentially accepted submissions of Transpower in terms of corridor management but I note that there are some differences from the set of provisions that have been used elsewhere, particularly relating to earthworks.
- 9.5 I have attached a copy of NZECP34:2001 to this evidence.
- 9.6 I have also attached the provisions from the Western Bay of Plenty District Plan which provides a template for provisions for the National Grid.

The National Policy Statement for Electricity Transmission (NPSET)

- 9.7 The NPSET sets out the policy framework with the key policies for this hearing being Policies 10 and 11.
- 9.8 It is important to recognise that the policies are not absolute in that they use language such as 'to the extent reasonably possible'. There is also a judgement to be made as to what would 'compromise' the network.

- 9.9 It is also important to note that the objective of the NPSET seeks to manage both the adverse effects of the network and also the adverse effects of other activities on the network. As such it recognises that the network can affect other activities.
- 9.10 In my opinion the key to provisions in the district plan is to provide for the National Grid but enable rural production activities to the extent reasonably possible so that the two activities can co-exist.
- 9.11 A set of provisions have been developed between HortNZ and Transpower over a number of years to give effect to the NPSET and I support inclusion of such provisions in the Plan.

NZECP34:2001

- 9.12 NZECP34:2001 NZ Electrical Code of Practice for Electrical Safe distances are regulations which need to be met regardless of provisions in a district plan. The regulations seek to ensure that activities near electrical lines are undertaken safely to people and property and to ensure that lines can be accessed for inspection and maintenance.
- 9.13 The s42A Report considers that NZECP34:2001 sets out provisions relating to safety. Section 2.1.1 of NZECP states:
- The minimum safe distances are designed to limit the change of damage or hazards being created by the building or excavation. The minimum distances also ensure that the support structures can be accessed for inspection and maintenance.*
- 9.14 Therefore it is incorrect to state that NZECP is only concerned about safety as the regulations are intended to have a wider application.

D14.4.2 General (Pg 4)

- 9.15 The s42A Report in section 2 General sets out the rationale and basis for the provisions in the Plan based on a broad submission of Transpower's. HortNZ has no specific submission points that are listed in this section but note that the section is relevant in terms of setting out the Transpower position.

D4.4 14.4.1.2 P2 Buildings, structures and sensitive land use within the National Grid Yard in all other zones (Pg 17)

- 9.16 Rule 14.4.1.2 P2 will apply to rural production activities in the Rural Zone.
- 9.17 HortNZ made a submission (419.84) seeking changes to 14.4.1.2 and opposed changes (1168.181) sought by Transpower (576.54)

and supported changes (1168.183) sought by Federated Farmers (680.282).

- 9.18 HortNZ sought that clause c) be amended by deleting all reference to reticulation and storage of water for irrigation purposes. HortNZ is concerned about the limitation of such network systems for providing water for rural production activities.
- 9.19 The activity would default to non-complying as it is not provided for as a permitted activity or a restricted discretionary activity.
- 9.20 Such an activity status could severely limit the provision of irrigation infrastructure.
- 9.21 As I understand the issue it is about the earthworks associated with such irrigation infrastructure – such as races and storage dams. I consider that the earthworks provisions are the more appropriate place where such consideration is applied. If the construction of races or dams does not meet the earthwork thresholds a restricted discretionary consent would be required.
- 9.22 Therefore I support the deletion of reference to reticulation and storage of water for irrigation purposes by a network utility operator in P2 14.4.1.2 (1) b) and 14.4.1.2 (2)b) iii)
- 9.23 The s42A Report is recommending the use of the term *Pseudomonas syringae* pv. *Actinidiae* (Psa) disease control structures. This is an inappropriate term to use. The structures are called 'Protective canopies' by the industry and are not limited to PSA management.
- 9.24 Protective canopies are a type of artificial crop protection structure but using non-permeable materials and are fully enclosed but not heated or temperature controlled like a greenhouse.
- 9.25 Such structures are more akin to a greenhouse and would be difficult to remove to provide access to the National Grid so are sought to be limited within the National Grid Yard. However it is more appropriate that they are called protective canopies than PSA structures.
- 9.26 14.4.1.2.(2) c) is a condition that seeks to not permanently physically impede existing vehicular access to a National Grid support structure.
- 9.27 In my opinion the word 'existing' should be deleted. The threshold is that a structure should not impede access to the structure but it does not need to be exactly the same existing access that is retained. If a structure alters the access but still retains vehicular

access via an alternative that should adequately provide for the access that Transpower seeks.

- 9.28 In addition there should be a provision in 14.4.1.2 (3) that enable artificial crop protection structures in the National Grid Yard where they meet the requirements of NZECP34:2001 Clause 2.4.1. This has been included in other plans with Transpower's agreement but is not included in the recommended provisions. This should be added after d):

OR

e) meets the requirements of NZECP34:2001 Clause 2.4.1.

D14.5 Earthworks activities within the National Grid Yard 14.4.1 P3 (Pg 26)

- 9.29 HortNZ made a submission (419.103) seeking changes to the earthwork provisions and further submissions supporting Federated Farmers (680.283) and opposing (1168.182 and 186) Waikato DC (697.7) and Transpower (576.55).
- 9.30 In previous plans the earthwork provisions for the National Grid Yard have been based on NZECP34:2001.
- 9.31 The s42A Report is recommending changes which are not consistent with NZECP based on the notion that NZECP is only about managing safety. As set above NZECP also provides for access and maintenance so are appropriate to be applied to earthworks in the National Grid Yard.
- 9.32 I oppose the recommended changes to 14.4.1.3 (1) a) and b) and 2) as they are inconsistent with NZECP34:2001.
- 9.33 The s42A Report states that the depths of earthworks are simplified. In so doing the provisions are inconsistent with NZECP and do not provide for earthworks that can be undertaken within the National Grid Yard.
- 9.34 14.4.1.3 (1) e) seeks to set mandatory distances to conductors. Such distances are set out in NZECP and are dependent on the voltage and span. This is a more appropriate effects based approach than setting mandatory distances.
- 9.35 The key issues for earthworks are that the integrity of the structures are not compromised by earthworks or access to a structure lost. The provisions in NZECP provide for those requirements to be met.

D14.8 Earthworks within the National Grid Yard that do not comply with one or more of the conditions in Rules 14.4.1.3 (1) and 14.4.1.3 (2) 14.4.2 RD3 (Pg 35)

- 9.36 HortNZ made a submission (419.104) supporting 14.4.2 RD3 and a further submission (1168.187) opposing Transpower (576.58).
- 9.37 Earthworks for reticulation and storage of water for irrigation purposes in the National Grid Yard should be provided as a restricted discretionary activity. It needs to be clear in RD3 that earthworks that don't meet 14.4.1.3 (1) and 2) are an RD Activity.

D14.11 14.4.4 Non-complying General (Pg 47)

- 9.38 HortNZ made a further submission (1168.189) on Transpower (576.66) seeking that some earthworks be a non-complying activity.
- 9.39 I consider that earthworks that are not permitted should be able to be assessed as a restricted discretionary activity so there should be no requirement for earthworks to be non-complying activity.
- 9.40 The s42A Report is recommending that a Non-complying earthworks provision is included in the Plan and I do not support that recommendation.

D14.12 14.4.4 NC3 – NC10 Non complying activities (Pg 51)

- 9.41 HortNZ made a submission (419.105) seeking that the provision relating to hazardous substances stated the hazardous class of substances that are explosive or flammable and so not provided for within the National Grid Yard.
- 9.42 HortNZ (1168.190, 178 and 188) opposed submissions of Transpower (576.82, 64 and 68)
- 9.43 The s42A Report is recommending some changes to 14.4.4 but not as sought by HortNZ.
- 9.44 In particular there appears to be no specific provision for greenhouses and protective canopies within the NC provision. In my opinion they should be listed in NC9 with Dairy sheds and buildings for intensive farming.
- 9.45 NC8 could have the hazard classes 1-4 added so it is clear which hazardous substances are a non-complying activity in the National Grid Yard.
- 9.46 The s42A Report is recommending an Advice Note for 14.1 Introduction. I consider that these matters are specific to the National Grid Yard so the advice Note should be in 14.4 not 14.1.

10. CH 14 – REPORT D5 14.5 ELECTRICAL DISTRIBUTION

D5.6 14.5.1 Construction or alteration of a building for a sensitive land use.

- 10.1 HortNZ (419.106) sought that Rule 14.5.1 P5 be deleted as setback distances are provided in NZECP34:2001.
- 10.2 The s42A Report is recommending that the submission be rejected on the basis that NZECP34 only applies to safety.
- 10.3 As set out above NZECP also provides for access and maintenance and limits chances of hazards arising and would apply to sensitive land uses establishing near electricity lines.
- 10.4 I do not support duplication of provisions with regulations so support the deletion of the provision.
- 10.5 I note in the strikethrough changes to Ch 14 – Recommended amended version – Rule 14.5.1 P5 is struck out as sought by HortNZ.
- 10.6 On this basis it would appear that the submission has been accepted and I support that change.

11. CH 14 - REPORT D12 14.12 TRANSPORTATION

- 11.1 HortNZ made a two submissions relating to transportation:
- (a) 419.107 on 14.12.1.4 (1) d) i) regarding traffic generation and horticulture harvesting considered in D12.6 (Pg 29)
 - (b) 419.108 on Table 14.12.5.7 regarding parking spaces for coolstores and workers accommodation considered in D12.30 (pg 87)
- 11.2 The s42A Report is recommending that 14.12.1.4 (l) d) be amended to include specific provision for traffic generated from horticulture harvesting as sought in the submission. This recommendation is supported.
- 11.3 The s42A Report rejects the submission regarding parking for coolstores and workers accommodation in that they are located in the Rural Zone and are part of a farming activity so there are no parking requirements.
- 11.4 There may be coolstores and workers accommodation located in zones other than rural, such as industrial and it would be appropriate that there was a recognition of parking requirements in such situation.
- 11.5 The provision could state that other than the rural zone, the parking requirements are as follows:

Activity	Minimum required parking spaces	Minimum required loading bays
Coolstores other than in Rural Zone	1 space per 1000m2 GFA	Nil
Worker accommodation other than in Rural Zone	1 space per 12 workers accommodated	Nil

- 11.6 Such an approach would ensure that appropriate parking requirements are applied to the activities outside of the Rural Zone.

12. CONCLUSION

- 12.1 This evidence has set out changes I support to a range of provisions to provide for infrastructure and ensure that the effects of infrastructure are appropriately managed through in the Plan.
- 12.2 Horticultural growers rely on infrastructure for many aspects of their businesses but can also be adversely affected when provision of infrastructure is incompatible with growing activities.
- 12.3 Therefore I have sought to take a principled approach to the provisions to ensure that both growing and provision of infrastructure can co-exist.
- 12.4 The provisions sought for the National Grid are based on the NPSET and NZECP34:2001 and as developed with Transpower over a number of years.
- 12.5 I also seek to ensure that the framework in the Plan for infrastructure gives effect to the higher order documents.
- 12.6 Such an approach will lead to effective and efficient provision of infrastructure services in the district.

Lynette Wharfe

29 September 2020

Appendix 1: Experience of Lynette Wharfe

Some of the projects I have been involved in that I consider are particularly relevant in this context are:

- a) Project Manager and facilitator for a Sustainable Management Fund (“**SMF**”) Project ‘Reducing nitrate leaching to groundwater from winter vegetable crops’, to develop management tools for vegetable growers to implement best practice for fertiliser applications, to assist in changing fertiliser usage.
- (b) Managed an SMF project for NZ Agrichemical Education Trust communicating the revised NZS 8409:2004 Management of Agrichemicals to local authorities throughout NZ, including development and leading workshops with councils.
- (c) Revised the Manual for the Introductory GROWSAFE® Course for the NZ Agrichemical Education Trust, to make the Manual more user friendly and accessible and to align it with the Hazardous Substances and New Organisms legislation. (
- (d) Managing the research component for SFF project – SAMSUN – developing a framework for the development of Sustainable Management Systems for agriculture and horticulture.
- (e) Project Manager MAF Operational Research Project Effectiveness of Codes of Practice investigating the use of codes of practice in the agriculture and horticulture sectors.
- (f) Undertook a review of Current Industry and Regional Programmes aimed at reducing pesticide risk, including assessing a number of Codes of Practice.
- (g) Contributed as a project team member for a Sustainable Farming Fund project ‘Environmental best practice in agricultural and rural aviation’ that included developing a Guidance Note on agricultural aviation, which is now on the Quality Planning website.
- (h) Undertook a review of agrichemical provisions in the Auckland Regional Air Land and Water Plan and developed a risk based response for inclusion in the Proposed Auckland Unitary Plan.

Appendix 2 - Western Bay of Plenty provisions for National Grid

Appendix 3 – NZECP34:2001