



## **PROPOSED INVERCARGILL CITY DISTRICT PLAN**

### **Decision No. 11**

### **Electrical Interference**

#### **Hearings Committee**

Councillor Darren Ludlow (Chair)

Councillor Neil Boniface

Councillor Graham Sycamore

Keith Hovell

11 October 2016

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## **INTRODUCTION**

We have been appointed by the Invercargill City Council to consider and issue decisions on the submissions lodged to the Proposed Invercargill City District Plan. In this decision we consider the submissions lodged in relation to Electrical Interference.

The Resource Management Act 1991 sets out various matters that impact on our considerations and deliberations. The key provisions are Sections 5 - 8, 32, 75 and 76 of the Act, and the Second Part of the First Schedule to the Act. The Section 42A Report prepared for the Committee considered these matters in detail and we have had regard to those matters. Where the statutory provisions are of particular significance we have referred to them within this Decision.

In this Decision, the following meanings apply:

"The Council" means the Invercargill City Council.

"FS" or "Further Submitter" means a person or organisation supporting or opposing a submission to the Proposed Plan.

"Hearings Committee" means the District Plan Hearings Committee established by the Council under the Local Government Act.

"ICNIRP is the International Commission on Non-Ionising Radiation Protection.

"NES" is a National Environmental Standard.

"NPSET" is the National Policy Statement on Electricity Transmission.

"NZAS" means New Zealand Aluminium Smelter Limited.

"Operative Plan" or "Operative District Plan" means the Invercargill City District Plan 2005.

"Proposed Plan" or "Proposed District Plan" means the Proposed Invercargill City District Plan 2013.

"RMA" means the Resource Management Act 1991.

"Spark NZ Limited" refers to the company previously known as Telecom NZ Limited.

"Submitter" means a person or body lodging a submission to the Proposed Plan.

At the commencement of the hearings, Crs Boniface and Ludlow declared an interest as Directors of PowerNet Limited, Cr Sycamore declared an interest as a Director of Invercargill City Holdings Limited and Commissioner Hovell declared a conflict of interest in relation to submissions lodged by Cunningham Properties Limited. The Councillors and Commissioner took no part in deliberations in relation to the submissions of the submitters referred to.

## **THE HEARING TO CONSIDER SUBMISSIONS TO THE PROPOSED DISTRICT PLAN**

The hearing to consider the submissions lodged to the matters set out in this decision was held in the Council Chambers of the Invercargill City Council on 25 August 2014.

## **Section 42A Report**

The Hearings Committee received a report from Joanna Shirley, Policy Planner with the Invercargill City Council. In her report, Mrs Shirley highlighted that electrical interference can affect amenity values and in some instances can impact on the safe and efficient operation of zone activities. She described how in the Zone specific section of the Proposed District Plan each Zone has policies relating to electrical interference. These policies are predominantly focused on ensuring freedom from nuisance but also recognise that in some areas of the District, such as the Airport Operation and Airport Protection Zones, adverse effects of electrical interference can impact on the safe and efficient operation of the activities taking place within the Zones.

Mrs Shirley referred to Rule 3.5.2 which requires facilities emitting electric and magnetic fields to comply with all relevant New Zealand standards, measured at or beyond the boundary of a site. Where an activity cannot comply with these Rules then the activity is non-complying. On the basis of the submissions lodged, Mrs Shirley accepted that the rule is not clear, particularly in referring to "all relevant NZ standards". She had researched which standards were "relevant" and found there were a number. Of more significance Mrs Shirley ascertained that Radio Spectrum Management, a subsidiary group of the Ministry of Business, Innovation and Employment, is the leading government agency on this subject and monitors and manages the radio spectrum. As part their role they investigate electrical interference complaints and enforce the appropriate electromagnetic compatibility standards. She noted that no regard had been given to this organisation and its activities during the preparation of the Proposed Plan.

In consultation with Radio Spectrum Management Mrs Shirley concluded that electrical interference does not require regulatory control under the Proposed Plan as it is adequately addressed by other legislation. She therefore recommended deletion of Rule 3.5 in its entirety.

Mrs Shirley did however consider it appropriate to retain the objectives and policies referring to electrical interference in order to ensure the maintenance and enhancement of amenity values is achieved. To help clarify the intent of the provisions and provide consistency between the zone policies Mrs Shirley recommended minor wording changes to the policies and the inclusion of a definition of "electrical interference".

In reply to questions from the Committee, Mrs Shirley indicated that if a complaint was received regarding electrical interference, the Council would advise Radio Spectrum Management and they would investigate and take any action required. She noted that in the past few years there had been no such complaints, highlighting that electrical interference was not an issue of concern to residents and reinforcing the lack of a need to include any rules in the Proposed Plan.

### **Submitters Attending the Hearing**

No persons appeared at the hearing.

### **Material Tabled at the Hearing**

#### Transpower NZ Limited

Mike Hurley, Senior Environmental Planner at Transpower, outlined concerns that Transpower had with Rules 3.5.1 and 3.5.2. He stated that as Transpower's infrastructure traverses property boundaries it would never meet a zero interference level at the boundary of a site and noted that the proposed rules did not recognise the International Commission

on Non-ionising Radiation Protection (ICNRIP) guidelines as required by the National Policy Statement on Electricity Transmission. He therefore supported the recommendation to delete the rules in Section 3.5.

Mr Hurley also agreed with the assessment in the Section 42A Report that electrical interference can still be considered as part of a resource consent application for a new development.

#### PowerNet Limited

Joanne Dowd of Mitchell Partnerships advised on behalf of PowerNet Limited that as its infrastructure traverses property boundaries it would not be able to meet the zero interference level at the boundary of a site and for that reason supported the submission of Transpower NZ Limited. Mrs Dowd also advised that the recommendation to delete Section 3.5 was appropriate.

With reference to the recommendation to amend various policies to read "*to avoid nuisance from electrical interference*" Mrs Dowd asserted that the use of the word "avoid" is inconsistent with Section 5(2)(c) of the RMA and case law. She requested that the phrase "avoid, remedy or mitigate" be used.

#### Chorus NZ Limited and Spark NZ Limited

Mary Barton, Senior Environmental Planner at Chorus NZ Limited, advised on behalf of Chorus NZ Limited and Spark NZ Limited that the recommendation to delete Section 3.5 was supported.

#### New Zealand Police

Marty Thomson of NZ Police advised of opposition to Rule 3.5.2 because it was inconsistent with the NES for Telecommunications Facilities and uncertain. Mr Thomson supported the recommendation to delete Section 3.5.

#### South Port NZ Limited

Kirsty O'Sullivan of Mitchell Partnerships advised on behalf of South Port NZ Limited that the recommendation to amend the wording of Section 2.42 Policy 5 was supported.

#### Invercargill Airport Limited

Kirsty O'Sullivan of Mitchell Partnerships advised on behalf of Invercargill Airport Limited that the recommendations in the Section 42A Report as they related to the submissions of the company were accepted.

## **MATTERS REQUIRING PARTICULAR CONSIDERATION**

### **Use of "avoid" in Policies**

In her Section 42A Report Mrs Shirley recommended the rewording of a number of policies to read "to avoid nuisance from electrical interference". She considered this a minor change under Clause 16(2) of the First Schedule of the RMA with the word "avoid" having the same meaning as "freedom from" which had been used. She also considered the revised wording consistent with the provisions of the RMA. The Committee agreed this approach was appropriate but also noted that the change in wording arose as a consequence of Submissions 103.32 and 103.47 by Invercargill Airport Limited.

Mrs Dowd on behalf of PowerNet Limited asserted that the use of the word "avoid" is inconsistent with section 5(2)(c) of the RMA. She requested the phrase "avoid, remedy or mitigate" be used and referred to the Environment Court decision *Winstone Aggregates Ltd and Auckland Regional Council v Papakura District Council (AO49/2002)* as supporting that approach.

The Committee had some doubt as to whether the case law referred to was appropriate, noting the recent Supreme Court decision *Environmental Defence Society v New Zealand King Salmon Limited [2014]* placed a greater emphasis on the stand alone use of the word "avoid". Notwithstanding that, Liz Devery, Senior Policy Planner, at the hearing in response to questions from the Committee advised that the wording proposed was appropriate, highlighting that the policy was not referring to adverse effects in general, but only to those effects which were a nuisance. She commented that any nuisance should be avoided, while depending on the circumstances, it may be appropriate to remedy or mitigate other effects of a lesser impact. The Committee agreed with Mrs Devery and concluded that the change in wording as recommended by Mrs Shirley reflected the outcome sought and was highly appropriate.

### **Appropriateness of Section 3.5**

Mrs Shirley in her Section 42A Report noted the opposition to the provisions in this section of the Proposed Plan with several submitters commenting that Rule 3.5.2 is too vague by referring to "all relevant New Zealand standards" and that it is inconsistent with the National Environmental Standard for Telecommunication Facilities. Some of the submitters request that the rule be deleted while others recommend amending the rule to be more specific. NZ Police in Submission 52.5 sought that the rule be amended to adopt the wording specified in the National Environmental Standard for Telecommunication Facilities. Further Submitters Transpower NZ Ltd (FS 25.3) and PowerNet Ltd (FS 12.7) considered that as well as New Zealand Standards, international guidelines, such as the ICNIRP Guidelines, should also be recognised by the rule.

It was clear to the Committee that there was confusion as to the intent and implications of Section 3.5 of the Proposed Plan. As the Committee understood the situation, the standard referred to in the NES for Telecommunication facilities, being *NZS 2772:Part1:1999 Radiofrequency Fields Part 1 – Maximum Exposure Levels – 3 kHz to 300GHz* does not apply to the interference of electronic equipment, nor does the International Commission on Non-ionising Radiation Protection (ICNIRP) Guidelines seek to limit electromagnetic field exposure to the human body. The Committee agreed with Mrs Shirley where she stated:

*The use of the term "all relevant New Zealand standards" in Rule 3.5.2 is too vague and, as shown by the interpretation of the submitters, opens the rule up to a broad range of considerations outside of the scope of the electrical interference provisions.*

The Committee also noted that Mrs Shirley had found a range of comprehensive standards, guidelines and codes of practice established for the purpose of managing electrical interference. The Committee therefore supported the deletion of Section 3.5 as recommended by Mrs Shirley and sought by submitters. The Committee also noted Section 17 of the RMA can be used by the Council if it is considered that an adverse effect from electrical interference is not being adequately avoided, remedied or mitigated, although it thought it more likely that any problems that arose would be investigated and resolved by Radio Spectrum Management.

Having regard to the adverse effects electrical interference can have on amenity values the Committee also concluded that it is appropriate to retain policies in the respective zones in relation to electrical interference. Regard was given to the request by Invercargill Airport



Limited to have a single District wide policy, but in reviewing the provisions for each zone it was noted that the various components that comprised amenity were dealt with separately, and for consistency the same approach should be adopted with regard to electrical interference.

### **Provisions Applying to the NZAS Smelter**

NZAS in Submission 71.36(b) has opposed the inclusion of Smelter Zone Policy 5<sup>1</sup> given the isolation of the Smelter from other activities and as a consequence argues that electrical interference is unlikely to be an issue. Mrs Shirley in her Section 42A Report recommended that this submission be rejected *"to raise awareness of this issue and is a matter that should be considered by the Smelter as part of their site operations"*. She also stated that while *"electromagnetic waves reduce rapidly with distance, the Smelter Zone closely adjoins the coastal marine area, where boating and fishing operations occur. Electrical interference can adversely impact navigation equipment and radio communications, which are important for these activities"*.

Having regard to these matters, the Committee decided to accept the submission, primarily on the basis of the isolation of the Smelter from any places where any adverse electrical interference effects could reasonably cause any nuisance or inconvenience. The Committee therefore resolved to delete Policy 5.

### **Conflict with National Environmental Standards**

A4 Simpson Architects Limited in Submission 107.14 opposed the policy framework applying to Electrical Interference on the grounds that it is covered by National Environmental Standards. Mrs Shirley in her Section 42A Report noted:

*The National Environmental Standards on Electricity Transmission Activities and Telecommunication Facilities include controls on electric and magnetic field exposure and radiofrequency exposure to ensure exposure levels are safe for human health. The Electrical Interference provisions of (the) Proposed District Plan are provided to protect amenity values and therefore serve a different purpose to that of the NES. The electrical interference provisions also apply to a much wider scope than the national environmental standards which are limited to existing electricity transmission activities and telecommunication facilities which are located in the road reserve.*

The Committee noted similar comments to those by A4 Simpson Architects Limited from several submitters. The Committee concluded that in part this arose as a consequence of the wording of the associated rules, which as set out above are to be deleted. To avoid further confusion, the Committee agreed with Mrs Shirley that a definition of "electrical interference" should be added to the Proposed Plan.

## **SECTION 32 MATTERS**

### **Requirements**

The Committee was advised by Mrs Shirley that Section 32 of the RMA establishes the framework for assessing objectives, policies and rules proposed in a Plan, and that a Report was released at the time of notification of the Proposed Plan in compliance with those provisions. The Committee was also advised that Section 32AA of the RMA requires a further evaluation to be released with decisions outlining the costs and benefits of any amendments made after the Proposed Plan was notified, with the detail of the assessment

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<sup>1</sup> Policy 5 states "To avoid nuisance from electrical interference beyond the zone boundary".

corresponding with the scale and significance of the environmental, economic, social, and cultural effects that are anticipated from the implementation of the changes made to the Proposed Plan.

As the Committee understands its obligations, it is required to:

- (i) Assess any changes made to objectives to determine whether they are the most appropriate way to achieve the purpose of the RMA.
- (ii) Examine any changes made to the policies and rules to determine whether they are the most appropriate way to achieve the objectives of the Proposed Plan. This includes:
  - Identifying the costs of the environmental, economic, social, and cultural effects that are anticipated from the implementation of the provisions (including effects on employment and economic growth)
  - Identifying other reasonably practicable options for achieving the objectives; and
  - Assessing the efficiency and effectiveness of the provisions in achieving the objectives.

The Committee however, is not required to assess in accordance with Section 32 of the RMA any changes to the issues and/or explanatory text of provisions.

### **Assessment**

The Committee's decision does not introduce any changes that have not been assessed in the Section 42A report. Mrs Shirley in her Section 42A Report advised the Committee as follows:

*Electrical interference is covered in the amenity section of the original Section 32 report and in the Zone Specific Issues Section of Plan. Minor changes are recommended to the majority of the policies and their explanations. The changes are only minor in nature and do not change the intent of the policies.*

*I am recommending that the Rule Section on Electrical Interference be deleted from the Proposed District Plan. This is considered relevant for further evaluation under Section 32AA of the RMA. ...*

*The environmental, social, cultural and economic effects of this change are considered minor. The issue of electrical interference will continue to be recognised by the policies of the Plan and is an environmental effect that can be considered as part of an application for resource consent. Adverse effects of electrical interference will be monitored and managed by the RSM group, which has the expertise and equipment to effectively implement electromagnetic compatibility legislation. The public will be made aware of the investigation service provided by RSM through the advice of Council staff and sharing of information.*

*Overall I consider that the policies on electrical interference are sufficient to help ensure that the maintenance and enhancement of amenity values is achieved and that the objectives for the zones are met.*

For those decisions that reflect the recommendations made by Mrs Shirley in her Section 42A Report, the Committee agrees with that approach and adopts it. This decision also deletes Smelter Zone Policy 5 which differs from Mrs Shirley's recommendation. Given the isolated location of the Smelter Zone the Committee considers that it is unlikely that any adverse electrical interference effects will cause a nuisance or inconvenience to

neighbouring zones. Therefore the policy is not considered necessary. Its deletion will provide the Aluminium Smelter with confidence that they can continue their operations without unnecessary regulation which will result in a positive social and economic outcome.

Dated at Invercargill this 11<sup>th</sup> day of October 2016



Councillor Darren Ludlow (Chair)



Councillor Neil Boniface



Councillor Graham Sycamore



Keith Hovell

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## APPENDIX 1 - DECISIONS BY SUBMISSION

SUBMISSION	DECISION
<b>SECTIONS 2.19 – 2.43 POLICIES</b>	
<b>2.19.3 Airport Operations Zone – Policy 8</b> <b>2.20.3 Airport Protection Zone – Policy 8</b>	
<p><b>103.32 and 103.47 - Invercargill Airport Ltd</b> Support. The submitter considers these policies appropriate but believes they may be best appearing as a District Wide policy. Insert similar policy in the Transportation section (2.17) or Infrastructure section (2.9) of the District Wide part of the Plan.</p>	<p><b>Decision 11/1</b> This submission is accepted in part.</p> <p><b>Amendments to District Plan</b> Amend Business 1 Zone Policy 8, Business 2 Zone Policy 6, Business 3 Zone Policy 8, Business 4 Zone Policy 5, Business 5 Zone Policy 5, Hospital Zone Policy 5, Industrial 1 Zone Policy 6, Industrial 2 Zone Policy 5, Industrial 3 Zone Policy 6, Otatara Zone Policy 7, Residential 1 Zone Policy 12, Residential 2 Zone Policy 12, Residential 3 Zone Policy 12, Rural 1 Zone Policy 11 and Seaport Zone Policy 5 to read:</p> <p>To <del>ensure freedom</del> <u>avoid nuisance</u> from electrical interference.</p> <p><i>[Note some Policy numbers may have changed as a result of other decisions]</i></p> <p><b>Reasons</b></p> <ol style="list-style-type: none"> <li>1. As noted on page 4 of this Decision, the various components that comprise amenity are dealt with separately in each zone, and for consistency the same approach should be adopted with regard to electrical interference.</li> <li>2. The structure of the Proposed Plan is such that the different aspects of amenity are dealt with on a Zone-by-Zone basis.</li> <li>3. Concerns with electrical interference are not just related to the transportation network, but they also relate to people’s everyday lives.</li> <li>4. It is desirable to have consistent wording of the policies within each zone. The changes made do not alter the intent of the policies.</li> </ol> <p>Note: Consequential changes where required are made for consistency to the Explanation of the policies under Clause 16(2) of the First Schedule.</p>

## APPENDIX 1 - DECISIONS BY SUBMISSION

SUBMISSION	DECISION
<b>2.36.3 Residential 1 – Policy 12</b>	
<p><b>107.14 - A4 Simpson Architects Limited</b>                      The submitter opposes the inclusion of this provision on the grounds that he believes it is covered by relevant National Environmental Standards. Delete 2.36.3 Policy 12.</p>	<p><b>Decision 11/2</b>                      This submission is accepted in part.</p> <p><b>Amendments to District Plan</b>                      Add the following definition to Section Four of the Proposed District Plan:</p> <p><u><b>Electrical Interference</b> – Means the interruption, obstruction or degradation of the effective performance of an electrical device or radio frequency.</u></p> <p><b>Reasons</b></p> <ol style="list-style-type: none"> <li>1. As set out on page 4 of this Decision, the Electrical Interference provisions of the Proposed District Plan are provided to protect amenity values and therefore serve a different purpose to that of the NES.</li> <li>2. To clarify the intent of the provisions in the Proposed Plan a definition of “electrical interference” is now included.</li> </ol>
<b>2.42.3 Seaport Zone – Policy 5</b>	
<p><b>24.52 - South Port NZ Ltd</b>                      Support. Retain.</p>	<p><b>Decision 11/3</b>                      This submission is noted.</p> <p><b>Amendments to District Plan</b>                      No amendments are required.</p> <p><b>Reason</b>                      The submitter supports the provision and does not request any change to it.</p> <p>It should be noted however that there is a minor change in wording to the Policy from Decision 11/1. This does not however alter its intent.</p>
<b>2.43.3 Smelter Zone – Policy 5</b>	
<p><b>71.36 - NZAS Ltd</b>                      Oppose. The submitter considers that this policy is unjustified and unnecessary. The submitter considers that given the isolation of the operation from other activities electrical interference is unlikely to be an issue.</p>	<p><b>Decision 11/4</b>                      This submission is accepted.</p> <p><b>Amendments to District Plan</b></p>

## APPENDIX 1 - DECISIONS BY SUBMISSION

SUBMISSION	DECISION
Delete Policy 5	<p>(i) Smelter Zone Policy 5 is deleted.</p> <p>(ii) Smelter Zone Policy 7 is amended to read: Wind, signage, height of structures, private open space and density, landscaping, planting and screening, public open space, weather protection, <u>electrical interference</u>: To acknowledge that these dimensions of amenity do not require regulatory controls in the Smelter Zone.</p> <p><b>Reason</b> As discussed on page 4 of this Decision, the Smelter is well separated from any areas within which electrical interference could reasonably be of concern.</p>
<b>SECTION 3.5 RULES</b>	
<p><b>52.5 - NZ Police</b> The submitter states that this rule is inconsistent with the telecommunications NES, and that the rule is too uncertain in referring to “all relevant New Zealand Standards”. Delete Rule 3.5.2 or adopt the appropriate wording from the Telecommunications NES.</p> <p><b>FS25.4 - Transpower NZ Ltd</b> Support in part Submission 52.5. The further submitter supports the rule to the extent that its activities are captured by the telecommunications NES. However, the further submitter opposes the narrow approach sought by the submitter as they believe that the rule is not intended to just apply to telecommunications facilities but to any activity that creates an electric or magnetic field, not just radiofrequency fields. The further submitter suggests that the rule refer to the ICNIRP 2010 Exposure Guidelines.</p> <p><b>102.9 - Chorus NZ Ltd and 104.9 - Telecom NZ Ltd</b> The submitters state that this rule is inconsistent with the telecommunications NES, and that the rule is too uncertain in referring to “all relevant New Zealand Standards”. Delete Rule 3.5.2.</p> <p><b>71.50 - NZAS</b> The submitter opposes Rules 3.5.1 – 3.5.3. The submitter considers this provision is not warranted in relation to the smelter site, that the provisions would be best as performance standards or considerations when processing resource consents for activities likely to result in electrical interference, and</p>	<p><b>Decision 11/5</b> Accept Submissions 52.5 NZ Police, 102.9 Chorus NZ Ltd and 104.9 Telecom NZ Ltd.</p> <p>Accept in part Submissions 71.50 NZAS and 87.43 Transpower NZ Ltd.</p> <p><b>Amendments to District Plan</b></p> <p>(i) Delete Section 3.5 Electrical Interference.</p> <p>(ii) Adopt Decision 11/2.</p> <p><b>Reasons</b></p> <ol style="list-style-type: none"> <li>1. As discussed on pages 3 and 4 of this Decision, Rule 3.5.1 is uncertain, there are various Standards applicable to electrical interference and the responsibility for responding to any complaints regarding electrical interference lies with the Radio Spectrum Management group.</li> <li>2. Inclusion of a definition of "electrical interference" is desirable, but there is no need for it to refer to any particular NZ Standard or to the International Commission on Non-ionising Radiation Protection (ICNIRP).</li> </ol>

## APPENDIX 1 - DECISIONS BY SUBMISSION

SUBMISSION	DECISION
<p>that the rule is too uncertain in referring to “all relevant New Zealand Standards”.</p> <p>Delete 3.5.1 – 3.5.3 and replace with appropriate performance standards for the Council to measure an activity against when resource consent is sought for that activity AND define electrical interference with reference to an appropriate standard.</p> <p><b>FS25.3 - Transpower NZ Ltd</b></p> <p>Support in part submission 71.50. The further submitter considers that the proposed rule does not follow good practice by referring to “any relevant NZ Standard”, and does not provide certainty to the public or the Council on what standards must be met.</p> <p><b>87.43 - Transpower NZ Ltd</b></p> <p>The submitter considers that Rule 3.5.1 has a zero tolerance for radio frequency interference (RFI) at the boundary of a property and as their lines traverse property boundaries and therefore could never comply with this rule. The submitter's assets do comply with NZS 6869:2004 and the submitter considers that the limits within this standard should be relied on to manage any potential effects of RFI. The submitter seeks that Rule 3.5.2 be amended to include reference to the <i>International Commission on Non-ionising Radiation Protection (ICNIRP) Guidelines</i> that is included in the NPSET. The submitter considers that a non-complying status for a new line does not give effect to the NPSET.</p> <p><u>Decision sought:</u> Delete Rule 3.5.1 and amend Rule 3.5.2 to read:</p> <p><b>3.5.2</b> The electric and magnetic fields exposure at or beyond the boundary of any site containing a facility emitting electric and magnetic fields shall be such as to comply with all relevant New Zealand standards <u>and international guidelines</u>.</p> <p>And any consequential amendments.</p> <p><b>FS12.7 - PowerNet Ltd</b></p> <p>Supports Submission 87.43. The further submitter agrees that 3.5.1 should be deleted and 3.5.2 should be amended to reflect that there are international standards which are accepted industry standards in relation to the issue of electrical interference.</p>	



## APPENDIX 2 - AMENDED DISTRICT PLAN PROVISIONS

### SECTION TWO – ISSUES, OBJECTIVES AND POLICIES

#### 2.19 Airport Operations Zone

**Policy 8 Electrical interference:** To protect airport operations from the adverse effects of electrical interference.

***Explanation:** Electrical interference has the potential to adversely affect the safe and efficient operation of the airport. The possibility of electrical interference is an environmental effect that needs to be considered in the placement and maintenance of electrical equipment and machinery, including transmitting aerials.*

#### 2.20 Airport Protection Zone

**Policy 8 Electrical interference:** To protect airport operations from the adverse effects of electrical interference.

***Explanation:** Electrical interference has the potential to adversely affect the safe and efficient operation of the airport. The possibility of electrical interference is an environmental effect that needs to be considered in the placement and maintenance of electrical equipment and machinery, including transmitting aerials.*

#### 2.22 Business 1 (Central Business District) Zone

**Policy 8 Electrical Interference:** To ~~ensure freedom~~ avoid nuisance from electrical interference.<sup>2</sup>

***Explanation:** The possibility of electrical interference is an environmental effect that needs to be considered in the placement and maintenance of electrical equipment and machinery, including transmitting aerials.*

#### 2.23 Business 2 (Suburban Shopping and Business) Zone

**Policy 6 Electrical Interference:** To ~~ensure freedom~~ avoid nuisance from electrical interference.<sup>2</sup>

***Explanation:** The possibility of electrical interference is an environmental effect that needs to be considered in the placement and maintenance of electrical equipment and machinery, including transmitting aerials.*

#### 2.24 Business 3 (Specialist Commercial) Zone

**Policy 8 Electrical Interference:** To ~~ensure freedom~~ avoid nuisance from electrical interference.<sup>2</sup>

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<sup>2</sup> Decision 11/1

Note: Underline indicates additions, strikethrough indicates deletions.

## APPENDIX 2 - AMENDED DISTRICT PLAN PROVISIONS

***Explanation:** ~~Specialist commercial and business uses are entitled to freedom from electrical interference. The possibility of electrical interference is an environmental effect that needs to be considered in the placement and maintenance of electrical equipment and machinery, including transmitting aerials.~~<sup>2</sup>*

### 2.25 Business 4 (Neighbourhood Shop) Zone

**Policy 5 Electrical Interference:** To ensure ~~freedom~~ avoid nuisance from electrical interference.<sup>2</sup>

***Explanation:** The possibility of electrical interference is an environmental effect that needs to be considered in the placement and maintenance of electrical equipment and machinery, including transmitting aerials.*

### 2.26 Business 5 (Rural Service) Zone

**Policy 5 Electrical Interference:** To ~~prevent~~ avoid nuisance from electrical interference.<sup>2</sup>

***Explanation:** ~~Land uses within the zone and near it have a right to freedom from electrical interference. The possibility of electrical interference is an environmental effect that needs to be considered in the placement and maintenance of electrical equipment and machinery, including transmitting aerials.~~*

### 2.27 Hospital Zone

**Policy 5 Electrical Interference:** To ensure ~~freedom~~ avoid nuisance from electrical interference.<sup>2</sup>

***Explanation:** The possibility of electrical interference is an environmental effect that needs to be considered in the placement and maintenance of electrical equipment and machinery, including transmitting aerials. Interference with communications facilities could cause a major hazard for the operation of the hospital, in particular for emergency services.*

### 2.29 Industrial 1 (Light) Zone

**Policy 6 Electrical Interference:** To ensure ~~freedom~~ avoid nuisance from electrical interference.<sup>2</sup>

***Explanation:** ~~The possibility of electrical interference is an environmental effect that needs to be considered in the placement and maintenance of electrical equipment and machinery, including transmitting aerials.~~*

Note: Underline indicates additions, strikethrough indicates deletions.

## APPENDIX 2 - AMENDED DISTRICT PLAN PROVISIONS

### 2.31 Industrial 2 (Urban) Zone

**Policy 5 Electrical Interference:** To ensure ~~freedom~~ avoid nuisance from electrical interference.<sup>2</sup>

**Explanation:** The possibility of ~~E~~electrical interference is an environmental effect that needs to be considered in the placement and maintenance of electrical equipment and machinery, including transmitting aerials.

### 2.32 Industrial 3 (Large) Zone

**Policy 6 Electrical Interference:** To ensure avoid ~~freedom~~ nuisance from electrical interference.<sup>2</sup>

**Explanation:** The possibility of ~~E~~electrical interference is an environmental effect that needs to be considered in the placement and maintenance of electrical equipment and machinery, including transmitting aerials.

### 2.34 Otatara Zone

**Policy 7 Electrical Interference:** To ensure ~~freedom from~~ avoid nuisance from electrical interference.<sup>2</sup>

**Explanation:** The possibility of electrical interference is an environmental effect that needs to be considered in the placement and maintenance of electrical equipment and machinery, including transmitting aerials.

### 2.36 Residential 1 Zone

**Policy 12 Electrical interference:** To ensure ~~freedom from~~ avoid nuisance from electrical interference.<sup>2</sup>

**Explanation:** ~~People expect not to be bothered by electrical interference in residential areas. Electrical interference can be a source of irritation to residents within the residential zones. This is an environmental effect that needs to be considered in the placement and maintenance of electrical equipment and machinery, including transmitting aerials.~~<sup>2</sup>

### 2.38 Residential 2 (Bluff and Omaui) Zone

**Policy 12 Electrical interference:** To ensure ~~freedom from~~ avoid nuisance from electrical interference.<sup>2</sup>

**Explanation:** ~~People expect not to be bothered by electrical interference in residential areas. Electrical interference can be a source of irritation to residents within the residential zones. This is an environmental effect that needs to be considered in the placement and maintenance of electrical equipment and machinery, including transmitting aerials.~~<sup>2</sup>

Note: Underline indicates additions, strikethrough indicates deletions.

## APPENDIX 2 - AMENDED DISTRICT PLAN PROVISIONS

### 2.39 Residential 3 (Large Lot) Zone

**Policy 12** ~~Electrical interference:~~ To ensure freedom from avoid nuisance from electrical interference.<sup>2</sup>

**Explanation:** Electrical interference can be a source of irritation to residents within the residential zones. ~~The possibility of electrical interference~~ This is an environmental effect that needs to be considered in the placement and maintenance of electrical equipment and machinery, including transmitting aerials.<sup>2</sup>

### 2.40 Rural 4-Zone

**Policy 11** ~~Electrical interference:~~ To ensure freedom from avoid nuisance from electrical interference.<sup>2</sup>

**Explanation:** The possibility of electrical interference is an environmental effect that needs to be considered in the placement and maintenance of electrical equipment and machinery, including transmitting aerials.

### 2.42 Seaport Zone

**Policy 5** ~~Electrical Interference:~~ To ensure freedom avoid nuisance from electrical interference.<sup>2</sup>

**Explanation:** ~~People expect not to be bothered by electrical interference. Electrical interference may have adverse effects on the efficient operation of the Seaport Zone.~~ The possibility of electrical interference is an environmental effect that needs to be considered in the placement and maintenance of electrical equipment and machinery, including transmitting aerials.<sup>2</sup>

### 2.43 Smelter Zone

**Policy 5** ~~Electrical Interference:~~ To avoid nuisance from electrical interference beyond the zone boundary.

**Explanation:** ~~Because of the very large amounts of electricity utilised in the smelter operation, the potential exists for creation of significant electrical interference. This can be addressed by electrical engineering design and facility management, and would be a resource management issue only if it extended beyond the boundary.~~<sup>3</sup>

**Policy 7** Wind, signage, height of structures, private open space and density, landscaping, planting and screening, public open space, weather protection, electrical interference<sup>4</sup>: To acknowledge that these dimensions of amenity do not require regulatory controls in the Smelter Zone.

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<sup>3</sup> Decision 11/4

<sup>4</sup> Decision 11/4

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## APPENDIX 2 - AMENDED DISTRICT PLAN PROVISIONS

***Explanation:** Because of the large and isolated nature of the site and the self-contained and extensive nature of the smelter operation, these dimensions of amenity are not relevant in the zone.*

### SECTION THREE RULES

#### <sup>5</sup>~~3.5~~ **Electrical Interference**

- ~~3.5.1~~ No land use activity shall create electrical interference at or beyond the boundary of the property.
- ~~3.5.2~~ The electric and magnetic fields exposure at or beyond the boundary of any site containing a facility emitting electric and magnetic fields shall be such as to comply with all relevant New Zealand standards.
- ~~3.5.3~~ Where any of the provisions of Rules ~~3.5.1~~ and ~~3.5.2~~ above will not be met then the activity shall be a non-complying activity.

### SECTION FOUR DEFINITIONS

<sup>6</sup>Electrical Interference – Means the interruption, obstruction or degradation of the effective performance of an electrical device or radio frequency.

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<sup>5</sup> Decision 11/5

<sup>6</sup> Decision 11/2

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