

# Appendix 1 – Officers Recommended Amendments to Infrastructure Chapter

Note the below provisions represent the Section 42A Report Writing Officer's recommended amendments to the provisions of the Proposed District Plan, in response to submissions (with underline used for new text and ~~strikethrough~~ for deleted text). Recommendations made throughout the Reporting Officer's right of reply are shown in red underline for new text and ~~res ~~strikethrough~~~~ for deleted text.

## Overview

The district relies on the safe and efficient delivery of infrastructure as it is integral to community, economic and social well-being. However, development, operation, maintenance and upgrading of infrastructure can give rise to adverse environmental effects and can have adverse effects on other land uses and activities<sup>1</sup>. In enabling infrastructure and managing adverse environment effects, it is important to recognise the locational, operational and functional needs and constraints of infrastructure. It is also important to recognise the public benefits associated with infrastructure, in particular the benefits of regionally significant infrastructure, to enhance economic, cultural, environmental and social well-being in the district.

Infrastructure, sometimes referred to as network utilities, is defined in the RMA and includes:

- i. pipelines;
- ii. telecommunications;
- iii. radiocommunications;
- iv. facilities for the generation of electricity, including lines and support structures;
- v. water supply, irrigation, drainage or sewerage systems;
- vi. structures for transport on land by cycleways, rail, roads, walkways, or any other means;
- vii. facilities for the loading or unloading of cargo or passengers;
- viii. airports; and
- ix. navigation.

Regionally significant infrastructure is also defined in the Northland Regional Policy Statement (RPS) and includes important energy, water, communication, transport infrastructure and significant social and community facilities in the region.

This chapter manages key infrastructure and general network utilities. Renewable electricity and transport are managed through the Renewable Electricity Generation and Transport chapters. In addition to the provisions in this Chapter, there are provisions in other Part 2: District Wide Matters that may be relevant for infrastructure, including the Historic Heritage, Heritage Area Overlays, Sites and Areas of Significance to Māori, Ecosystems and Indigenous Biodiversity, Natural Character, Natural Features and Landscapes, and Coastal Environment chapters.<sup>2</sup>

~~The provisions in this chapter are therefore specific to network utilities undertaken by a network utility operator (as defined in the RMA). The chapter also addresses amateur radio facilities as their activities involve radio communication and amateur radio configurations that involve masts, aerials and supporting structures similar to other types of network utilities.~~<sup>3</sup>

<sup>1</sup> Federated Farmers (S421.019).

<sup>2</sup> Top Energy (S483.032).

<sup>3</sup> Top Energy (S483.054).

There are responsibilities under the RMA, the National Policy Statement on Electricity Transmission 2008 and the RPS in relation to infrastructure. These responsibilities require Council to provide for the National Grid and regionally significant infrastructure and protect it from inappropriate land use and subdivision that could result in reverse sensitivity effects and undermine its effective operation, security or future expansion. ~~The National Environmental Standards for Telecommunication Facilities 2016 (NES-TF) and National Environmental Standards on Electricity Transmission Activities 2009 (NES-ETA) provide a suite of nationally consistent rules specific to telecommunication facilities and electricity transmission activities. The District Plan does not apply to activities regulated under the NES-TF and NES-ETA but it does apply to any telecommunication facility and electricity transmission activity not regulated by these environmental standards (e.g. new transmission lines, new telecommunication poles and antennas not in rural zone or road reserve). The District Plan also applies to telecommunication facilities located in areas subject to regulations 44-51 of the NES-TF (e.g. historic heritage, visual amenity landscapes).~~<sup>4</sup>

Objectives	
I-O1	The district has safe, efficient and resilient infrastructure that services the current and future needs of people and communities in the district.
I-O2	<del>The economic and community</del> benefits of infrastructure <del>are recognised and provided for,</del> including the <del>benefits of</del> regionally significant infrastructure, to enhance economic, cultural, environmental and social well-being in the district are recognised and provided for <sup>5</sup> .
I-O3	Infrastructure is protected from incompatible land use, subdivision and development that may result in reverse sensitivity effects to ensure its effective operation, maintenance, <u>repair</u> <sup>6</sup> and upgrading.
I-O4	<del>The Adverse effects of infrastructure are managed in a way that recognises and provides for the operational need or functional need for infrastructure to be in particular environments through the design and location of infrastructure to minimise adverse effects on areas with historical and cultural values, natural values, and coastal values.</del> <sup>7</sup>
I-O5	The provision of infrastructure is integrated with land-use and is coordinated at the time of subdivision and development.
I-O6	The location of infrastructure does not <u>unnecessarily</u> <sup>8</sup> constrain the ability of tangata whenua to develop land in the Māori Purpose zone or the Treaty Settlement overlay.
Policies	
I-P1	Provide for the continued operation, maintenance, <u>repair</u> , <sup>9</sup> upgrading and replacement of existing infrastructure.
I-P2	<del>In the coastal environment, manage the effects of the development, operation, maintenance and upgrading of infrastructure activities by:</del> <del>a. avoiding adverse effects on the qualities and characteristics of significant natural areas, outstanding natural features or landscapes, areas of outstanding natural character;</del> <del>b. avoiding significant adverse effects on other natural features and landscapes, and areas of natural character;</del> Recognise and provide for

<sup>4</sup> Telco Companies (S282.004).

<sup>5</sup> Top Energy (S483.034).

<sup>6</sup> Top Energy (S483.035).

<sup>7</sup> Top Energy (S483.036) and others.

<sup>8</sup> Transpower (S454.041).

<sup>9</sup> KiwiRail (S416.014).

	<p><del>e. recognising the technical requirements, operational need and functional needs of infrastructure when considering and managing adverse effects on the environment.<sup>10</sup> and constraints of infrastructure activities; and</del></p> <p><del>d. having regard to offsetting and environmental compensation measures where there are more than minor residual adverse effects that cannot be avoided, remedied or mitigated.</del></p>
<b>I-P3</b>	<p><del>Outside the coastal environment, manage the effects of the development, operation, maintenance and upgrading of infrastructure activities by:-</del></p> <p><del>a. avoiding effects on historical and cultural values, significant natural areas, and outstanding natural features or landscapes to the extent practicable;</del></p> <p><del>b. minimising or remedying adverse effects on historical and cultural values, natural environment values that cannot be avoided;–</del></p> <p><del>c. recognising the technical, operational and functional needs and constraints of infrastructure activities; and</del></p> <p><del>d. having regard to offsetting and environmental compensation measures where there are more than minor residual adverse effects that cannot be avoided, remedied or mitigated.<sup>11</sup></del></p>
<b>I-PX</b>	<p><u>Provide for the development of, major upgrades to, and new National Grid infrastructure, and any ancillary activities including earthworks and vegetation clearance, while managing the adverse effects of these activities by the following:</u></p> <ol style="list-style-type: none"> <li><u>1. having regard to the extent to which adverse effects have been avoided, remedied or mitigated by route, site and construction method selection;</u></li> <li><u>2. considering the constraints imposed by the operational needs or functional need<sup>s</sup><sup>12</sup> of the National Grid on measures to avoid, remedy or mitigate adverse effects;</u></li> <li><u>3. avoiding, remedying or mitigating adverse effects where practicable;</u></li> <li><u>4. seeking to avoid adverse effects on:</u> <ol style="list-style-type: none"> <li><u>a. the characteristics, qualities and values of outstanding natural character areas in the coastal environment;</u></li> <li><u>b. the characteristics, qualities and values of outstanding natural landscapes and outstanding natural features;</u></li> <li><u>c. Threatened and At-Risk indigenous species and areas of significant indigenous vegetation and significant habitat of indigenous fauna;</u></li> </ol> </li> <li><u>5. seeking to avoid significant adverse effects on:</u> <ol style="list-style-type: none"> <li><u>a. the characteristics, qualities and values of natural character and natural features and landscapes in the coastal environment not identified as outstanding;</u></li> <li><u>b. areas of predominately indigenous vegetation and indigenous species, habitats and ecosystems that are particularly vulnerable to modification;</u></li> <li><u>c. the characteristics, qualities and values of natural character of wetland, lakes and river margins;</u></li> </ol> </li> <li><u>6. where it is not practicable to avoid adverse effects on the values of the areas listed in clause <del>4</del><sup>13</sup> above within the coastal environment because of the functional need or operational need of the National Grid:</u> <ol style="list-style-type: none"> <li><u>a. recognise that there may be some areas where avoidance of adverse effects is required to protect the characteristics, qualities and values, so that the activity cannot proceed; and</u></li> <li><u>b. otherwise remedy or mitigate adverse effects on the characteristics, qualities and values.</u></li> </ol> </li> </ol>

<sup>10</sup> Forest and Bird (S511.040) and others.

<sup>11</sup> Forest and Bird (S511.041) and others.

<sup>12</sup> Clause 16, Schedule 1 of the RMA.

<sup>13</sup> Clause 16, Schedule 1 of the RMA.

	Where there is a conflict with other policies in this District Plan, this policy prevails. <sup>14</sup>
<b>I-P4</b>	<p>Provide for infrastructure where there are benefits such as:</p> <ol style="list-style-type: none"> <li>significant<sup>15</sup> social, economic and cultural benefits associated with regionally significant infrastructure</li> <li>improved: <ol style="list-style-type: none"> <li>quality of life;</li> <li>standard of living;</li> <li>public health and safety;</li> <li>access to latest technology, such as fibre and high-speed wireless internet;</li> <li>functioning of businesses; and</li> <li>transportation of freight, goods, people.</li> </ol> </li> <li>growth and development of the district;</li> <li>a reduction in the operation and maintenance costs of infrastructure;</li> <li>integration of infrastructure with urban development; and</li> <li>facilitating local, regional, national or international connectivity.</li> </ol>
<b>I-P5</b>	Require the coordination of infrastructure planning and delivery at the time of land use, subdivision and development so that land use and infrastructure is integrated, efficient and aligned.
<b>I-P6</b>	<p>Where practicable and appropriate for the type of infrastructure, minimise the adverse visual effects of infrastructure by:</p> <ol style="list-style-type: none"> <li>co-location or multiple use;</li> <li>removing redundant facilities or structures;</li> <li>using landscaping and/or recessive colours and finishes;</li> <li>encouraging innovative design to maintain the character and amenity of the surrounding area by integrating infrastructure within the site and utilising existing built form and landform; and</li> <li>requiring the undergrounding of services when locating infrastructure in the coastal environment, a resource overlay, heritage area or an area with high amenity value.</li> </ol>
<b>I-P7</b>	<p>Protect infrastructure, including regionally significant infrastructure,<sup>16</sup> from the effects of incompatible land use and subdivision, including reverse sensitivity effects, which may compromise the operation and capacity of infrastructure by:</p> <ol style="list-style-type: none"> <li>locating and designing noise sensitive activities to avoid potential reverse sensitivity effects on airports, and State Highways and railway designations<sup>17</sup>;</li> <li>avoiding physical obstructions in take-off, approach, landing and departure paths and runway end protections areas;</li> <li>managing new noise sensitive activities within a defined air noise contour <u>and the Rail Alert Overlay for railways</u><sup>18</sup>;</li> <li>managing access to the railway corridor, and local, regional and national road network;</li> <li><u>identifying a Critical Electricity Lines Overlay on the planning maps and</u><sup>19</sup> managing land use and subdivision activities in proximity to Critical Electricity Lines to: <ol style="list-style-type: none"> <li>retain the ability for the network utility operator to access, operate, maintain, repair and upgrade the line;</li> <li>ensure that future buildings and building alterations, earthworks, planting of trees and<sup>20</sup> construction activities do not compromise the effective operation of</li> </ol> </li> </ol>

<sup>14</sup> Transpower (S454.044).<sup>15</sup> Waiaua Bay Farm (S463.015)<sup>16</sup> Top Energy (S483.045).<sup>17</sup> KiwiRail (S416.018).<sup>18</sup> KiwiRail (S416.018).<sup>19</sup> Top Energy (S483.045).<sup>20</sup> Top Energy (S483.045).

	<p>the electricity distribution network and maintain safe electrical clearance distances under all electricity distribution line operating conditions.</p> <p>f. managing land disturbance and activities sensitive to gas transmission to avoid, or mitigate potential adverse effects on, gas transmission pipelines; and</p> <p>g. managing other activities, through set-backs and design controls where necessary, to achieve appropriate protection of local, regional and nationally significant infrastructure.</p>
<b>I-PY</b>	<p>Protect the safe and efficient operation, maintenance and repair, upgrading, removal and development of National Grid from adverse effects by:</p> <p>a. <u>Avoiding activities within the National Grid Yard, including but not limited to sensitive activities, where these will:</u></p> <ol style="list-style-type: none"> <li><u>compromise the operation, maintenance, upgrading and development of the National Grid; or</u></li> <li><u>result in reverse sensitivity effects on the National Grid.</u></li> </ol> <p>b. <u>Only allowing subdivision activities within the National Grid Subdivision Corridor where the subdivision is designed to ensure that any future land use and development will:</u></p> <ol style="list-style-type: none"> <li><u>avoid or minimise as far as practicable the risk to the safety of people and property;</u></li> <li><u>avoid reverse sensitivity effects on the National Grid; and</u></li> <li><u>not compromise the operation, maintenance, upgrading and development of the National Grid, or access to it.</u></li> </ol> <p>c. <u>Only allowing earthworks within the National Grid Yard where it can be demonstrated that the safe and efficient functioning, operation, maintenance and repair, upgrading and development of the National Grid will not be compromised, taking into account:</u></p> <ol style="list-style-type: none"> <li><u>the extent to which the earthworks may compromise the safe access to and operation, maintenance and repair, upgrading and development of the National Grid;</u></li> <li><u>the stability of land within and adjacent to the National Grid; and</u></li> <li><u>risks relating to health or public safety including the risk of property damage.</u><sup>21</sup></li> </ol>
<b>I-P8</b>	<p>Provide for resilient infrastructure that will meet the district's needs by considering:</p> <ol style="list-style-type: none"> <li>the impact on the network and levels of service if the work is not undertaken;</li> <li>the need for the infrastructure in the context of the wider network; and</li> <li>whether it is regionally significant infrastructure.</li> </ol>
<b>I-P9</b>	<p>Encourage <del>new linear</del><sup>22</sup> infrastructure to be located within road corridors<sup>23</sup> and, where practicable, adjacent to the carriageway unless this would result in a risk to health and safety.</p>
<b>I-P10</b>	<p><del>Provide for the operation, maintenance and removal of the National Grid while having regard to the extent to which adverse effects have been avoided, remedied or mitigated through route, site and method selection.</del><sup>24</sup></p>
<b>I-P11</b>	<p>Avoid new infrastructure where it will <u>unnecessarily constrain</u> <del>compromise</del><sup>25</sup> the ability to develop and use land in the Māori Purpose zone or in the Treaty Settlement overlay <del>unless the owners of the land agree to the new infrastructure.</del><sup>26</sup></p>

<sup>21</sup> Transpower (S454.050).

<sup>22</sup> Top Energy (483.104).

<sup>23</sup> Clause 16, Schedule 1 of the RMA.

<sup>24</sup> Transpower (S454.053).

<sup>25</sup> Top Energy (S483.049).

<sup>26</sup> Top Energy (S483.049).

<b>I-P12</b>	<p>Recognise the benefits of new technology in infrastructure that:</p> <ol style="list-style-type: none"> <li>improve access to, and efficient use of, networks and services;</li> <li>increases resilience or reliability of networks and services;</li> <li>protects the on-going safety of the community and the integrity of the network; or</li> <li>results in environmental benefits or enhancements.</li> </ol>
<b>I-P13</b>	<p>Manage the adverse effects of infrastructure on <u>other land uses and activities</u><sup>27</sup> <del>the environment by:</del></p> <ol style="list-style-type: none"> <li><del>avoiding, remedying or mitigating the adverse effects of substantial upgrades to, or the development of new infrastructure, including effects on:</del> <ol style="list-style-type: none"> <li><del>natural and physical resources;</del></li> <li><del>amenity values;</del><sup>28</sup></li> <li><del>sensitive activities;</del></li> <li><del>the safe and efficient operation of other infrastructure;</del></li> <li><del>the health, well-being and safety of people and communities; and</del></li> </ol> </li> <li><del>avoiding radio, electric and magnetic emissions that do not meet the international and national recognised standards or guidelines in I-S1 and I-S2;</del><sup>29</sup></li> <li><del>requiring the undergrounding of network utilities in Urban zones and the Settlement zone where it:</del> <ol style="list-style-type: none"> <li><del>is technically feasible;</del></li> <li><del>is justified by the extent of adverse visual effects; and</del></li> <li><del>provides for the safety of the community.</del></li> </ol> </li> </ol>
<b>I-PZ</b>	<p><u>Requiring the undergrounding of network utilities in Urban zones and the Settlement zone unless:</u></p> <ol style="list-style-type: none"> <li><u>it will result in greater adverse effects on the environment compared to placing the network utility above ground; or</u></li> <li><u>there are operational, functional, technical or significant financial reasons that mean it is not feasible for the network utility to be underground.</u><sup>30</sup></li> </ol>
<b>I-P14</b>	<p><del>Manage infrastructure to address the effects of the activity requiring resource consent, including (but not limited to) c</del><u>Consideration of the following matters where relevant when assessing and managing the effects of infrastructure to the application:</u><sup>31</sup></p> <ol style="list-style-type: none"> <li>any locational, technical, and operational requirements;</li> <li>bulk, height and design of any accessory buildings or structures;</li> <li>the extent of earthworks and/or indigenous vegetation removal associated with the infrastructure or access to it;</li> <li>the degree to which the environment has already been modified;</li> <li>potential for co-location and shared use of services and corridors;</li> <li>the nature, duration, timing and frequency of the adverse effects;</li> <li>any adverse effects on areas with historical and cultural values, natural values, coastal values, and recreational value;</li> <li>the health, well-being and safety of people and communities, including nuisance from noise, vibration, dust, odour emissions, temperature and light spill;</li> <li>the safe and efficient operation of other infrastructure;</li> <li>stormwater and overland flow path implications;</li> <li>the ability to safely access the infrastructure;</li> <li>the temporary or permanent nature of any adverse effects;</li> <li>whether the infrastructure is nationally or regionally significant;</li> <li>the impact of not operating, repairing, maintaining, upgrading, removing or developing the infrastructure;</li> </ol>

<sup>27</sup> Forest and Bird (S511.045).

<sup>28</sup> Forest and Bird (S511.045).

<sup>29</sup> Top Energy (S483.051).

<sup>30</sup> Top Energy (S483.051).

<sup>31</sup> Waiaua Bay Farm (S463.017).



	<ul style="list-style-type: none"> <li>o. the benefits derived from the infrastructure at a local, regional and national scale, including the significant environmental, economic, social and cultural benefits of regionally significant infrastructure;</li> <li>p. the extent to which the infrastructure is integrated with, and necessary to support, planned development within Urban zones and the Settlement zone; and</li> <li>q. any historical, spiritual or cultural association held by tangata whenua, with regard to the matters set out in Policy TW-P6.</li> </ul>
<b>Rules</b>	

**Notes:**

1. **The rules in this Chapter apply across the District either in all zones or within specified zone as set out in the relevant rule. The zone rules in Part 3 – Area Specific Matters do not apply to infrastructure unless otherwise specified in this Chapter.**<sup>32</sup>
2. **There may be rules in the following other District-Wide Matters chapters that apply to infrastructure and that apply to a proposed activity, in addition to the rules in this chapter. These other rules that and may be more stringent than the rules in this chapter: Historic Heritage, Heritage Area Overlays, Sites and Areas of Significance to Māori, Ecosystems and Indigenous Biodiversity, Natural Character, Natural Features and Landscapes, and Coastal Environment. Ensure other relevant District-Wide Matters chapters are also referred to, in addition to this chapter, to determine whether resource consent is required under other rules in the District Plan.**<sup>33</sup> Refer to the *how the plan works* chapter to determine the activity status of a proposed activity where resource consent is required under multiple rules.
3. The operation, maintenance, upgrading, relocation or removal of an electricity transmission line and ancillary structures that exist prior to the 14 January 2010 and remain part of the National Grid is largely controlled by the Resource Management (National Environmental Standards for Electricity Transmission Activities) Regulations 2009 (NES-ETA). No rules in the Plan apply to activities associated with the existing electricity transmission line regulated by the NES-ETA. Where an activity associated with electricity transmission line is not regulated by the NES-ETA the rules and standards in the District Plan apply.
4. The installation and operation of telecommunications facilities (such as cabinets, antennas, poles, small cell-units and telecommunications lines) undertaken by a facility operator are controlled by the Resource Management (National Environmental Standards for Telecommunication Facilities) Regulations 2016 (NES-TF). No rules in the District Plan apply to activities regulated by the NES-TF, except where these do not comply with the permitted activity standards in the regulations and when<sup>34</sup> the regulated activity is located in an area subject to subpart 5 of the regulations (including areas with historic heritage values, visual amenity landscapes, ~~significant natural areas~~).<sup>35</sup> The District Plan also applies to telecommunication facilities not regulated under the NES-TF (e.g. new poles outside the road reserve and in rural zones).
5. The rules do not replace, supersede, or provide permission under the New Zealand Electrical Code of Practice for Electrical Safe Distances — NZECP 34:2001 or the Electricity (Hazards from Trees) Regulations 2003. Compliance is required under all documents.
6. **The rules in this Chapter are primarily so provisions are specific to network utility operations undertaken by a network utility operators except as the provisions relate to Amateur radio operators and the provisions managing buildings, structures and**

<sup>32</sup> Telco Companies (S282.004).<sup>33</sup> Top Energy (S483.032).<sup>34</sup> Telco Companies (S282.004).<sup>35</sup> Clause 16, Schedule 1 of the RMA.

**vegetation planting within the National Grid Yard and Critical Electricity Lines Overlay (I-R11, I-R12, I-R13).**<sup>36</sup>

<b>I-R1</b>	<b>Operation, maintenance, repair and removal of existing above or underground network utilities</b>	
<b>All zones</b>	<b>Activity status: Permitted</b>  <b>Where:</b>  <b>PER-1</b> The activity complies with standards: I-S1 Radio frequency fields; and I-S2 Electric and magnetic fields.	<b>Activity status where compliance not achieved with PER-1: Non-complying</b>
<b>I-R2</b>	<b>New underground network utilities (including customer connections) or upgrading of existing underground network utilities</b>	
<b>All zones</b>	<b>Activity status: Permitted</b>  <b>Where:</b>  <b>PER-1</b> A new gas pipeline does not exceed a gauge pressure of 2,000 kilopascals.  <b>PER-2</b> The activity complies with standards: I-S1 Radio frequency fields; and I-S2 Electric and magnetic fields.  <b>NOTE:</b> Refer to NT-R5 if the activity will occur near a notable tree.	<b>Activity status where compliance not achieved with PER-1: Discretionary</b>  <b>Activity status where compliance not achieved with PER-2: Non-Complying</b>
<b>I-R3</b>	<b>Upgrading of existing above ground network utilities</b>	
<b>All zones</b>	<b>Activity status: Permitted</b>  <b>Where:</b>  <b>PER-1</b> The realignment, relocation or replacement of a telecommunications line, pipe, pole, tower, conductor, cross arm, switch, transformer or ancillary structure is within 5m of the existing alignment or location.  <b>PER-2</b> The realignment, relocation or replacement of a gas transmission line is within: 1. an existing easement in favour of the pipeline; or 2. is within 12m of the existing alignment or location.  <b>PER-3</b>	<b>Activity status where compliance not achieved with PER 1, PER-2, PER-3, PER-4, PER-5, PER-6, PER-7, PER-8, PER-9, PER-10, PER-11 or PER-12: <u>Restricted Discretionary</u></b>  <b><u>Matters of discretion are restricted to:</u></b> <ol style="list-style-type: none"> <li><u>The functional need and operational need of the network utility;</u></li> <li><u>The benefits of the network utility;</u></li> <li><u>The purpose and necessity of the upgrading;</u></li> <li><u>The potential adverse visual effects of the upgrading, including impacts on the amenity values of the locality.</u></li> </ol>

<sup>36</sup> Top Energy (S483.054).



	<p>A pole is not replaced with a tower.</p> <p><b>PER-4</b> A replacement pole, tower or telecommunication pole does not exceed a height, which is the lesser of the following:</p> <ol style="list-style-type: none"> <li>1. 25m; or</li> <li>2. the height of the replaced pole, tower or telecommunications pole by more than 30 percent <del>in a 10 year period</del>.<sup>37</sup></li> </ol> <p><b>PER-5</b> The diameter or width of a replacement pole or telecommunication pole:</p> <ol style="list-style-type: none"> <li>1. does not exceed twice that of the replaced pole at its widest point; or</li> <li>2. where a single pole is replaced with a pi pole, the width of the pi pole structure must not exceed three times the width of the replaced pole at its widest point.</li> </ol> <p><b>PER-6</b> There are no additional towers.</p> <p><b>PER-7</b> A maximum of two additional poles, where necessary to achieve conductor clearances required by <u>the New Zealand Electrical Code of Practice for Electrical Safe Distances (NZECP 34:2001)</u>.<sup>38</sup></p> <p><b>PER-8</b> Additional cross arms do not exceed the length of the existing cross arm by more than 400 percent, <del>up to a maximum of 4m</del>.<sup>39</sup></p> <p><b>PER-9</b> The diameter of replacement pipes do not exceed the diameter of the replacement pipe by more than 300mm.</p> <p><b>PER-10</b> The realignment, relocation or replacement of any other network utility structure or buildings must:</p> <ol style="list-style-type: none"> <li>1. be within 5m of the alignment or location of the original structure or building;</li> <li>2. must not increase the footprint of the structure or building by greater than 30 percent <del>in a 10 year period</del>; and</li> <li>3. must comply with the zones permitted setback standards if it is a building.</li> </ol>	<p><u>and any cumulative adverse effects; and</u></p> <p>e. <u>Any measures to avoid, remedy or mitigate adverse effects</u>.<sup>42</sup></p> <p><b>Activity status where compliance not achieved with PER-13: Non-Complying</b></p>
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<sup>37</sup> Top Energy (S483.059, S483.060).

<sup>38</sup> Clause 16, Schedule 1 of the RMA.

<sup>39</sup> Top Energy (S483.059, S483.060).

<sup>42</sup> Top Energy (S483.059, S483.060).

	<p><b>PER-11</b> A replacement panel antenna does not increase the face area by more than 20 percent in a 10 year period.<sup>40</sup></p> <p><b>PER-12</b> A replacement dish antenna does not increase in diameter by more than 20 percent in a 10 year period.<sup>41</sup></p> <p><b>PER-13</b> The activity complies with standards: I-S1 Radio frequency fields; and I-S2 Electric and magnetic fields.</p>	
<b>I-R4</b>	<b>Electricity generators or self-contained power units for the supply of a network utility</b>	
<b>All zones</b>	<p><b>Activity status: Permitted</b></p> <p><b>Where:</b></p> <p><b>PER-1</b> A permanent back-up generator or a self-contained power unit is setback at least 2m from a General Residential or Settlement zone site boundary.</p> <p><b>PER-2</b> The activity complies with standards: I-S1 Radio frequency fields; and I-S2 Electric and magnetic fields.</p>	<p><b>Activity status where compliance not achieved with PER-1: Discretionary</b></p> <p><b>Activity status where compliance not achieved with PER 2: Non-Complying</b></p>
<b>I-R5</b>	<b>New above ground customer connections</b>	
<p><b>Rural Production zone</b></p> <p>-</p> <p><b>Māori Purpose zone</b></p> <p>-</p> <p><b>Rural Lifestyle zone</b></p> <p>-</p> <p><b>Horticulture zone</b></p> <p>-</p> <p><b>Kauri Cliffs zone</b></p>	<p><b>Activity status: Permitted</b></p> <p><b>Where:</b></p> <p><b>PER-1</b> The customer connection:</p> <ol style="list-style-type: none"> <li>1. <u>Does not include a new pole if located in the General Residential Zone or Settlement Zone; or</u></li> <li>2. <u>Does not include a new pole greater than 25m in height above ground level if located in any other zone.</u><sup>44</sup></li> </ol> <p><b>PER-2</b> The activity complies with standards:</p>	<p><b>Activity status where compliance not achieved with PER-1: <u>Restricted Discretionary</u></b></p> <p><b><u>Matters of discretion are restricted to:</u></b></p> <ol style="list-style-type: none"> <li>a. <u>The functional need and operational need of the network utility;</u></li> <li>b. <u>The benefits of the network utility;</u></li> <li>c. <u>The purpose and necessity of the customer connection;</u></li> <li>d. <u>The potential adverse visual effects of the customer connection, including impacts on the amenity</u></li> </ol>

<sup>40</sup> Top Energy (S483.059, S483.060)

<sup>41</sup> Top Energy (S483.059, S483.060).

<sup>44</sup> Top Energy (S483.062).

<b>All zones</b> <sup>43</sup>	I-S1 Radio frequency fields; and I-S2 Electric and magnetic fields.	<u>values of the locality, and any cumulative adverse effects; and</u> e. <u>Any measures to avoid, remedy or mitigate adverse effects.</u> <sup>45</sup> <b>Activity status where compliance not achieved with PER-2: Non-complying</b>
<b>I-R6</b>	<b>New network utilities in existing buildings</b>	
<b>All zones</b>	<b>Activity status: Permitted</b>  <b>Where:</b>  <b>PER-1</b> The activity complies with standards: I-S1 Radio frequency fields; and I-S2 Electric and magnetic fields.	<b>Activity status where compliance not achieved with PER-1: Non-complying</b>
<b>I-R7</b>	<b>New overhead lines and associated poles, telecommunication and attached antennas, or towers</b>	
<b>Rural Production zone</b> - <b>Rural Lifestyle zone</b> - <b>Māori Purpose zone</b> - <b>All zones</b> <sup>46</sup>	<b>Activity status: Permitted</b>  <b>Where:</b>  <b>PER-1</b> Poles or telecommunications poles and attached antenna ( <u>excluding lighting rods</u> ) do not exceed a height above ground level of: <ol style="list-style-type: none"> <li>1. 25m in the Rural Production Zone, Rural Lifestyle Zone, Māori Purpose Zone, Light Industrial Zone, Heavy Industrial Zone, Airport Zone, Hospital Zone, Horticulture Zone, Horticulture Processing Facilities Zone;</li> <li>2. 20m in the Mixed-Use Zone, Open Space Zone, Sport and Active Recreation Zone, Ngawha Innovation and Precinct Zone, Orongo Bay Zone, Rural Residential Zone;</li> <li>3. 15m in the General Residential Zone, Settlement Zone, and all other special purpose zones; or</li> </ol>	<b>Activity status where compliance not achieved with PER-1, <del>or</del> PER-2, PER-3, PER-4 or PER-5: Restricted Discretionary</b>  <b><u>Matters of discretion are restricted to:</u></b> <ol style="list-style-type: none"> <li>a. <u>the functional need and operational need of, and benefits from, the network utility;</u></li> <li>b. <u>the potential impact on the levels of service or health and safety if the work is not undertaken;</u></li> <li>c. <u>the bulk, height, location and design of the network utility, including any associated building(s) or structures;</u></li> <li>d. <u>the impact on the character and qualities of the surrounding area; and</u></li> <li>e. <u>any adverse effects on public health and/or safety.</u><sup>50</sup></li> </ol> <b>Activity status where compliance not achieved with PER-<del>3</del>6: Non-complying</b>

<sup>43</sup> Telco Companies (S282.005).<sup>45</sup> Top Energy (S483.062).<sup>46</sup> Telco Companies (S282.006).<sup>50</sup> The Telco Companies (S282.006).

	<p>4. <u>the permitted height of the adjacent zone in clause <del>a</del> 1 to 3 <del>e</del> above if located in the road reserve.</u><sup>47</sup></p> <p><b>PER-2</b> Towers do not exceed a height of 15m.</p> <p><b>PER-3</b> <u>Where two or more telecommunication facility operators are located on the same pole in the zones referred to PER-1. <del>a</del> 1<sup>48</sup>, the pole and attached antenna (excluding lighting rods) do not exceed a height of 30m above ground level.</u><sup>49</sup></p> <p><b>PER-4</b> <u>Where located within or adjacent to a residential zone (except within the road reserve), the telecommunication facility complies with the relevant height in relation to boundary standard for that zone.</u></p> <p><b>PER-5</b> <u>Where located in the road reserve, the diameter of the antenna and any headframe do not exceed 1m.</u></p> <p><b>PER-36</b> The activity complies with standards: I-S1 Radio frequency fields; and I-S2 Electric and magnetic fields.</p>	
<b>I-R8</b>	<b>New telecommunications kiosk</b>	
<b>All zones</b>	<p><b>Activity status: Permitted</b></p> <p><b>Where:</b></p> <p><b>PER-1</b> It does not exceed: 1. a height of 3.5m; and 2. an area of 1.5m<sup>2</sup>.</p> <p><b>PER-2</b> The activity complies with standards: I-S2 Radio frequency fields; and I-S3 Electric and magnetic fields.</p>	<p><b>Activity status where compliance not achieved with PER-1: Discretionary</b></p> <p><b>Activity status where compliance not achieved with PER-2: Non-complying</b></p>
<b>I-R9</b>	<b>Navigational aids, sensing or environmental monitoring equipment</b>	
<b>All zones</b>	<p><b>Activity status: Permitted</b></p> <p><b>Where:</b></p>	<b>Activity status where compliance not achieved with PER-1: Non-complying</b>

<sup>47</sup> Telco Companies (S282.006).

<sup>48</sup> Clause 16, Schedule 1 of the RMA.

<sup>49</sup> Telco Companies (S282.006).

	<b>PER-1</b> The activity complies with standards: I-S1 Radio frequency fields; and I-S2 Electric and magnetic fields.	
<b>I-R10</b>	<b>Substations</b>	
<b>Rural Production zone</b> - <b>Rural Lifestyle zone</b> <b>All zones</b> <sup>51</sup>	<b>Activity status: Permitted</b> <b>Where:</b> <b>PER-1</b> The substation is not located in General Residential Zone, Settlement Zone, Rural Residential Zone, or any special purpose zone. <sup>52</sup> <b>PER-12</b> 1. The substation activity <sup>53</sup> must be landscaped by a strip of vegetation which will screen any buildings or structures; and 2. The landscaped plants must achieve the continuous screening within five years and have a depth of 1.5m.	<b>Activity status where compliance not achieved with PER-1: Discretionary</b>
<b>I-R11</b>	<b>New building or structures, and extensions to existing buildings or structures, in the National Grid Yard</b>	
<b>All zones</b>	<b>Activity status: Permitted</b> <b>Where:</b> <b>PER-1</b> <del>No new building(s) or structures, and extensions shall be erected within 12m of any National Grid support structure, except for fences less than 2.5m in height and more than 5m from the support structure.</del> 1. <u>Alterations and additions to an existing building or structure for a sensitive activity that does not involve an increase in the building height or footprint;</u> 2. <u>Accessory buildings for sensitive activities located more than 12m from a National Grid support structure, that are no more than 2.5m in height and no more than 10m<sup>2</sup> in area;</u> 3. <u>Network utilities as defined in section 166 of the RMA and electricity generation that connects to the National Grid;</u>	<b>Activity status where compliance not achieved with PER-1 or PER-2: Non-complying</b> 1. <u>A change of use to a sensitive activity within existing buildings or structures;</u> 2. <u>The establishment of a sensitive activity;</u> 3. <u>A building used for the handling or storage of hazardous substances (Hazardous Substances (Hazard Classification) Notice 2020) with explosive or flammable intrinsic properties (except this does not apply to the accessory use and storage of hazardous substances in domestic-scale quantities);</u> 4. <u>Wintering barns, commercial greenhouses, immovable protective canopies, produce packing facilities, or milking sheds; and</u>

<sup>51</sup> Top Energy (S483.066, S483.067).

<sup>52</sup> Top Energy (S483.066, S483.067).

<sup>53</sup> Clause 16, Schedule 1 of the RMA.

	<p>4. <u>Fences located at least 5m from a National Grid support structure and no more than 2.5m in height;</u></p> <p>5. <u>Ancillary stockyards and platforms, including those associated with milking sheds located more than 12m from a National Grid support structure; and</u></p> <p>6. <u>Uninhabited farm and horticultural buildings and structures located more than 12m from a National Grid support structure and alterations to these buildings and structures.</u></p> <p><b>PER-2</b></p> <p>1. <u>The buildings and structures listed in PER-1 comply with the safe distance requirements in the New Zealand Electrical Code of Practice for Electrical Safe Distances (NZECP34:2001).</u></p> <p><u>Under the National Grid Conductors (wires) the following can occur:</u></p> <p>1. <u>a fence less than 2.5m in height;</u></p> <p>2. <u>an extension to existing buildings used for sensitive activities that do not increase the building envelope; and</u></p> <p>3. <u>non habitable buildings ancillary to a farming activity, such as milking sheds, piggeries, poultry sheds, greenhouses and protective canopies.</u></p> <p><b><del>This rules does not apply to:</del></b> network utilities within a transport corridor or any part of electricity infrastructure that connects the National Grid.</p> <p><b>NOTES:</b></p> <p>i. <del>structures and activities located near transmission lines must comply with the safe distance requirements in the New Zealand Electrical Code of Practice for Electrical Safe Distances (NZECP34:2001). Compliance with this plan does not ensure compliance with NZECP34:2001; and</del></p> <p>ii. vegetation planted near the National Grid Yard should be selected and/or managed to ensure that it complies with the Electricity (Hazards from Trees) Regulations 2003.</p>	<p>5. <u>Any other building or structure that does not achieve compliance with PER-1 or PER-2.</u><sup>54</sup></p>
I-R12	<p><b>New buildings or structures, and extensions to existing buildings or structures, and earthworks within 10m of a Critical Electricity Lines Overlay</b></p>	

<sup>54</sup> Transpower (S454.065).



All zones	<p><b>Activity status: Permitted</b></p> <p><b>Where:</b></p> <p><b>PER-1</b>  <del>1. The building or structure is less than 3m in height above ground level.<sup>55</sup> does not require a building consent; or</del>  2. <u>1. The extension of the building or structure does not exceed the envelope or footprint of the existing building or structure.</u></p> <p><b>PER-2</b>  Earthworks:  <del>1. are not directly above underground cables;</del>  <del>2. do not result in a reduction of existing ground clearance distances from overhead lines below the minimums prescribed in the New Zealand Code of Practice 34:2001 (NZECP 34:2001); and</del>  <del>3. are in accordance with NZECP 34:2001.<sup>56</sup></del></p> <p><b>PER-32:</b>  <u>New buildings and structures, and extensions of existing buildings and structures Activities</u> that do not comply with PER-1, <del>or PER-2</del> provided that:  i. prior to works notification is provided to Council <u>that the building or structure complies with the safe distance requirements in the New Zealand Electrical Code of Practice for Electrical Safe Distances (NZECP 34:2001), and the proposed activity is being carried out in accordance with the Electricity Act 1992 and associated regulations (NZECP 34:2001, the Electricity (Hazards from Trees) Regulations 2003 (SR 2003/375), and the Electricity (Safety) Regulations 2010); or<sup>57</sup></u>  ii. the activity is being carried out by a network utility operator or territorial authority in accordance with <u>the New Zealand Electrical Code of Practice for Electrical Safe Distances (NZECP 34:2001).<sup>58</sup></u></p>	<p><b>Activity status when compliance not achieved with PER-1, PER-2 or PER-3: Restricted Discretionary</b></p> <p><b>Matters of discretion restricted to:</b></p> <p>a. the safe and efficient operation and maintenance of the electricity supply network, including:  i. the use, design and location of buildings or structures;  ii. compliance with <u>the New Zealand Electrical Code of Practice for Electrical Safe Distances (NZECP 34:2001);<sup>59</sup></u>  iii. effects on public health and safety; and  iv. effects on access to Critical Electricity Lines, designated substations and associated infrastructure for maintenance purposes.</p>
I-R13	Tree planting within 20m of a Critical Electricity Lines Overlay	

<sup>55</sup> Top Energy (S483.069, S483.071).

<sup>56</sup> Addressed in Hearing 6/7 through the recommended amendments to the Earthworks Chapter.

<sup>57</sup> Top Energy (S483.069, S483.071).

<sup>58</sup> Clause 16, Schedule 1 of the RMA.

<sup>59</sup> Clause 16, Schedule 1 of the RMA.

All zones	<p><b>Activity status: Permitted</b></p> <p><b>Where:</b></p> <p><b>PER-1</b> The planting of trees is not for the purpose of providing a shelterbelt, plantation forestry or commercial horticultural operations.</p> <p><b>PER-2:</b> Activities that do not comply with PER-1 provided that:</p> <ol style="list-style-type: none"> <li>1. <del>prior to works notification is provided to Council and the proposed activity is being carried out in in accordance with the trees will be planted and managed to comply with Electricity Act 1992 and associated regulations (NZECP 34:2001, the Electricity (Hazards from Trees) Regulations 2003. (SR 2003/375), and the Electricity (Safety) Regulations 2010).</del><sup>60</sup></li> </ol>	<p><b>Activity status when compliance not achieved with PER-1 or PER-2: Restricted Discretionary</b></p> <p><b>Matters of discretion are restricted to:</b></p> <ol style="list-style-type: none"> <li>a. the safe and efficient operation and maintenance of the electricity supply network, including: <ol style="list-style-type: none"> <li>i. the mature size, growth rate, location, and fall zone of any associated tree planting;</li> <li>ii. including landscape planting and shelterbelts;</li> <li>iii. compliance with the <u>Electricity (Hazards from Trees) Regulations 2003</u> <del>NZECP 34:2001;</del><sup>61</sup></li> <li>iv. effects on public health and safety; and</li> <li>v. effects on access to Critical Electricity Lines, designated substations and associated infrastructure for maintenance purposes.</li> </ol> </li> </ol>
I-R14	Amateur radio infrastructure	
All zones	<p><b>Activity status: Permitted</b></p> <p><b>Where:</b></p> <p><b>PER-1</b> It must be owned and operated by a licensed amateur radio operator.</p> <p><b>PER-2</b> All amateur radio configurations must be designed and operated in compliance with New Zealand Standard NZS 2772.1:1999.</p> <p><b>PER-3</b> There are no more than 2 antennas and aerials per site.</p> <p><b>PER-4</b> The relevant zone setback standards are complied with.</p> <p><b>PER-5</b></p>	<p><b>Activity status when compliance not achieved with PER-1, PER-2, PER-3, PER-4, PER-5, PER-6, PER-7, PER-8 or PER-9: Restricted Discretionary</b></p> <p><b>Matters of discretion are restricted to:</b></p> <ol style="list-style-type: none"> <li>a. visual amenity effects, including effects on landscape;</li> <li>b. any positive effects of the activity;</li> <li>c. cumulative amenity effects associated with multiple devices and structures;</li> <li>d. the bulk, height, location and design of any structure; and</li> <li>e. any loss of sunlight on adjoining sites.</li> </ol>

<sup>60</sup> Top Energy (S483.070, S483.072).

<sup>61</sup> Top Energy (S483.070, S483.072).

	<p>Within the General Residential zone, no support structures, aerials and antennas are located between the road and the closest part of any building on the site, or within 1.5m from any other boundary.</p> <p><b>PER-7</b></p> <ol style="list-style-type: none"> <li>Where antennas are attached to a building or other structure (including a mast), the radio and telecommunications antenna do not exceed:             <ol style="list-style-type: none"> <li>for an antenna dish; 2m in diameter;</li> <li>for panel antenna: 4m<sup>2</sup> in area.</li> </ol> </li> <li>provided there is no more than one pedestal mounted antenna per site, which:             <ol style="list-style-type: none"> <li>is pivoted less than 4m above the ground with a maximum diameter of 5m and a maximum height for network utility structures of 6.5m;</li> <li>if guy wires are used, where these do not exceed 12mm in diameter.</li> </ol> </li> </ol> <p><b>PER-8</b></p> <ol style="list-style-type: none"> <li>Provided any element making up an aerial does not exceed 80mm in diameter;</li> <li>for horizontal HF yagi aerials, provided the maximum element length does not exceed 14.9m, and maximum boom length does not exceed 13m;</li> <li>for whip aerials, provided the maximum length does not exceed 3.5m in height for network utility structures above the maximum height for network utility structures for the support structure.</li> </ol> <p><b>PER-9</b></p> <ol style="list-style-type: none"> <li>Provided there is only one primary mast per site, which does not exceed a maximum height for network utility structures of 20m. This mast may be a pole or lattice mast, and may be guyed or self-supporting. Lattice masts shall be no more than:             <ol style="list-style-type: none"> <li>1000mm in outside diameter up to 9m in height for network utility structures;</li> <li>420mm in outside diameter above 9m in height for network utility structures.</li> </ol> </li> <li>provided there is only one secondary mast per site with a maximum height for network utility structures of 12m. This mast may be fitted with a rotator for VHF and/or UHF aerials;</li> <li>provided all masts (except for as provided for in PER 6(a) above) shall be less than 115mm in outside diameter; and</li> <li>in addition to the primary mast and the secondary mast, provided there are no</li> </ol>	
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	more than 2 other masts per site, which do not exceed the maximum height for network utility structures for buildings within the zone in which it is located by more than 30% (except that one mast may be used as a vertical aerial up to 13.5m in height for network utility structures).	
<b>I-R15</b>	<b><del>New overhead lines and associated poles, telecommunication poles and attached antennas, or towers</del></b>	
<b>All zones other than the Rural Production zone, Māori Purpose zone</b>	<b>Activity status: Restricted Discretionary</b> <del>-</del> <b>Matters of discretion are restricted to:</b> <del>-</del> <ul style="list-style-type: none"> <li><del>f. the functional and operational needs of, and benefits from, the network utility;</del></li> <li><del>g. the potential impact on the levels of service or health and safety if the work is not undertaken;</del></li> <li><del>h. the bulk, height, location and design of the network utility, including any associated building(s) or structures;</del></li> <li><del>i. the impact on the character and qualities of the surrounding area; and</del></li> <li><del>j. any adverse effects on public health and/or safety.</del></li> </ul>	<b>Activity status where compliance not achieved: Not applicable</b> <sup>62</sup>
<b>I-R16</b>	<b><del>Telecommunications lines, cabinets, poles and antennas regulated by the NES-TF that do not meet the Permitted Activity standards in Regulations 20,21,22,27,29,31,33,35 or 37 of the NES-TF and are not provided for as a controlled activity in Part 3 of the NES-TF Regulations</del></b> <sup>63</sup>	
<b>All zones</b>	<b>Activity status: Restricted Discretionary</b> <b>Matters of discretion are restricted to:</b> <ul style="list-style-type: none"> <li>a. the functional and operational needs of, and benefits from, the network utility;</li> <li>b. the potential impact on the levels of service or health and safety if the work is not undertaken;</li> <li>c. the bulk, height, location and design of the network utility, including any associated building(s) or structures;</li> <li>d. the impact on the character and qualities of the surrounding area; and</li> <li>e. any adverse effects on public health and/or safety.</li> </ul>	<b>Activity status where compliance not achieved: Not applicable</b>
<b>I-R17</b>	<b>Construction and upgrading of above ground water supply, wastewater systems, or stormwater infrastructure</b>	

<sup>62</sup> Telco Companies (S282.006).

<sup>63</sup> Clause 16, Schedule 1 of the RMA.

<b>All zones</b>	<b>Activity status: Restricted Discretionary</b>  <b>Matters of discretion are restricted to:</b> <ul style="list-style-type: none"> <li>a. the functional and operational needs of, and benefits from, the network utility;</li> <li>b. the potential impact on the levels of service or health and safety if the work is not undertaken;</li> <li>c. the bulk, height, location and design of the network utility, including any associated building(s) or structures;</li> <li>d. the impact on the character and qualities of the surrounding area;</li> <li>e. odour, noise, dust; and</li> <li>f. any adverse effects on public health and/or safety.</li> </ul>	<b>Activity status where compliance not achieved: Not applicable</b>
<b>I-R18</b>	<b><del>New sensitive activity and any buildings used by a sensitive activity located in the National Grid Corridor</del></b>	
<b>All zones</b>	<b><del>Activity status: Restricted Discretionary</del></b> <b><del>Matters of discretion are restricted to:</del></b> <ul style="list-style-type: none"> <li><del>a. the extent to which the buildings location, design and layout enables appropriate separation distances between a sensitive activity and the National Grid transmission lines and any substation;</del></li> <li><del>b. any reverse sensitivity effects;</del></li> <li><del>c. the risk of electrical hazards affecting public or individual safety, and the risk of public and private property damage; and</del></li> <li><del>d. any adverse effects arising from any earthworks or proposed landscaping.</del></li> </ul>	<b><del>Activity status where compliance not achieved: Not applicable</del><sup>64</sup></b>
<b>I-R19</b>	<b>Activities <u>Infrastructure</u><sup>65</sup> not otherwise listed in this chapter</b>	
<b>All zones</b>	<b>Activity status: Discretionary</b>	<b>Activity status where compliance not achieved: Not applicable</b>
<b>I-R20</b>	<b><del>Sensitive activity and any building used by a sensitive activity located within the National Grid Yard</del></b>	
<b>All zones</b>	<b><del>Activity status: Non-complying</del></b>	<b><del>Activity status where compliance not achieved: Not applicable</del><sup>66</sup></b>
<b>I-R21</b>	<b><del>The reticulation and storage of water for irrigation purposes within the National Grid Yard</del></b>	
<b>All zones</b>	<b><del>Activity status: Non-complying</del></b>	<b><del>Activity status where compliance not achieved: Not applicable</del><sup>67</sup></b>

<sup>64</sup> Transpower (S454.067).

<sup>65</sup> Clause 16, Schedule 1 of the RMA.

<sup>66</sup> Transpower (S454.068).

<sup>67</sup> Transpower (S454.069).

Standards		
<b>I-S1</b>	<b>Radio frequency fields</b>	
<b>All zones</b>	If generating radiofrequency fields, an activity must not exceed the maximum exposure level of the general public in New Zealand Standards NZS2772.1: 1999 Radiofrequency fields - Maximum exposure levels - 3KHz to 300 GHz.	<b>Activity status where compliance not achieved: Not applicable</b>
<b>I-S2</b>	<b>Electric and magnetic fields</b>	
<b>All zones</b>	If generating electric and magnetic fields, the activity must not exceed the International Commission on Non-Ionising Radiation Protection Guidelines for limiting exposure to time varying electric and magnetic fields (1Hz - 100kHz) (Health physics, 2010, 99(6); 818-836) and recommendations from the World Health Organisation monograph Environmental Health Criteria (No 238, June 2007).	<b>Activity status where compliance not achieved: Not applicable</b>