


7.4.10 **APPENDIX 7.4 B - NATIONAL ENVIRONMENTAL STANDARDS FOR ELECTRICITY TRANSMISSION ACTIVITIES REGULATIONS 2009 (184.3)(186.18)**

2009/397



**Resource Management (National Environmental Standards for Electricity Transmission Activities) Regulations 2009**

Anand Satyanand, Governor-General

**Order in Council**

At Wellington this 14th day of December 2009

Present:  
His Excellency the Governor-General in Council

Pursuant to section 43 of the Resource Management Act 1991, His Excellency the Governor-General, acting on the advice and with the consent of the Executive Council, and on the recommendation of the Minister for the Environment given in accordance with section 44 of that Act, makes the following regulations.

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4	<p><b>abrasive blasting</b> means wet abrasive blasting and dry abrasive blasting</p> <p><b>Act</b> means the Resource Management Act 1991</p> <p><b>base footprint</b> means the footprint of a tower at the commencement of these regulations</p> <p><b>base height</b> means the height of a transmission line support structure at the commencement of these regulations</p> <p><b>base position</b> means the position of a pole at the commencement of these regulations</p> <p><b>base width</b> means the length of the longest side of a tower's base footprint</p> <p><b>blasting</b> means water blasting and abrasive blasting</p> <p><b>circuit</b> means conductors on a transmission line that together form a single electrical connection between 2 or more system nodes</p> <p><b>conductor</b>—</p> <ul style="list-style-type: none"> <li>(a) means wire or cable used for carrying electric current along a transmission line; and</li> <li>(b) includes any hardware and insulation associated with the wire or cable</li> </ul> <p><b>dry abrasive blasting</b> means using abrasive material in air and directing it at pressure to wear down or remove the coatings or corrosion on a structure's surface</p> <p><b>earth-wire</b>—</p> <ul style="list-style-type: none"> <li>(a) means a protective wire that provides a path to ground for electrical current from a fault or lightning strike; and</li> <li>(b) includes an earth-wire that contains optic fibres; and</li> <li>(c) includes any hardware associated with the wire</li> </ul> <p><b>earthworks</b> means the disturbance of the surface of land by activities including blading, tracking, boring, contouring, ripping, moving, removing, stockpiling, placing, replacing, re-compacting, excavating, cutting, and filling earth (or any other matter constituting the land, such as soil, clay, sand, or rock)</p> <p><b>envelope for controlled activities</b> means the quadrangle formed by moving each side of a tower's base footprint outwards by 150% of the tower's base width and joining the sides (as shown in the second diagram in the Schedule)</p>	

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**envelope for permitted activities** means the quadrangle formed by moving each side of a tower's base footprint outwards by 60% of the tower's base width and joining the sides (as shown in the first diagram in the Schedule)

**existing transmission line—**

- (a) means a transmission line that was operational, or was able to be operated, at the commencement of these regulations; and
- (b) includes a transmission line described in paragraph (a) that is altered or relocated in accordance with these regulations; and
- (c) includes a transmission line that, in accordance with these regulations, replaces a transmission line described in paragraph (a)

**footprint** means the outline of the land occupied by a tower, formed by drawing straight lines between the outermost edges of the outermost parts of the tower at ground level

**height**, in relation to a transmission line support structure, means the height of the structure measured vertically from the ground level at the centre of the structure to the highest point of the structure (including conductors, but excluding telecommunication devices, earth peaks, and lightning rods)

**historic heritage area—**

- (a) means an area that is protected by a rule because of its historic heritage; and
- (b) to avoid doubt, includes an area that is protected by a rule because it is a site of significance to Māori

**land includes—**

- (a) land covered by water and the air space above land; and
- (b) the bed of a lake or river; and
- (c) the surface of water in a lake or river

**national grid** means the network that transmits high-voltage electricity in New Zealand and that, at the commencement of these regulations, is owned and operated by Transpower New Zealand Limited, including—

- (a) transmission lines; and
- (b) electricity substations

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**natural area** means an area that is protected by a rule because it has outstanding natural features or landscapes, significant indigenous vegetation, or significant habitats of indigenous fauna

**normal operating conditions** has the meaning given by regulation 10(9)

**occupied building** means a building that is, or is intended to be, regularly occupied by 1 or more people

**operation** means the use of a transmission line to convey electricity

**overland flow path** means the path that water takes over land if there is flooding

**pole**—

- (a) means a structure that supports conductors as part of a transmission line and that—
  - (i) has no more than 3 vertical supports; and
  - (ii) is not a steel-lattice structure; and
- (b) includes the hardware associated with the structure (such as insulators, cross-arms, and guy-wires) and the structure's foundations

**sensitive land use** includes the use of land for a childcare facility, school, residential building, or hospital

**telecommunication cable**—

- (a) means a wire or cable used for telecommunication; and
- (b) includes any hardware associated with the wire or cable

**telecommunication device**—

- (a) means a device (for example, an antenna) that—
  - (i) facilitates the operation of a transmission line; and
  - (ii) receives or transmits telecommunication signals; and
- (b) includes any hardware associated with the device; but
- (c) does not include a telecommunication cable

**temporary line deviation** means the construction and use of a temporary section of transmission line to divert electricity transmission during the maintenance or upgrading of an existing section of transmission line

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**temporary structure—**

- (a) means a non-permanent structure, and any associated lighting, erected only for a specific maintenance or upgrading task; but
- (b) does not include a transmission line that is part of a temporary line deviation

**termination structure** means a tower or pole used for the transition between an overhead and an underground transmission line

**tower—**

- (a) means a steel-lattice structure that supports conductors as part of a transmission line; and
- (b) includes the hardware associated with the structure (such as insulators, cross-arms, and guy-wires) and the structure's foundations

**transmission line—**

- (a) means the facilities and structures used for, or associated with, the overhead or underground transmission of electricity in the national grid; and
- (b) includes transmission line support structures, telecommunication cables, and telecommunication devices to which paragraph (a) applies; but
- (c) does not include an electricity substation

**transmission line support structure** means a tower or pole

**undergrounding—**

- (a) means replacing overhead transmission lines with underground transmission lines; and
- (b) includes altering, relocating, or replacing a tower or pole at 1 or both ends of the underground transmission lines so that the tower or pole becomes a termination structure

**upgrading** means increasing the carrying capacity, efficiency, security, or safety of a transmission line

**water blasting** means directing water at pressure to clean or wash a structure's surface

**wet abrasive blasting** means using abrasive material in water and directing it at pressure to wear down or remove the coatings or corrosion on a structure's surface.

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- (2) If a transmission line support structure is altered, relocated, or replaced after the commencement of these regulations, the altered, relocated, or replacement structure retains the base footprint, base height, base position, base width, envelope for controlled activities, and envelope for permitted activities of the first structure.
- (3) Unless the context requires another meaning, a term or expression that is defined in the Act and used, but not defined, in these regulations has the meaning given by the Act.

**4 Regulations apply only to certain activities relating to existing transmission lines**

- (1) These regulations apply only to an activity that relates to the operation, maintenance, upgrading, relocation, or removal of an existing transmission line, including any of the following activities that relate to those things:
  - (a) a construction activity;
  - (b) a use of land or occupation of the coastal marine area (within the meanings of use and occupy given by section 2(1) of the Act);
  - (c) an activity relating to an access track to an existing transmission line;
  - (d) undergrounding an existing transmission line.
- (2) However, these regulations do not apply to—
  - (a) the construction or use of a bridge or culvert to access an existing transmission line; or
  - (b) the control of the use of land for the purpose of the prevention or mitigation of any adverse effects of the storage, use, disposal, or transportation of hazardous substances; or
  - (c) the refuelling of a vehicle or equipment; or
  - (d) the use of land as a landing area for helicopters; or
  - (e) an activity carried out in relation to an electricity substation; or
  - (f) earthworks to the extent that they are subject to a regional rule.

*Operation of transmission line or use of access track*

**5 Permitted activities**

- (1) The operation of an existing transmission line is a permitted activity.
- (2) The use of an access track to an existing transmission line is a permitted activity.

*Overhead conductors, earth-wires, overhead telecommunication cables, and adding overhead circuits*

**6 Permitted activities: overhead conductors**

- (1) Adding an overhead conductor, or part of an overhead conductor, to an existing transmission line (except as part of adding an overhead circuit) is a permitted activity if—
  - (a) both of the conditions in subclauses (4) and (5) are complied with; and
  - (b) all of the applicable conditions in regulation 10(2) to (8) are complied with.
- (2) Replacing an overhead conductor, or part of an overhead conductor, on an existing transmission line is a permitted activity if the condition in subclause (6) is complied with.
- (3) Maintaining an overhead conductor on an existing transmission line is a permitted activity.

*Conditions*

- (4) The conductors must be configured so that there are no more than 2 conductors in the same phase (duplex configuration).
- (5) The diameter of a new conductor, or a new part of a conductor, must not exceed 50 mm.
- (6) The diameter of a replacement conductor, or a replacement part of a conductor, must not exceed—
  - (a) the diameter of the existing conductor or part; or
  - (b) 50 mm, if the diameter of the existing conductor or part is less than 50 mm.

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7	<p><b>Permitted activities: earth-wires and overhead telecommunication cables</b></p> <p>(1) Adding an earth-wire or overhead telecommunication cable, or part of an earth-wire or overhead telecommunication cable, to an existing transmission line is a permitted activity if both of the conditions in subclauses (4) and (5) are complied with.</p> <p>(2) Replacing an earth-wire or overhead telecommunication cable, or part of an earth-wire or overhead telecommunication cable, on an existing transmission line is a permitted activity if the condition in subclause (6) is complied with.</p> <p>(3) Maintaining an earth-wire or overhead telecommunication cable on an existing transmission line is a permitted activity.</p> <p><i>Conditions</i></p> <p>(4) The number of wires and cables must not exceed—</p> <p style="margin-left: 20px;">(a) 3 earth-wires, or 2 earth-wires and 1 telecommunication cable, per transmission line support structure; or</p> <p style="margin-left: 20px;">(b) the existing number of wires and cables, if that number is more than is permitted by paragraph (a).</p> <p>(5) The diameter of a new wire or cable, or a new part of a wire or cable, must not exceed 25 mm.</p> <p>(6) The diameter of a replacement wire or cable, or a replacement part of a wire or cable, must not exceed—</p> <p style="margin-left: 20px;">(a) the diameter of the existing wire, cable, or part (as the case may be); or</p> <p style="margin-left: 20px;">(b) 25 mm, if the diameter of the existing wire, cable, or part (as the case may be) is less than 25 mm.</p>	
8	<p><b>Permitted activities: adding overhead circuits</b></p> <p>(1) Adding an overhead circuit to an existing transmission line is a permitted activity if—</p> <p style="margin-left: 20px;">(a) the condition in subclause (2) is complied with; and</p> <p style="margin-left: 20px;">(b) both of the conditions in regulation 6(4) and (5) are complied with; and</p> <p style="margin-left: 20px;">(c) all of the applicable conditions in regulation 10(2) to (8) are complied with.</p>	
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*Condition*

- (2) The transmission line support structures of the transmission line must have been designed and built, at the commencement of these regulations, to carry the additional circuit.

**9 Restricted discretionary activities**

- (1) Adding an overhead conductor, or part of an overhead conductor, to an existing transmission line (except as part of adding an overhead circuit) is a restricted discretionary activity if—
- (a) 1 or both of the conditions in regulation 6(4) and (5) are breached; but
  - (b) all of the applicable conditions in regulation 10(2) to (8) are complied with.
- (2) Replacing an overhead conductor, or part of an overhead conductor, on an existing transmission line is a restricted discretionary activity if the condition in regulation 6(6) is breached.
- (3) Adding an earth-wire or overhead telecommunication cable, or part of an earth-wire or overhead telecommunication cable, to an existing transmission line is a restricted discretionary activity if 1 or both of the conditions in regulation 7(4) and (5) are breached.
- (4) Replacing an earth-wire or overhead telecommunication cable, or part of an earth-wire or overhead telecommunication cable, on an existing transmission line is a restricted discretionary activity if the condition in regulation 7(6) is breached.
- (5) Adding an overhead circuit to an existing transmission line is a restricted discretionary activity if—
- (a) first,—
    - (i) the condition in regulation 8(2) is breached; or
    - (ii) 1 or both of the conditions in regulation 6(4) and (5) are breached; and
  - (b) second, all of the applicable conditions in regulation 10(2) to (8) are complied with.

*Matters to which discretion restricted*

- (6) Discretion is restricted to the following matters in relation to a restricted discretionary activity under this regulation:
- (a) visual effects; and
  - (b) the effects and timing of construction works; and

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	(c) the effects on services and infrastructure.	
	<i>Increasing voltage or current rating, underground conductors, and undergrounding transmission lines</i>	
<b>10</b>	<b>Permitted activities: increasing voltage or current rating</b>	
(1)	Increasing the voltage or current rating of an existing transmission line is a permitted activity if all of the applicable conditions in subclauses (2) to (9) are complied with.	
	<i>Conditions</i>	
(2)	The electric and magnetic fields produced by the transmission of electricity at 50 Hz through overhead or underground alternating current transmission lines must, after being modelled in accordance with subclauses (4) to (7), be demonstrated to either—	
	(a) not exceed the following reference levels for public exposure:	
	(i) electric field strength of 5 kV/m; and	
	(ii) magnetic flux density of 100 microteslas; or	
	(b) not exceed the basic restriction level of 2 mA/m <sup>2</sup> for the density of electric current induced in the body.	
(3)	The static electric field strength produced by the transmission of electricity through overhead direct current transmission lines must be demonstrated to have no likely adverse human health effects after—	
	(a) modelling the field strength in accordance with subclauses (4) to (6) as if references to electric field strength were references to static electric field strength; and	
	(b) including the likely contribution to the field strength from the space charge around the transmission line caused by corona discharge.	
(4)	The electric field strength and magnetic flux density of a transmission line must be modelled at whichever of the following locations is closest to the line:	
	(a) 1 metre above the ground in an area above, below, or next to the line that is reasonably accessible to the public; or	
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- (b) 1 metre above the highest floor level of an occupied building.
- (5) The electric field strength and magnetic flux density of a transmission line may be modelled to take account of any shielding effect from buildings.
- (6) The electric field strength and magnetic flux density of an overhead transmission line must be modelled to result in the highest electric and magnetic fields likely under normal operating conditions using the following climatic conditions to determine conductor position:
- (a) ambient temperature of 20°C in winter and 30°C in summer;
- (b) maximum solar radiation of 1 000 W/m<sup>2</sup>;
- (c) dry conditions;
- (d) wind speed of 0.6 m/s.
- (7) The magnetic flux density of an underground transmission line must be modelled to result in the highest magnetic field likely under normal operating conditions.
- (8) The results of modelling the electric field strength, magnetic flux density, density of electric current induced in the body, or static electric field strength under this regulation must be provided to the relevant territorial authority if requested by the territorial authority.
- (9) In subclauses (6) and (7), **normal operating conditions**—
- (a) means the conditions associated with the highest load current; but
- (b) does not include conditions in which a short-term increase in voltage or current is caused by a fault such as switching, a lightning strike, a short circuit, or an abnormal operating state of a direct current transmission line.
- 11 Permitted activities: underground conductors**
- (1) Adding an underground conductor, or part of an underground conductor, to an existing transmission line is a permitted activity if all of the applicable conditions in regulation 10(2) to (8) are complied with.

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	<p>(2) Replacing an underground conductor, or part of an underground conductor, on an existing transmission line is a permitted activity.</p> <p>(3) Maintaining an underground conductor on an existing transmission line is a permitted activity.</p>	
	<p><b>12 Controlled activities: undergrounding transmission lines</b></p> <p>(1) Undergrounding an existing transmission line is a controlled activity if all of the applicable conditions in regulation 10(2) to (8) are complied with.</p> <p><i>Matters over which control reserved</i></p> <p>(2) Control is reserved over the following matters in relation to a controlled activity under this regulation:</p> <p>(a) the location of termination structures, and the route of underground cables, in relation to—</p> <p style="padding-left: 20px;">(i) visual, landscape, and ecological effects; and</p> <p style="padding-left: 20px;">(ii) the effects on historic heritage; and</p> <p>(b) the extent and nature of earthworks and control of sediment; and</p> <p>(c) the effects and timing of construction works; and</p> <p>(d) the effects on services and infrastructure.</p>	
	<p><b>13 Non-complying activities</b></p> <p>(1) Each of the following activities is a non-complying activity if 1 or more of the applicable conditions in regulation 10(2) to (8) are breached:</p> <p>(a) adding an overhead conductor, or part of an overhead conductor, to an existing transmission line:</p> <p>(b) adding an overhead circuit to an existing transmission line:</p> <p>(c) increasing the voltage or current rating of an existing transmission line:</p> <p>(d) adding an underground conductor, or part of an underground conductor, to an existing transmission line:</p> <p>(e) undergrounding an existing transmission line.</p> <p>(2) Altering, relocating, or replacing a transmission line support structure of an existing transmission line (other than as part</p>	
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of a temporary line deviation or undergrounding) is a non-complying activity if—

- (a) the requirement described in regulation 15(1)(c) or (2)(c) is breached; and
- (b) 1 or more of the applicable conditions in regulation 10(2) to (8) are breached.

*Transmission line support structures:  
Alteration, relocation, and replacement*

**14 Permitted activities**

- (1) Altering, relocating, or replacing a tower of an existing transmission line (other than as part of a temporary line deviation or undergrounding) is a permitted activity if all of the applicable conditions in subclauses (3) to (6) are complied with.
- (2) Altering, relocating, or replacing a pole of an existing transmission line (other than as part of a temporary line deviation or undergrounding) is a permitted activity if all of the applicable conditions in subclauses (3), (4), (7), and (8) are complied with.

*Conditions*

- (3) If a transmission line support structure is increased in height (including by being replaced with another structure),—
  - (a) the structure may be made no more than 15% higher than its base height; and
  - (b) the additional height must comply with any height restrictions for airport purposes, or any public view shafts, specified in a rule.
- (4) A transmission line support structure must not be relocated, or replaced with another transmission line support structure, so that any part of the structure at ground level is—
  - (a) within 12 metres of an occupied building (measured horizontally); or
  - (b) any closer to an occupied building, if the existing structure is within 12 metres of the building (measured horizontally).
- (5) If a tower is widened (including by being replaced with another tower), each side of the tower's footprint may be made no longer than the total of—

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	<ul style="list-style-type: none"> <li>(a) the length of that side of the tower's base footprint; and</li> <li>(b) 25% of the tower's base width.</li> </ul>	
	(6) A tower must not be relocated, or replaced with another tower, so that any part of the tower at ground level falls outside the tower's envelope for permitted activities.	
	(7) A pole must not be replaced with a tower.	
	(8) A pole must not be relocated, or replaced with another pole, more than 5 metres from the pole's base position (measured horizontally).	
	<b>15 Controlled activities</b>	
	(1) Altering, relocating, or replacing a tower of an existing transmission line (other than as part of a temporary line deviation or undergrounding) is a controlled activity if—	
	<ul style="list-style-type: none"> <li>(a) all of the applicable conditions in regulation 14(3) to (5) are complied with; and</li> <li>(b) the condition in regulation 14(6) is breached; but</li> <li>(c) the tower is not relocated, or replaced with another tower, so that any part of the tower at ground level falls outside the tower's envelope for controlled activities.</li> </ul>	
	(2) Altering, relocating, or replacing a pole of an existing transmission line (other than as part of a temporary line deviation or undergrounding) is a controlled activity if—	
	<ul style="list-style-type: none"> <li>(a) all of the applicable conditions in regulation 14(3), (4), and (7) are complied with; and</li> <li>(b) the condition in regulation 14(8) is breached; but</li> <li>(c) the pole is not relocated, or replaced with another pole, more than 10 metres from the pole's base position (measured horizontally).</li> </ul>	
	(3) Altering, relocating, or replacing a tower or pole of an existing transmission line as part of undergrounding, so that the tower or pole becomes a termination structure, is a controlled activity if all of the applicable conditions in regulation 14(3), (4), and (7) are complied with.	
	<i>Matters over which control reserved</i>	
	(4) Control is reserved over the following matters in relation to a controlled activity under this regulation:	
	<ul style="list-style-type: none"> <li>(a) visual, landscape, and ecological effects; and</li> </ul>	
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	<ul style="list-style-type: none"> <li>(b) the effects on historic heritage; and</li> <li>(c) the effects and timing of construction works; and</li> <li>(d) the effects on services and infrastructure.</li> </ul>	
<b>16</b>	<b>Restricted discretionary activities</b>	
(1)	Altering, relocating, or replacing a tower of an existing transmission line (other than as part of a temporary line deviation or undergrounding) is a restricted discretionary activity if—	
	<ul style="list-style-type: none"> <li>(a) 1 or more of the conditions in regulation 14(3) to (5) are breached; or</li> <li>(b) both of the following apply:               <ul style="list-style-type: none"> <li>(i) the requirement described in regulation 15(1)(c) is breached; but</li> <li>(ii) all of the applicable conditions in regulation 10(2) to (8) are complied with.</li> </ul> </li> </ul>	
(2)	Altering, relocating, or replacing a pole of an existing transmission line (other than as part of a temporary line deviation or undergrounding) is a restricted discretionary activity if—	
	<ul style="list-style-type: none"> <li>(a) 1 or more of the conditions in regulation 14(3), (4), and (7) are breached; or</li> <li>(b) both of the following apply:               <ul style="list-style-type: none"> <li>(i) the requirement described in regulation 15(2)(c) is breached; but</li> <li>(ii) all of the applicable conditions in regulation 10(2) to (8) are complied with.</li> </ul> </li> </ul>	
(3)	Altering, relocating, or replacing a tower or pole of an existing transmission line as part of undergrounding, so that the tower or pole becomes a termination structure, is a restricted discretionary activity if 1 or more of the conditions in regulation 14(3), (4), and (7) are breached.	
	<i>Matters to which discretion restricted</i>	
(4)	Discretion is restricted to the following matters in relation to a restricted discretionary activity under this regulation:	
	<ul style="list-style-type: none"> <li>(a) the location and height of the transmission line support structures in relation to—           <ul style="list-style-type: none"> <li>(i) visual, landscape, and ecological effects; and</li> <li>(ii) the effects on historic heritage; and</li> <li>(iii) the effects on sensitive land uses; and</li> </ul> </li> </ul>	
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	<ul style="list-style-type: none"> <li>(b) earthworks, clearance of trees and vegetation, and restoration of the land; and</li> <li>(c) the effects and timing of construction works.</li> </ul>	
	<i>Temporary structures and temporary line deviation</i>	
<b>17</b>	<b>Permitted activities</b>	
(1)	Erecting or using a temporary structure in relation to an existing transmission line (other than as part of a temporary line deviation) is a permitted activity if the condition in subclause (3) is complied with.	
(2)	Carrying out a temporary line deviation of an existing transmission line is a permitted activity if the condition in subclause (4) is complied with.	
	<i>Conditions</i>	
(3)	Any temporary structures must be—	
	<ul style="list-style-type: none"> <li>(a) erected no earlier than 20 working days before the start of the relevant maintenance or upgrading; and</li> <li>(b) removed no later than 20 working days after the end of the maintenance or upgrading.</li> </ul>	
(4)	Any structures involved in a temporary line deviation must be—	
	<ul style="list-style-type: none"> <li>(a) erected no earlier than 60 working days before the start of the relevant maintenance or upgrading; and</li> <li>(b) removed no later than 60 working days after the end of the maintenance or upgrading.</li> </ul>	
<b>18</b>	<b>Controlled activities</b>	
(1)	Erecting or using a temporary structure in relation to an existing transmission line (other than as part of a temporary line deviation) is a controlled activity if the condition in regulation 17(3) is breached.	
(2)	Carrying out a temporary line deviation of an existing transmission line is a controlled activity if the condition in regulation 17(4) is breached.	
	<i>Matters over which control reserved</i>	
(3)	Control is reserved over the following matters in relation to a controlled activity under this regulation:	
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- (a) the duration of any works; and
- (b) the effects and timing of construction works.

*Transmission lines: Removal*

**19 Permitted activities**

- (1) Removing an existing transmission line, or part of an existing transmission line, is a permitted activity if both of the conditions in subclauses (2) and (3) are complied with.

*Conditions*

- (2) The transmission line, or the part of the transmission line, and any associated construction or demolition material must be removed from the land.
- (3) Any ground that is disturbed from the removal must be restored in a way that minimises the risk of soil erosion, sediment run-off, and weed invasion.

**20 Controlled activities**

- (1) Removing an existing transmission line, or part of an existing transmission line, is a controlled activity if 1 or both of the conditions in regulation 19(2) and (3) are breached.

*Matters over which control reserved*

- (2) Control is reserved over the following matters in relation to a controlled activity under this regulation:
  - (a) earthworks, clearance of trees and vegetation, and restoration of the land; and
  - (b) the effects and timing of construction works.

*Telecommunication devices*

**21 Permitted activities**

- (1) Installing or modifying a telecommunication device on a transmission line support structure of an existing transmission line is a permitted activity if both of the conditions in subclauses (3) and (4) are complied with.
- (2) Maintaining a telecommunication device on a transmission line support structure of an existing transmission line is a permitted activity.

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	<i>Conditions</i>	
(3)	The width of the telecommunication device must not exceed 1.8 metres.	
(4)	The telecommunication device must extend no more than 2.5 metres above the height of the structure.	
<b>22</b>	<b>Restricted discretionary activities</b>	
(1)	Installing or modifying a telecommunication device on a transmission line support structure of an existing transmission line is a restricted discretionary activity if 1 or both of the conditions in regulation 21(3) and (4) are breached.	
	<i>Matters to which discretion restricted</i>	
(2)	Discretion is restricted to the following matters in relation to a restricted discretionary activity under this regulation:	
	(a) the size, height, and number of telecommunication devices and associated telecommunication cables; and	
	(b) visual and landscape effects.	
	<i>Signs</i>	
<b>23</b>	<b>Permitted activities</b>	
(1)	Installing or modifying a sign on a transmission line support structure of an existing transmission line that is intended to identify the structure or its owner, or is intended to help with safety or navigation, is a permitted activity if the applicable condition in subclause (2) or (3) is complied with.	
	<i>Conditions</i>	
(2)	The signs on a transmission line support structure that are intended to identify the structure or its owner must together cover an area of no more than 1 m <sup>2</sup> .	
(3)	The signs on a transmission line support structure that are intended to help with safety or navigation must together cover an area of no more than 6 m <sup>2</sup> .	
<b>24</b>	<b>Restricted discretionary activities</b>	
(1)	Installing or modifying a sign on a transmission line support structure of an existing transmission line that is intended to identify the structure or its owner, or is intended to help with	
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safety or navigation, is a restricted discretionary activity if the applicable condition in regulation 23(2) or (3) is breached.

- (2) Installing or modifying a sign next to a transmission line support structure of an existing transmission line that is intended to identify the structure or its owner, or is intended to help with safety or navigation, is a restricted discretionary activity.

*Matters to which discretion restricted*

- (3) Discretion is restricted to the following matters in relation to a restricted discretionary activity under this regulation:
- (a) visual effects; and
  - (b) the effects on services and infrastructure.

*Transmission line support structures:  
Discharges from blasting and applying  
protective coatings*

**25 Permitted activities**

- (1) Blasting a transmission line support structure of an existing transmission line, or preparing the structure to receive protective coatings, is a permitted activity if all of the applicable conditions in subclauses (3) to (9) are complied with.
- (2) Applying protective coatings to a transmission line support structure of an existing transmission line is a permitted activity if the condition in subclause (10) is complied with.

*Conditions*

- (3) Blasting must not be done within 50 metres of a water body or the coastal marine area.
- (4) Blasting must not be done—
- (a) within 50 metres of a public road; or
  - (b) within 100 metres of an occupied building.
- (5) Abrasive material used in abrasive blasting must contain no more than 5% free silica by dry weight.
- (6) Waste and debris resulting from abrasive blasting must be removed from the site of the blasting to the extent practicable.
- (7) Dry abrasive blasting—
- (a) must be done no more than 1 metre above ground level; and

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- (b) may be done only if covers or screens are used to mitigate the effects of any contaminants discharged by the blasting.
- (8) If abrasive blasting is done on a tower coated with lead-based paint, the waste and debris (including abrasive material) resulting from the blasting must be captured and removed by using geotextile material of a filter quality or by any equivalent method.
- (9) The following substances must not be used for surface preparation: paint strippers (unless used on a solvent rag to degrease a surface), fungicides, acids, alkalis, sodium hypochlorite, or any other oxidising agent.
- (10) Protective coatings must be applied—
  - (a) by hand; or
  - (b) by pressurised spray used no more than 1 metre above ground level.

#### 26 Controlled activities

- (1) Blasting a transmission line support structure of an existing transmission line, or preparing the structure to receive protective coatings, is a controlled activity if—
  - (a) it is not done over a water body or the coastal marine area; and
  - (b) the applicable conditions in regulation 25(4) and (7) are complied with; and
  - (c) 1 or both of the following apply:
    - (i) it is done within 50 metres of a water body or the coastal marine area;
    - (ii) 1 or more of the conditions in regulation 25(5), (6), (8), and (9) are breached.
- (2) Applying protective coatings to a transmission line support structure of an existing transmission line is a controlled activity if the condition in regulation 25(10) is breached.

#### *Matters over which control reserved*

- (3) Control is reserved over the following matters in relation to a controlled activity under this regulation:
  - (a) the effects on water quality and ecologically-sensitive receiving environments; and

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- (b) the effects on occupied buildings; and
- (c) the risk of contamination of soil; and
- (d) the effects on health.

**27 Restricted discretionary activities**

- (1) Blasting a transmission line support structure of an existing transmission line, or preparing the structure to receive protective coatings, is a restricted discretionary activity if—
- (a) it is done over a water body or the coastal marine area; or
  - (b) 1 or both of the conditions in regulation 25(4) and (7) are breached.

*Matters to which discretion restricted*

- (2) Discretion is restricted to the following matters in relation to a restricted discretionary activity under this regulation:
- (a) the effects on water quality and ecologically-sensitive receiving environments; and
  - (b) the effects on occupied buildings and use of public roads; and
  - (c) the risk of contamination of soil; and
  - (d) the effects on health.

*Discharges to water***28 Permitted activities**

- (1) Discharging contaminants into water, in relation to an existing transmission line, is a permitted activity if, after the water and contaminants are reasonably mixed together, all of the conditions in subclauses (2) to (6) are complied with.

*Conditions*

- (2) The discharge must not produce conspicuous—
- (a) films of oil or grease; or
  - (b) scums or foams; or
  - (c) floatable or suspended materials.
- (3) The discharge must not create a conspicuous change in colour or visual clarity.
- (4) The discharge must not emit an objectionable odour.
- (5) The discharge must not make fresh water unsuitable for farm animals to drink.

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(6)	The discharge must not have adverse effects on aquatic life that are more than minor.	
<b>29</b>	<b>Controlled activities</b>	
(1)	Discharging contaminants into water, in relation to an existing transmission line, is a controlled activity if, after the water and contaminants are reasonably mixed together, 1 or more of the conditions in regulation 28(2) to (6) are breached.	
	<i>Matters over which control reserved</i>	
(2)	Control is reserved over the following matters in relation to a controlled activity under this regulation:	
	(a) the effects on water quality; and	
	(b) the effects on aquatic life.	
	<i>Trimming, felling, and removing trees and vegetation</i>	
<b>30</b>	<b>Permitted activities</b>	
(1)	Trimming, felling, or removing any tree or vegetation, in relation to an existing transmission line, is a permitted activity if all of the applicable conditions in subclauses (2) to (6) are complied with.	
	<i>Conditions</i>	
(2)	Any tree or vegetation must not be trimmed, felled, or removed if—	
	(a) a rule prohibits or restricts its trimming, felling, or removal (as the case may be); or	
	(b) it is in a natural area.	
(3)	Any tree or vegetation located on any land must not be felled or removed if a regional plan controls the use of the land for the purpose of—	
	(a) soil conservation; or	
	(b) avoiding or mitigating flooding.	
(4)	Any tree or vegetation must not be trimmed, felled, or removed if it is on land administered by the Department of Conservation under the Conservation Act 1987 or an Act specified in Schedule 1 of that Act.	
(5)	The felling or removal of any tree or vegetation must not create or contribute to—	
24		

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	<ul style="list-style-type: none"> <li>(a) instability of a slope or another land surface; or</li> <li>(b) erosion of the bed or bank of a water body or the coastal marine area.</li> </ul>	
	(6) Debris resulting from the trimming, felling, or removal must not enter a water body or the coastal marine area.	
	<b>31 Controlled activities</b>	
	(1) Trimming, felling, or removing any tree or vegetation, in relation to an existing transmission line, is a controlled activity if—	
	<ul style="list-style-type: none"> <li>(a) first,—               <ul style="list-style-type: none"> <li>(i) the condition in regulation 30(2) is breached because the tree or vegetation is in a natural area; but</li> <li>(ii) the trimming, felling, or removal is done to reduce the risk to a transmission line; and</li> </ul> </li> <li>(b) second, all of the applicable conditions in regulation 30(3) to (6) are complied with.</li> </ul>	
	<i>Matters over which control reserved</i>	
	(2) Control is reserved over the following matters in relation to a controlled activity under this regulation:	
	<ul style="list-style-type: none"> <li>(a) replanting; and</li> <li>(b) disposal of trees and vegetation; and</li> <li>(c) visual, landscape, and ecological effects.</li> </ul>	
	<b>32 Restricted discretionary activities</b>	
	(1) Trimming, felling, or removing any tree or vegetation, in relation to an existing transmission line, is a restricted discretionary activity if 1 or both of the following paragraphs apply:	
	<ul style="list-style-type: none"> <li>(a) first,—               <ul style="list-style-type: none"> <li>(i) the condition in regulation 30(2) is breached; and</li> <li>(ii) it does not satisfy the exception in regulation 31(1)(a)(ii):</li> </ul> </li> <li>(b) second, 1 or more of the conditions in regulation 30(3) to (6) are breached.</li> </ul>	
	<i>Matters to which discretion restricted</i>	
	(2) Discretion is restricted to the following matters in relation to a restricted discretionary activity under this regulation:	
		25

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	<ul style="list-style-type: none"> <li>(a) replanting; and</li> <li>(b) disposal of trees and vegetation; and</li> <li>(c) control of erosion and sediment; and</li> <li>(d) visual, landscape, and ecological effects; and</li> <li>(e) the effects on drainage, flooding, and overland flow paths.</li> </ul>	
	<i>Earthworks</i>	
<b>33</b>	<b>Permitted activities</b>	
(1)	Earthworks relating to an existing transmission line are a permitted activity if all of the conditions in subclauses (2) to (9) are complied with.	
	<i>Conditions</i>	
(2)	Earthworks in a natural area must not, in a calendar year, exceed—	
	<ul style="list-style-type: none"> <li>(a) 50 m<sup>3</sup> per transmission line support structure; or</li> <li>(b) 100 m<sup>3</sup> per access track.</li> </ul>	
(3)	Erosion sediment control must be applied and maintained at the site of earthworks, during and after the earthworks, to avoid the adverse effects of sediment on water bodies and the coastal marine area.	
(4)	All areas of soil exposed by the earthworks must be stabilised against erosion as soon as practicable after the earthworks end to avoid the adverse effects of sediment on water bodies and the coastal marine area.	
(5)	The earthworks must not create or contribute to—	
	<ul style="list-style-type: none"> <li>(a) instability or subsidence of a slope or another land surface; or</li> <li>(b) erosion of the bed or bank of a water body or the coastal marine area; or</li> <li>(c) drainage problems or flooding of overland flow paths.</li> </ul>	
(6)	Soil or debris from the earthworks must not be placed where it can enter a water body or the coastal marine area.	
(7)	Earthworks must not be carried out on the bed of a lake or river or in the coastal marine area.	
(8)	Earthworks must not be carried out in a historic heritage area unless they are carried out on an archaeological site in accordance with the Historic Places Act 1993.	
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	(9) Earthworks must not be carried out on land that a local authority has identified as containing, or possibly containing, contaminants that pose a risk to the environment.	
	<b>34 Controlled activities</b>	
	(1) Earthworks relating to an existing transmission line are a controlled activity if—	
	(a) 1 or more of the conditions in regulation 33(2) to (7) are breached; but	
	(b) both of the conditions in regulation 33(8) and (9) are complied with.	
	<i>Matters over which control reserved</i>	
	(2) Control is reserved over the following matters in relation to a controlled activity under this regulation:	
	(a) the extent and nature of any disturbance; and	
	(b) management of the earthworks and the methods used to carry out the earthworks; and	
	(c) control of erosion and sediment and restoration of the land; and	
	(d) visual, landscape, and ecological effects; and	
	(e) the effects on historic heritage; and	
	(f) the effects on drainage, flooding, and overland flow paths.	
	<b>35 Restricted discretionary activities: historic heritage areas</b>	
	(1) Earthworks relating to an existing transmission line are a restricted discretionary activity if the condition in regulation 33(8) is breached.	
	<i>Matters to which discretion restricted</i>	
	(2) Discretion is restricted to the following matters in relation to a restricted discretionary activity under this regulation:	
	(a) the extent and nature of any disturbance; and	
	(b) management of the earthworks and the methods used to carry out the earthworks; and	
	(c) control of erosion and sediment and restoration of the land; and	
	(d) visual, landscape, and ecological effects; and	
	(e) the effects on historic heritage; and	
	27	

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	(f) the effects on drainage, flooding, and overland flow paths.	
<b>36</b>	<b>Restricted discretionary activities: potentially contaminated land</b>	
(1)	Earthworks relating to an existing transmission line are a restricted discretionary activity if the condition in regulation 33(9) is breached.	
	<i>Matters to which discretion restricted</i>	
(2)	Discretion is restricted to the following matters in relation to a restricted discretionary activity under this regulation:	
	(a) restoration of the land; and	
	(b) management of the earthworks and the methods used to carry out the earthworks; and	
	(c) the extent and nature of any disturbance in relation to ecological and health effects.	
	<i>Noise and vibration from construction activity</i>	
<b>37</b>	<b>Permitted activities</b>	
(1)	A construction activity relating to an existing transmission line is a permitted activity if both of the conditions in subclauses (2) and (3) are complied with.	
	<i>Conditions</i>	
(2)	The noise from the construction activity must comply with New Zealand Standard NZS 6803:1999 Acoustics—Construction Noise.	
(3)	The vibrations from the construction activity must comply with the peak particle velocity limits in table 1 of German Standard DIN 4150-3:1999 Structural Vibration—Effects of Vibration on Structures.	
<b>38</b>	<b>Controlled activities</b>	
(1)	A construction activity relating to an existing transmission line is a controlled activity if 1 or both of the conditions in regulation 37(2) and (3) are breached.	
28		

*Matters over which control reserved*

- (2) Control is reserved over the following matters in relation to a controlled activity under this regulation:
- (a) the timing of the works; and
  - (b) the effects on sensitive land uses; and
  - (c) the giving of notice of the works to parties who may be affected.

*Other transmission activities*

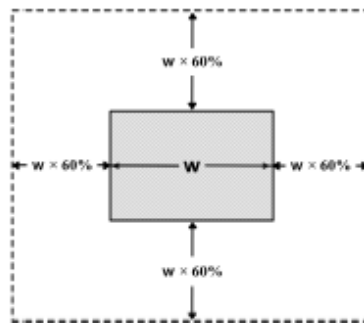
**39 Discretionary activities**

An activity to which these regulations apply (under regulation 4) is a discretionary activity if it is not described in these regulations as a permitted activity, controlled activity, restricted discretionary activity, or non-complying activity.

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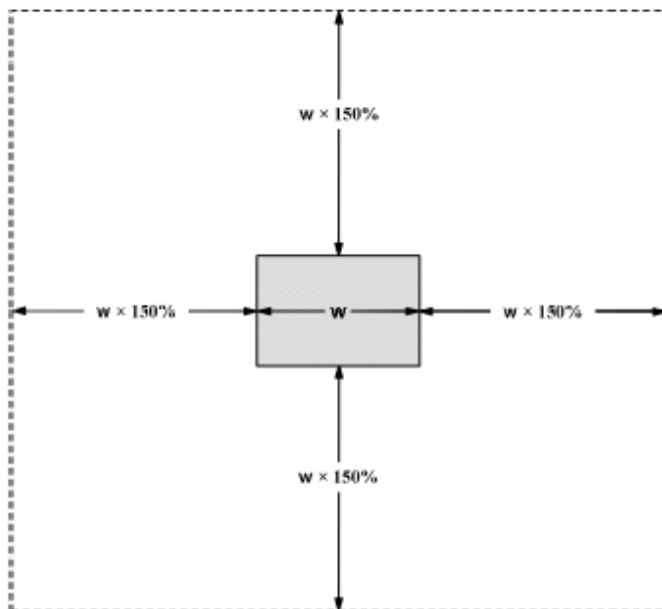
**Schedule** r 3(1)  
**Envelopes for activities relating to towers**

**Envelope for permitted activities**



where—  
*w* is the base width  
 the inner rectangle is the base footprint  
 the outer rectangle (dashed) is the envelope for permitted activities.

**Envelope for controlled activities**



where—  
*w* is the base width  
 the inner rectangle is the base footprint  
 the outer rectangle (dashed) is the envelope for controlled activities.

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Rebecca Kitteridge,  
Clerk of the Executive Council.

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### **Explanatory note**

*This note is not part of the regulations, but is intended to indicate their general effect.*

These regulations provide national environmental standards for electricity transmission. The regulations categorise activities that relate to the operation, maintenance, upgrading, relocation, or removal of existing transmission lines. Activities are categorised as permitted activities, controlled activities, restricted discretionary activities, non-complying activities, or discretionary activities.

The regulations come into force on 14 January 2010.

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