

## Critical Electricity Lines

### Issues

Critical Electricity Lines (CEL's) and substations are the key components of the electricity network in the Whangārei District. To provide a resilient electricity network the use and development of CEL's and substations must be sustainable, secure and efficient. CEL's and substations can be vulnerable to inappropriate subdivision or *building* or *major structure* location to the extent that they can restrict access and affect the ability to maintain the CEL's (lines, cables and support structures). Trees planted too close to lines or cables can disrupt supply.

CEL's are, or have the potential to be, critical to the quality, reliability and security of electricity supply throughout the district or region. These lines contribute to the social and economic wellbeing and health and safety of the district or region and are lines that:

- *Supply essential public services such as the hospital, civil defence facilities or Lifeline sites; or*
- *Supply large (1MW or more) industrial or commercial electricity consumers; or*
- *Supply 1,000 or more consumers; or*
- *Are difficult to replace with an alternative electricity supply if they are compromised.*

The locations of CEL's and designated substations are identified in the planning maps of the District Plan.

*Note:*

1. *The following provisions apply district-wide in addition to any other provisions in this Plan applicable to the same areas or site.*

### Rules

#### **CEL-R1 General Rules**

Activity Status: Permitted

1. Within 10m of a CEL or the designation boundary of a substation:
  - a. *Any building or structure that does not require building consent; or*
  - b. *Alteration of any building or major structure (excluding minor buildings) that does not exceed outside the envelope or footprint of the existing building or major structure (excluding minor buildings); or*

- c. Earthworks, *gardening* or *cultivation* that:
  - i. Are not directly above an underground cable(s); and
  - ii. 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
  - iii. Are in accordance with NZECP 34:2001.
- 2. Within 20m of a CEL or the designated boundary of a substation:
  - a. Planting of trees other than shelterbelts, *plantation forestry* or commercial horticultural operations.
- 3. Activities described in CEL-R1.1 and CEL-R1.2 that do not meet the requirements for permitted activities under CEL-R1.1 and CEL-R1.2 provided that; EITHER:
  - a. Prior to the commencement of any works:
    - i. Written notification has been provided to the Council; and
    - ii. 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:
  - b. The proposed activity is being carried out by a *network utility operator* or *territorial authority* in accordance with NZECP 34:2001.

*Note:*

- 1. *Specified distances from CEL's are to be measured from a point directly below the centreline of the line or cluster of lines, as shown in Figure CEL 1.*
- 2. *While only critical electricity lines are identified on the planning maps, works in close proximity to all electric lines can be dangerous. Compliance with NZECP 34:2001 as amended from time to time is mandatory for buildings, major structures (excluding minor buildings), earthworks, gardening or cultivation and when using machinery or equipment within close proximity to any electric lines.*

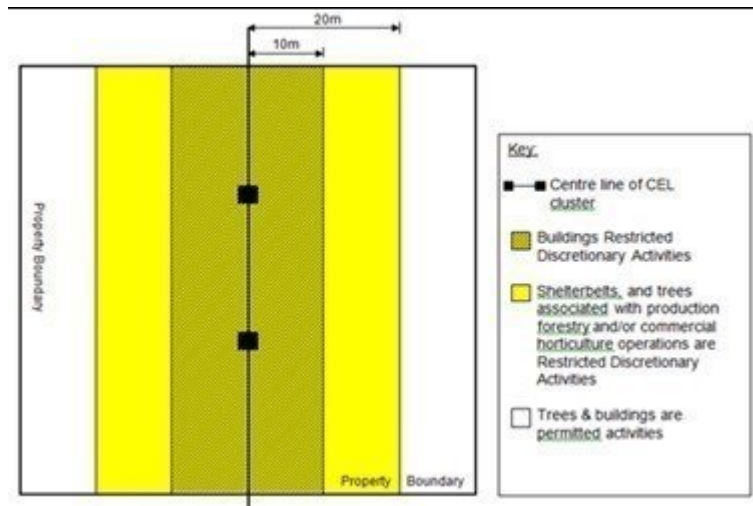


Figure CEL 1. Classification of Activities in vicinity of CEL

Activity Status when compliance not achieved: Restricted Discretionary

Matters of discretion:

1. The safe and efficient operation and maintenance of the electricity supply network, including:
  - a. The use, design and location of *buildings* and *major structures* (excluding *minor buildings*); and
  - b. The mature size, growth rate, location, and fall zone of any associated tree planting, including landscape planting and shelterbelts; and
  - c. Compliance with NZECP 34:2001; and
  - d. Effects on public health and safety; and
  - e. Effects on access to CEL's, designated substations and associated infrastructure for maintenance purposes.

### CEL-R2 Subdivision

Activity Status: Restricted Discretionary

Where:

1. *Subdivision* is within 32m of the centre line of a CEL, or within 32m from the designation boundary of a substation.

Matters of discretion:

1. The safe and efficient operation and maintenance of the electricity supply network, including:
  - a. The use, design and location of *buildings* and *major structures* (excluding *minor buildings*); and

- b. The mature size, growth rate, location, and fall zone of any associated tree planting, including landscape planting and shelterbelts; and
- c. Compliance with NZECP 34:2001; and
- d. Effects on public health and safety; and
- e. Effects on access to CEL's, designated substations and associated infrastructure for maintenance purposes.

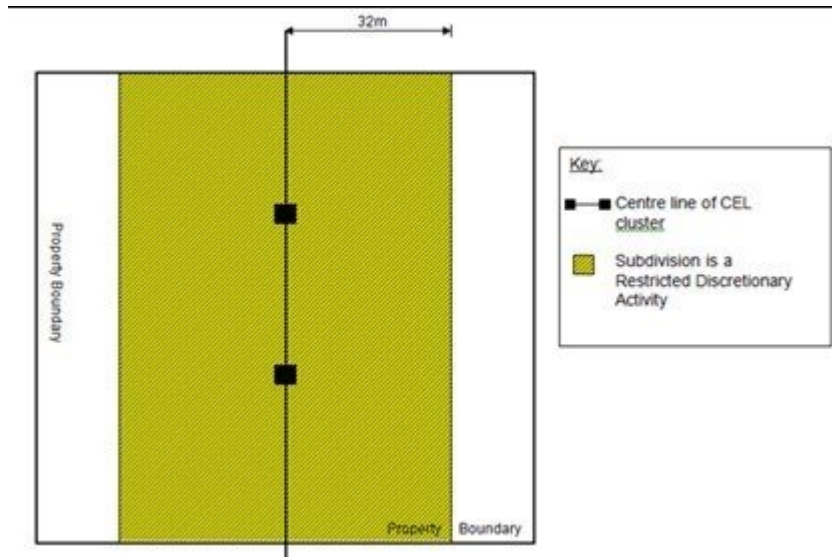


Figure CEL 2. Classification of Subdivision in vicinity of CEL

**Note:**

1. For restricted discretionary activities under CEL-R1 and CEL-R2 the relevant network utility operator will be considered an affected party under s95E of the Resource Management Act 1991.