



COVERSHEET

Minister	Hon Simeon Brown	Portfolio	Energy
Title of Cabinet paper	Amendments to the Electricity (Hazards from Trees) Regulations 2003	Date to be published	28 August 2024

List of documents that have been proactively released				
Date	Title	Author		
May 2024	Amendments to the Electricity (Hazards from Trees) Regulations 2003	Office of Energy Minister		
8 May 2024	Electricity (Hazards from Trees) Regulations 2003: Proposed Amendments ECO-24-MIN-0071 Minute	Cabinet Office		
13 May 2024	Regulatory Impact Statement: Amendments to the Electricity (Hazards from Trees) Regulations 2003	MBIE		

Information redacted

YES

Any information redacted in this document is redacted in accordance with MBIE's policy on Proactive Release and is labelled with the reason for redaction. This may include information that would be redacted if this information was requested under Official Information Act 1982. Where this is the case, the reasons for withholding information are listed below. Where information has been withheld, no public interest has been identified that would outweigh the reasons for withholding it.

Some information has been withheld for the reasons of constitution conventions, confidential advice to government and free and frank opinions.

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In Confidence

Office of the Minister for Energy

Cabinet Economic Policy Committee

Amendments to the Electricity (Hazards from Trees) Regulations 2003

Proposal

1 This paper seeks agreement to amend the Electricity (Hazards from Trees) Regulations 2003 ("Regulations").

Relation to government priorities

- 2 The purpose of the Regulations is to protect the security of electricity supply, and the safety of the public.
- 3 The amendments proposed in this paper implement the Government's commitment in *Electrify NZ* to unleash transmission and distribution infrastructure. Electrifying large parts of the economy will require enormous investment in transmission and local lines. Reforming the Regulations will support that investment by reducing the risks of outages arising from changes in land use and weather patterns.
- 4 A resilient and secure electricity supply is crucial for New Zealand's future prosperity. Protecting electricity lines from vegetation encroaching or trees falling is vital to ensure electricity supply remains reliable and safe. The reforms will also reduce the need to invest large amounts in network strengthening and post-event restoration by pro-actively removing risks from vegetation.

Executive Summary

- 5 Trees or parts of trees falling on power lines is a common cause of electricity outages, particularly during extreme weather events. In the wake of Cyclone Gabrielle, there has been renewed focus on improving the security of electricity supply.
- 6 Following a review of the Regulations by MBIE, including public consultation, I have concluded that amendments should be made to the Regulations to improve the security of supply and public safety. I seek the Committee's agreement to amend the Regulations by:
 - 6.1 **Creating a "clear to the sky" Growth Limit Zone (GLZ)** to prevent vegetation from hanging over electricity lines, which creates an unnecessary risk to the security of supply.
 - 6.2 **Extending the hazard warning 'notice zone'** (where vegetation risks entering the GLZ) by one metre, to make it easier for landowners and arborists to trim vegetation while complying with the New Zealand Electrical Code for Practice for Electrical Safe Distances ("NZECP 34").
- 7 My officials have assessed that these amendments would reduce the risk to lines from vegetation, without disproportionate impacts on afforestation incentivised by the Emissions Trading Scheme ("ETS"), or other costs to government and stakeholders.

- 8 The primary concern expressed by lines owners (Transpower and distribution networks) is that the Regulations do not allow them to remove trees outside the GLZ which could fall on their lines. The GLZ is the regulated zone around electricity lines which must be kept clear of vegetation.
- 9 I am considering further amendments to the Regulations to specifically address the risk of trees falling on lines from outside the GLZ. I have directed officials to develop a proposal for consultation with stakeholders.
- 10 I will give further consideration and continue to work with officials to ensure that there is a clear understanding from all stakeholders of their responsibilities and to ensure that no individual or landowner is disproportionately affected by these changes.

Background

- 11 The Regulations were made in 2003 to deal with the risk to electricity supply resilience posed by vegetation encroaching on lines.
- 12 The previous Government began a review of the Regulations in response to concerns raised by lines owners about their effectiveness. In the wake of Cyclone Gabrielle, there have been renewed calls from lines owners – the electricity distribution networks and Transpower – for amendments to the Regulations.
- 13 The Regulations have not undergone any substantive changes since they were introduced 21 years ago. The risk to public safety from trees and other vegetation falling on lines is increasing as New Zealand's landscape changes, and severe weather events become more common. The risk of disruption from outages is also becoming more significant as electrification of the economy increases, and New Zealanders become more dependent on electricity in their daily lives.
- 14 MBIE released a discussion document on the Regulations in March 2023, which presented options on how to improve their effectiveness.

The Analysis

What the current Regulations address

- 15 The current Regulations provide clarity about the rights and responsibilities of tree and line owners, where there is a risk of vegetation encroaching on lines. The current Regulations:
 - 15.1 prescribe a zone around electrical conductors within which lines owners must manage encroaching vegetation. A conductor is any "wire or cable used or placed in position for the conveyance of electricity" (but not including electric fences);
 - 15.2 set rules about who has responsibility for cutting or trimming vegetation that encroach on lines;
 - 15.3 assign liability if those rules are breached; and

15.4 provide for arbitration to resolve disputes between line owners and tree owners about the operation of these Regulations.

Why the Regulations require amendments

- 16 Changes in land use and weather patterns are increasing risks to the security of electricity supply and causing more outages (particularly through trees falling onto lines) and jeopardising public safety.
- 17 During Cyclone Gabrielle, the largest cause of outages was out-of-zone tree damage to overhead lines. Out-of-zone tree outages interrupted supply to 68,000 customers at the cyclone's peak.
- 18 Individual network owners reported in submissions that, even in more routine circumstances, significant numbers of customers were affected by outages caused by trees falling on networks. Unison and Centralines, the electricity distributors for Hawkes Bay and part of the central North Island, reported that 50,527 individual connection points (i.e. households and businesses) were affected by such outages in 2021/22.
- 19 The current scope of the Regulations is too narrow to effectively address these risks, leading to increased costs and potential hazards for New Zealanders that could be avoided by better vegetation management around lines.
- 20 Auckland distributor Vector estimated in its most recent Asset Management Plan that "80% of vegetation related outages are caused by failure modes [such as damage from trees outside the GLZ] which are outside the mitigations provided for by current regulation".
- 21 The current Regulations do not fully deal with encroachment risks, such as vegetation above the lines.
- 22 The Regulations also make it unnecessarily difficult for landowners and arborists (rather than expensive specialised personnel) to cut or trim vegetation approaching the GLZ. This is because of the way the Regulations interact with the New Zealand Electrical Code for Practice for Electrical Safe Distances ("NZECP 34"), which provides for safe approach distances for working near power lines.

The proposed amendments to the Regulations

23 I propose the following amendments to the Regulations:

Create a "clear to the sky" GLZ

23.1 The way the GLZ is currently defined means that vegetation can overhang or tunnel around lines. This creates a heightened risk of branches falling onto lines. I propose extending the GLZ consistently from the line to the sky to ensure no vegetation can hang above lines. Therefore, this amendment will result in all lines having a vegetation-free zone above them that is unlimited in distance.

- 23.2 The recommended amendments to the Regulations above will require the cutting or trimming of vegetation which could take some time to implement. I intend to allow an appropriate transition period to allow line and tree owners time to adjust to the new GLZ.
- 23.3 The cost of creating a "clear to the sky" GLZ will initially be borne by lines owners, under rules already in the Regulations which require them to meet the costs of the first trim of encroaching vegetation. The cost of subsequent maintenance of the GLZ will be borne by the tree owners.

Extend by one metre the hazard warning notice zone for vegetation that risks entering the GLZ

- 23.4 Under NZECP 34, there are different rules for minimum working distances from lines for:
 - 23.4.1 specialised personnel who meet standards for electrical or telecommunication work; and
 - 23.4.2 people who do not meet these standards (who must work further away).
- 23.5 If vegetation enters a zone (the notice zone) one metre from the GLZ, the Regulations allow line owners to alert tree owners about the risk of encroaching vegetation, through a hazard warning notice. The relationship between the notice zone and the safe distances in NZECP 34 is such that by the time tree owners are made aware of the risk, they often cannot address it themselves, but must rely on the specialised personnel mentioned above. This increases the cost of hazard reduction.
- 23.6 Alerting tree owners earlier by expanding the notice zone would give tree owners a better opportunity to address the encroachment risk without requiring specialised personnel to do the work, reducing costs.
- 23.7 I propose to expand the notice zone by one metre so that, once alerted, tree owners have more time to trim or cut vegetation which is approaching the GLZ, without breaching NZECP 34 or requiring expensive specialised personnel to undertake the work.

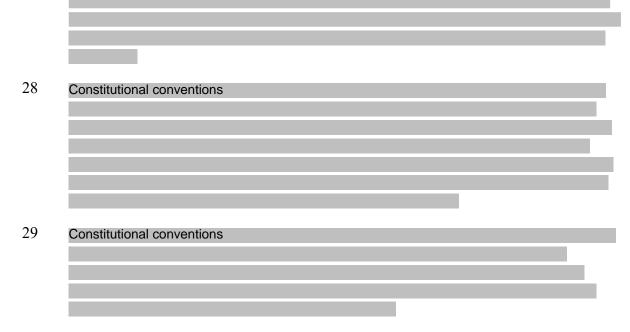
Submitters' Views

- 24 Lines owners generally advocated for the "clear to the sky" change. Key forestry stakeholders did not object to this change when officials consulted them after the discussion document was released.
- 25 The change to the "notice zone" was not canvassed in the discussion document, but lines owners advocated for changes to address this issue in their submissions. The amendment does not impose costs on tree owners, and gives scope for reducing maintenance costs, so I consider that it is unlikely to be controversial.

26 While these changes will reduce the risk from vegetation falling onto lines, Transpower and some distribution networks advocated for much more far-reaching changes to ensure security of supply and public safety. Transpower and some distribution networks advocated for restrictions on re-planting of trees over a very wide area around the GLZ. Some distribution networks advocated for at least increasing the GLZ significantly around lines which lack redundancy in the event that a tree falls on them.

Further Amendments

27 I have directed officials to develop a proposal that would allow lines owners to address risks of trees falling from outside the GLZ. Constitutional conventions



Cost-of-living Implications

- 30 The amendments will impose some additional costs on lines owners and tree owners but we do not consider they will be significant enough to impact broader cost-ofliving outcomes.
- 31 The requirement to use specialist personnel to trim trees can add considerably to costs for tree owners – particularly for residential tree owners. Enlarging the hazard warning notice zone to give earlier notice of encroachment could result in significant reductions in costs for tree owners.

Financial Implications

32 There are no significant financial implications for the Crown. Costs will be borne by lines and tree owners.

Legislative Implications

33 The Electricity (Hazards from Trees) Regulations 2003 will need to be amended to give effect to the policy proposals in this paper.

Impact Analysis

Regulatory Impact Statement

- 34 Impact analysis is required for these recommendations and a Regulatory Impact Statement (RIS) has been prepared and is attached to the Cabinet paper.
- 35 The Ministry of Business, Innovation and Employment's Quality Assurance panel has reviewed the RIS and confirms that it meets the criteria. The Regulatory Impact Analysis has been used to inform the final policy proposals put forward in this paper.

Climate Implications of Policy Assessment

36 The Ministry for the Environment has confirmed that a Climate Implications of Policy Assessment is not required.

Population Implications

37 The proposed amendments to the Regulations are not expected to have a significant impact on children, seniors, disabled people, women, people who are gender diverse, Māori, Pacific peoples, veterans, ethnic communities, and faith-based communities.

Human Rights

38 The proposals in this paper are consistent with the New Zealand Bill of Rights Act 1990 and the Human Rights Act 1993.

Consultation

39 The Treasury, Ministry for Primary Industries, Department of Conservation, Ministry for the Environment, Te Arawhiti, Infrastructure Commission, Commerce Commission and WorkSafe New Zealand were contacted for consultation on the proposal.

Proactive Release

40 I propose to proactively release this Cabinet paper subject to any necessary redactions. This would be done within 30 business days following confirmation of Cabinet's decisions.

Recommendations

- 35 The Minister for Energy recommends that the Committee:
 - 1. Agree to require Growth Limit Zones to be "clear to the sky."

- 2. Note that the cost of removing vegetation to achieve "clear to the sky" Growth Limit Zones will be determined by rules in the current Regulations, and is likely to be shared between lines and tree owners.
- 3. Note that I intend to allow an appropriate transition period to allow line and tree owners time to adjust to the new GLZ.
- 4. Agree to extend the notice zone in the Regulations (for vegetation that risks encroaching the Growth Limit Zone) by one metre.
- 5. **Note** that I propose to consult with stakeholders about further amendments to the Regulations to allow lines owners to address the risk of treefall from outside of the GLZ.
- 6. **Authorise** the Minister for Energy to issue drafting instructions to Parliamentary Council Office to give effect to the policy proposals in this paper.
- 7. Authorise the Minister for Energy to approve and release a draft of the amendments to the Regulations for targeted consultation.
- 8. Authorise the Minister for Energy to make decisions consistent with the proposals in these recommendations on any issues which arise during the drafting and minor or technical amendments as required.

Authorised for lodgement.

Hon Simeon Brown

Minister for Energy

Appendices

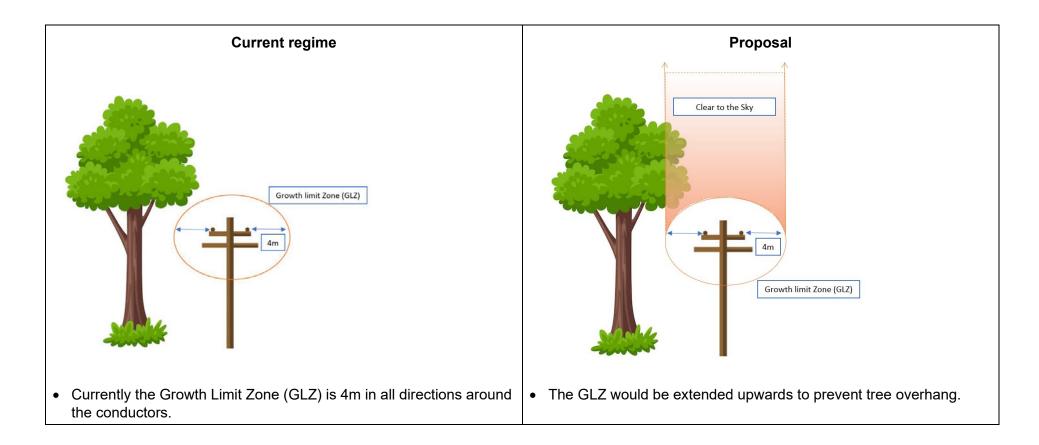
Appendix One: "Clear to the Sky"

Appendix Two: Extending the hazard warning notice zone

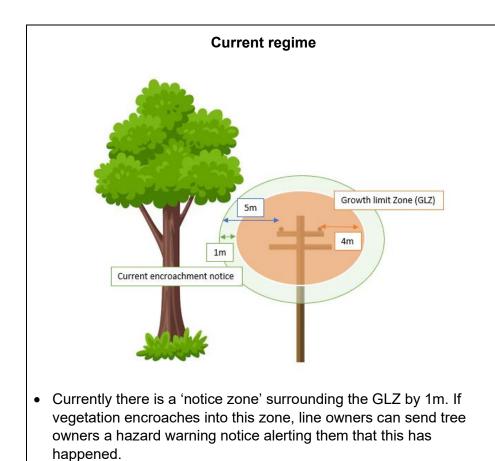
Constitutional conventions

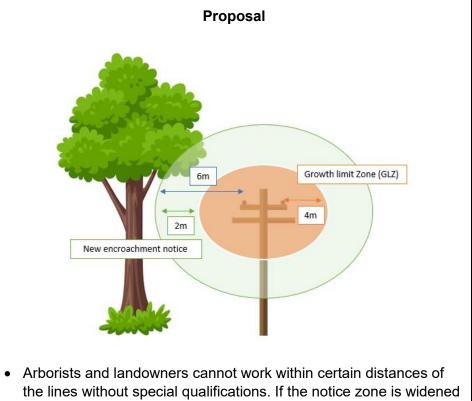
Appendix Four: Regulatory Impact Statement

Appendix One: "Clear to the Sky" GLZ



Appendix Two: Extending the hazard warning notice zone





the lines without special qualifications. If the notice zone is widened to give them earlier notice of encroachment they have more scope to fix the problem before the vegetation grows into the area in which expensive specialist utility arborists are needed, as required by NZECP34.

IN CONFIDENCE

Constitutional conventions					
Constitutional conventions					